

Significs and Language

With an introduction
by H. W. Schmitz

Victoria Lady Welby

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SIGNIFICS AND LANGUAGE

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Volume 5

Victoria Lady Welby

Significs and Language

SIGNIFICS AND LANGUAGE

The Articulate Form of our Expressive and
Interpretative Resources

by

VICTORIA LADY WELBY

Reprint of the edition London, 1911,
and of two articles by V. Welby.

Edited and introduced by
H. Walter Schmitz.

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Dedicated to the Memory of GEROLD UNGEHEUER

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PREFACE

The idea of a study of the development of Victoria Lady Welby's signifiacs and the signifiac movement in the Netherlands which derived from it from the standpoint of the history of science stems from my esteemed teacher Prof. Dr. Gerold Ungeheuer. More than ten years ago, when the name Lady Welby was still only known to a few specialists, he had gathered together the first materials for such a study. For he had recognized that the signifiac work of Lady Welby and her Dutch followers (e.g. F. van Eeden, L. E. J. Brower, J. van Ginneken, and G. Mannoury) entailed ideas on the theory of signs and language which can, in contrast to today's predominant research approaches, be designated as definitely communication oriented.

Since Ungeheuer's interest was in the following years called upon more by other communication theoretical problems, he was so kind as to leave the topic "Signifiacs" to me. Shortly after having begun my own studies on the subject in the summer of 1981, I learned from Dr. A. Eschbach, the General Editor of the "Foundations of Semiotics" series that he planned to republish the two major books by Lady Welby *What is Meaning?* and *Signifiacs and Language* in his series. Following his offer and wishes, I was pleased to undertake the task of editing the second volume. In the course, I followed A. Eschbach's first plan for this volume and included in addition to Lady Welby's book *Signifiacs and Language* her previous article "Meaning and Metaphor" (1893) as well as the better known and important essay "Sense, Meaning and Interpretation" (1896). However, in order to provide the reader a wider view of Lady Welby's thinking, I have selected several noteworthy so far unpublished essays by her and placed them before the other texts.

My introduction to this volume contains the results of my extensive study of the life, works, and influence of Lady Welby. It attempts to show how Lady Welby developed her signifiacs in discussion and cooperation with numerous highly divergent scientists and scholars of her times, how her ideas influenced other scholars in England, the USA, France, Germany, and Italy, and how signifiacs — aside from in the Netherlands — sank into oblivion and was finally re-discovered.

I owe it to a large extent to the ready and generous support of numerous persons and institutions that I was able to carry out the investigations and archive studies that were necessary for this introductory text.

I received the most important stimulation from Gerold Ungeheuer, who followed my studies with great interest and provided me with assistance that no one else could have offered. This is not the least of my reasons for dedicating this book to his memory.

My archive studies in Canada and the Netherlands were made possible by a grant from the Deutsche Forschungsgemeinschaft (grant no. Schm 572/1-1). Prof. Hartwell Bowsfield, University Archivist (York University, Downsview, Ont., Canada) made the Welby Collection accessible to me and, by his helpfulness and hospitality, made my stay in wintery Toronto to an unforgettable experience. Mr. David Hughes, Archival Assistant, contributed in a similar manner to my work by knowledgeable assistance and useful tips.

I owe many thanks to Sir Bruno Welby, Denton House (Grantham, England) for permission to make wide use of unpublished letters and manuscripts of Lady Welby's in this volume.

Miss P. M. Baker, Sterling Library (University of London Library) was a valuable aid to me in my research on the coming into being and the extent of the Lady Welby Library and in my study of the pamphlets and other material belonging to it.

My archival studies in Amsterdam on the relationship between Lady Welby and Frederik van Eeden were aided by the cooperation and numerous informations of the following persons: Dr. H. W. van Tricht, Ellecom; Mr. R. Richard, curator of the Frederik van Eeden Museum (Universiteits-Bibliotheek, Amsterdam); Mr. G. van Suchtelen, Frederik van Eeden-Genootschap (Amsterdam); and Mr. B. Willink, Den Haag.

Dr. Jürgen Zander, Schleswig-Holsteinische Landesbibliothek (Kiel, West Germany) made possible the study of relevant parts of the correspondence remains of Ferdinand Tönnies'.

Further information was provided by Prof. Paul Chipchase, King's College (Cambridge, England), Mrs. Marie Neurath, London, the student G. Freudenthal, Berlin, and Mrs. Viktória Eschbach-Szabó (Ruhr-Universität Bochum).

Finally, my friends Johann Georg Juchem (Institut für Kommunikationsforschung und Phonetik, Bonn) and Achim Eschbach (Universität Essen) ac-

accompanied the work on this book with constructive and patient criticism and informed comments. I would like to thank them and all the other mentioned and unmentioned persons and institutions for their constantly generous and friendly support.

Bonn, February 1983

H. Walter Schmitz



Victoria Lady Welby
(1862)

(Miniature, water-colour painting about 17 cm × 13 cm,
executed by Edward Taylor; owned by Sir Bruno Welby)

VICTORIA LADY WELBY'S SIGNIFICS: THE ORIGIN OF THE SIGNIFIC MOVEMENT

“It is confusion and misunderstanding
that we must first attack or we must fail
hopelessly in the long run.”

(V. Lady Welby, letter of Nov. 10, 1909
to F. van Eeden)

1. The Rediscovery: A First Approach to Lady Welby and Her Significs

With Victoria Lady Welby's *Significs and Language*, her very last publication, being reprinted now more than 70 years after it first appeared in print, it is justified to ask why. Who was the authoress? What did she mean by “significs”? What did she write about it? What did she think about language? What is the relation between significs and what today is called semiotics justifying the new edition within the series “Foundations of Semiotics”? And finally, is Lady Welby's work interesting from a point of view other than that of pure history of science?

All these questions are legitimate, because the authoress and her thinking and works have for the most part sunk into oblivion. No *Who's Who* or *Who was Who* contains entries on Lady Welby. Bibliographies on semiotics – except that of Eschbach (1974) – either mention her not at all or – like C. Morris in his bibliography to *Signs, Language, and Behavior* (1946) – only cite a single book by her. Other than that the semiotic literature usually only refers to her in connection with C. S. Peirce (cf. e.g. Walther 1974; Sebeok 1976). She is at least known to Peirce experts as his correspondent, and it would appear that precisely this rather circumstantial fact has at least contributed to the rediscovery of significs.

And yet Lady Welby's work never sank into complete oblivion. It is just that those who cited Lady Welby or discussed her ideas were more likely to be outsiders with regard to the currently predominant trends within semiotics. Just who they were, what has been written about significs since her death in 1912,

and what finally led to that which I have called the rediscovery of significs should shed some light on Lady Welby and the impact of her signific approach, and for this reason it is worth while tracing these developments during the last 70 years.

The first and at the same time relatively extensive publications dealing with Lady Welby and her significs are the obituaries appearing shortly after her death. These were all written by contemporaries who were well acquainted with her personally and with her scholarly work (cf. Macdonald 1912; Spender 1912; Whibley 1912; Winton 1912). Above all they give evidence of the admiration the authors felt for Lady Welby: "extraordinary in the history of women" (Macdonald 1912: 155), "one of the most remarkable women of the Victorian time" (Winton 1912: 543), "one whose name will surely be found upon the roll of illustrious Englishwomen" (Spender 1912). This estimation is corroborated by citing some biographic data, by reference to her decisive role in founding the Royal School of Art Needlework but also in founding the Sociological Society of Great Britain, by her membership in the Anthropological Society and the Aristotelian Society. But these authors find even more essential her autonomous and independent intellectual career in which she achieved a development and significance that assured her a place among the scholars of her time without the benefit of ever having enjoyed a formal school let alone university education. "She made acquaintance by degrees with man after man distinguished in things philosophical, theological, scientific, and social, and her Lincolnshire home became a place of meeting for men of high representative value." (Winton 1912: 544) That this was possible can be attributed to the fact "that she had developed to an almost uncanny extent the gift of interpreting and translating into terms which she herself could appreciate the achievements of her contemporaries in the most diverse fields of investigation" (Spender 1912).

In the opinion of Whibley (1912: 706), Lady Welby belonged to two worlds in each of which she led a different life, namely to the early Victorian era on the one hand and, due to her own studies and to her trust in scientific progress, to the threshold of the future. Still, Macdonald's appraisal is somewhat more exact, seeing her significance in providing a link between three ages of English thought:

"Her earlier work was religious in the conventional sense, though of a rare spirituality in its kind. The challenge which it met was merely the challenge which mid-century agnostic philosophy had presented to the serious religious who were above the paltry proofs and disproofs of an earlier day and still more above the meanness

of summary disparagement of the views of men of acknowledged moral dignity and intellect. Her next stage, the period of her great quest, was an attempt to meet the challenge of the great disturbance of thought made by the coming evolution and its conquests. She found her own answer; so that when the new spiritual conceptions of the universe came, or the new physiological metaphysics – let us call it for brief Bergson – it was only declaring much that she had prophesied and not a little that she had said.” (Macdonald 1912: 155f.)

On her way out of the phase of religious work, she arrived, according to her biographers, at philosophy. However, she met here with a totally unexpected state of affairs. She encountered a world of confusion in which antagonisms, controversies, misunderstandings, prejudices, and stupidity reigned supreme. The discovery that the greater part of the determinable upset and confusion was caused by controversies over the sense of certain words led her to the view that language is the condition making all thought possible, which is why it not only constitutes but also limits our actual existence as intelligent beings (cf. Macdonald 1912: 154). She maintained this view even after she had turned to the natural sciences upon having ascertained the sterility of philosophical systems. She denounced the “‘linguistic anarchy’” (Macdonald 1912: 155) there too in various publications. Nevertheless, natural science contributed more to her search for truth “and God’s sufficient answer for His universe” (ibid.). She found here knowledge that increasingly opened man’s eyes and which interlocked with each new fact and each additional science to a progressive rebuttal of chaos or incompleteness, thereby producing a vision of a reality which could only be described as godly. According to the authors mentioned, Lady Welby’s significs was supposed to have the function of unearthing and solving the problems in the expressive and interpretative realm which hinder or render impossible the process of comprehending this reality and of communicating knowledge. Her signific method thereby is described as a language analytical and language critical one but not as one based on a theory of signs.

Finally, and this is their unanimous opinion, her work is said to have remained unfinished. The supposed lack of influence her signific studies had during her lifetime is attributed with the same agreement of opinion to the fact that she did not manage to make the signific way of approaching things and its results sufficiently clear to her contemporaries. After Macdonald (1912: 153) Mrs. W. K. Clifford in her subsequent memoirs on Lady Welby also held the typical qualities of the seer, for such as Lady Welby considered to be, to be responsible for her failure to do so (Mrs. W. K. Clifford 1924: 103). However, none of her

biographers ever gave rise to any doubt about the significance and the necessity of Lady Welby's work.

Not until the literary and editorial activity of Mrs. Henry Cust (i.e. Emmeline Mary Elizabeth Cust), Lady Welby's daughter, at the end of the twenties did the study of Lady Welby the person and of signification gain new impetus. First she published a book on the extensive travelling done by Lady Welby with her mother, whose introduction yields important information on Lady Welby's biography (Cust 1928). In 1929 and 1931 she subsequently edited two volumes containing excerpts from Lady Welby's extensive correspondence, thereby making the world of Lady Welby's thoughts and ideas as well as their resonance among numerous eminent scientists and scholars of her time accessible to posterity (Welby 1929; 1931). As can be seen from reviews of these two volumes (cf. e.g. Anonymous 1929; Oakeley 1932) the astonishment at the mental world revealed by these correspondences was not exactly slight. Once these excerpts from Lady Welby's correspondence with C. S. Peirce had been published it was recognized then as once again in later years that signification was an approach based on a theory of signs (cf. Oakeley 1932: 526). At the same time it then became apparent that signification was not developed by Lady Welby alone and independently of other contemporary currents of thought, but rather in cooperation with numerous other men of learning. For this reason reading the correspondence evoked in Oakeley (1932: 524) the impression of a "Platonic dialogue" whose various parts display "a high degree of unity from the dominant tendency and pursuit of her questioning spirit". Yet at first these publications as well found no echo in the realm of science.

The echo of Lady Welby and her philosophic work sketched thus far was carried by her biographers and was thus outside the realm of scientific endeavor dealing with semantics or even a theory of signs. This changes for the first time with *The Meaning of Meaning* by Ogden and Richards (1923). While the authors mention Lady Welby's investigations in the same breath with those of Marty, Peirce, Mauthner and others as being such, from which they "have derived instruction" (Ogden/Richards 1952: ix), still they nowhere refer to Lady Welby for their own argumentation. Instead they merely refer to Lady Welby in two footnotes as an early pioneer in the field of investigating meaning. Above and beyond this, Lady Welby appears, as in later years as well, only as Peirce's correspondent, namely in the appendix on Peirce's theory of signs (Ogden/Richards 1952: 279–290) which is of such importance for Peirce readers. On the one hand, this state of affairs is very surprising, for as I shall show in detail (Ch. 4.9),

the extent to which Ogden especially and therefore several chapters of *The Meaning of Meaning* were influenced by Lady Welby and her signfic approach is fully obscured. On the other hand, these circumstances are also characteristic of the type of influence Lady Welby had on her readers (cf. Ch. 4).

As *The Meaning of Meaning*, despite its demonstrable influence on Charles Morris and others, "is not generally thought of as being in the main-stream of philosopher's discussions" (Kretzmann 1967: 402), the same is true of the work done by representatives of "General Semantics" who, together with Ogden's and Richards' work, are assigned not only by Kretzmann (1967: 403) to a tradition "that considers the study of meaning to have a crucial bearing on human happiness or sanity" (ibid.). It may correspond to the historical facts that Lady Welby's writing is seen as a possible source of this tradition (cf. Kretzmann 1967: 403) but it only reconfirms how one-sided the signfic's impact known thus far actually was. Thus Korzybski (1950: 280) and Hayakawa (1954: 20), too, do in fact in chapters on the history of semantics refer to Lady Welby, but these references do not necessarily allow the conclusion that "General Semantics" is somehow derived from signfic. Quite the contrary. According to Korzybski himself he had drafted practically his entire system as early as the year 1926 before he became acquainted with the work of Bréal, Lady Welby and others (Korzybski 1950: 282). On the other hand there can be no doubt that the representatives of "General Semantics" in later years not only knew of Lady Welby's work but were familiar with its contents and thought highly of it. At the same time at least Hayakawa recognized *The Meaning of Meaning* as a "continuation of the study of signfic initiated by Lady Welby" (Hayakawa 1954: 24) and within his view of the history of semantics, even the origin of modern semantics lies on the one hand in Lady Welby's signfic and on the other in Whitehead's and Russell's *Principia Mathematica* (1954: 20).

In contrast to "General Semantics" there can be absolutely no doubt that the signfic movement in the Netherlands began directly with Lady Welby's signfic and further developed it in a large number of its own publications (cf. Read 1948: 83 f). This movement which, since its disintegration at the end of the fifties has sunk into oblivion in semiotics and linguistics like the work of Lady Welby, was a mere 35 years ago an important pendant to the "Unity of Science Movement" and to Morris' theory of signs in the fields of semantic analysis and the theory of signs.¹ Through the intermediary of the Dutch psychiatrist, poet and social reformer Frederik van Eeden, who knew Lady Welby since 1892 and maintained a lively exchange of thoughts with her until her death, Lady Welby

and signifiics became known in the Netherlands. Eminent mathematicians, philosophers, psychologists, linguists, natural scientists and theologians worked together in the signifiic movement forming itself since about 1917. Among them were the mathematicians L. E. J. Brouwer, G. Mannoury, the poet and jurist J. I. de Haan as well as the theologian and linguist J. van Ginneken. According to Mannoury's own statements the point of departure for their work was for one thing Lady Welby's approach based on a theory of signs, that is above all her trichotomy "sense – meaning – significance". For another – and this was the more significant aspect of her work for the developments in the Netherlands – there was

"the eloquent, one might well say passionate way in which she pleads the cause of a truly psychologically and sociologically oriented conceptual criticism and criticizes the slovenly and uncritical ways of expression (she spoke here of 'misleading metaphors'), in which 'the man in the street', as well as the scientific and philosophical world of her time indulged." (Mannoury 1969: 176)

The Dutch proponents of signifiics proved in their publications to be the only ones who not only explicitly expressed that they based their work on Lady Welby's signifiics but also actually continued along their way toward a communication oriented theory of signs (cf. e.g. van Dantzig 1948). It is therefore not surprising that Lady Welby's work till today has not sunk into oblivion to the same degree in the Netherlands as for instance in Great Britain or in the USA.²

Not until 1957 was attention drawn again to Lady Welby and signifiics by a book in the USA: C. Cherry's *On Human Communication*. Cherry, himself familiar with the Dutch movement, gives a good concise characterization of signifiics and its relation to neighboring disciplines (1957: 217f.). His evaluation of Lady Welby's research approach can be deduced from his recommendation to the newcomer in semantics to read Lady Welby's Encyclopaedia Britannica article on signifiics as an introduction (Cherry 1957: 109).

So till the end of the fifties there was no new discussion of Lady Welby's signifiics not to mention a critical appraisal of her ideas, with the exception of the Dutch movement which, however, is threatened by the same disregard and neglect. Such mention and citations as are nevertheless to be found in literature on the subject until then are weak remembrances at best. The publication in 1958 of the last volume of the *Collected Papers of Charles Sanders Peirce* also had no other effect than such a remembrance. This was the volume containing among other things Peirce's extremely positive review of Lady Welby's *What is Meaning?* (1903). Still the actual rediscovery of Lady Welby was induced by the

research on the history of pragmatism in general and on Peirce in particular. The painstaking investigation by H. S. Thayer (1968) certainly is largely responsible for this fact. By means of his exact study of Lady Welby's published correspondence (Welby 1929; 1931) he succeeded in reconstructing to some extent Lady Welby's significance in the history of ideas and in shedding light on the relations to and intermediary influence on Ogden, Schiller, Peirce and Russell (cf. Thayer 1968: 305–308). In the same manner he was then able to define more closely the relation between G. Vailati's semantic analysis and significs (1968: 333–338). Thayer thereby provided the first important indications of some of the causes for the impressive fact that in Great Britain in the 20 years between the publication of *What is Meaning?* (1903) and Ogden's and Richards' *The Meaning of Meaning* (1923) "the subject of *meaning* became of increasing interest, puzzlement, and concern to philosophers" (Thayer 1968: 308). I shall pursue other possible causes in Ch. 4.

Hardwick took the next step toward the rediscovery of significs (1971; 1977a; 1977b). He was the first to take Lady Welby seriously enough as Peirce's correspondent to print her letters too in the new edition of Peirce's letters to Lady Welby. Strangely enough this had failed to occur in the first edition by Lieb (1953). This made important documents on significs available for the first time. However, Hardwick's own studies of Lady Welby's biography and of significs (Hardwick 1971; 1977b) contain hardly more insights than were already known from Ogden's and Richards' (1923: 279–290) and Thayer's (1968) work.

It is in keeping with this development that A. Eschbach took the last decisive step and published Lady Welby's most important publications in a new edition in the "Foundations of Semiotics" series so that they can become generally available again and can contribute some aspects neglected so far to the present day discussion of the theory of signs.³ However this goal is hardly to be attained by means of the new publication of Lady Welby's work alone. Her ideas and goals are only accessible with difficulty to today's reader of her texts if he is unprepared by background information on the authoress, her times, and her discussions with contemporaries. Therefore in the following chapters I shall attempt to create as broad a background for understanding Lady Welby as possible using sources which have so far not been used and which I myself have in part discovered.

2. The Origins and Development of Significs: A Biographical and Bibliographical Sketch of Lady Welby's Course of Thoughts

2.1 The Sources of This Study

"I have ever felt sure, and am feeling so more now, that the work of your life will not be lost, Significs leaving a germ of true and lasting value." (F. Tönnies to Lady Welby on Oct. 27, 1908)

The biographical and bibliographical material concerning Lady Welby is extremely extensive, but it reveals certain gaps even now, after I have ended my study of the archives. Taken separately, the available sources differ greatly not only with regard to their reliability and historical information, but also with regard to the care taken in editing them and the form of reproduction (as far as they were published at all).

The first group of materials are Lady Welby's own publications which, apart from six books (Welby 1852; 1881a; 1892a; 1897a, 1903; 1911b), include numerous newspaper and magazine articles as well as a considerable number of privately printed essays, parables, aphorisms and pamphlets. The latter, in particular, cannot be found today in libraries and are probably not wholly existent in the archives. Most of these publications can only be interpreted to the extent that we are able to gather information concerning their origin (such as e.g. motives and reasons for writing these texts and their addressees) from other sources.

Among these sources are for one thing the biographical publications on Lady Welby. I have dealt with most of them in an introductory way in the previous chapter. Even though all the biographers knew Lady Welby personally, Macdonald's article (1912) is of more importance in that Macdonald was employed by Lady Welby as a sort of assistant from March 1905 till spring 1911 (after having ended work on *Significs and Language*), and so had a much more direct contact to her and significs than many others. But the most important and instructive information about the first thirty years of Lady Welby's life can be found in a book written by her daughter Nina (i.e. Emmeline) Cust (Mrs. Henry Cust 1928). According to her, this book is based on published travel descriptions written by Lady Emmeline Stuart-Wortley, Lady Welby's mother, and by Lady Welby herself, as well as on diaries and letters written during that time.

Lady Welby's extremely extensive correspondence, from which only a small part has been published up to now, has considerable significance when undertaking a historical reconstruction of the development of significs, and is as well

invaluable for the study of the history of culture and science, especially with respect to Great Britain. N. Cust published the most important part in terms of comprehensiveness, in two books (Welby 1929, 1931). The former includes the time of 1879–1891 and the latter 1898–1911. However, both books reveal certain errors and this fact restricts their use for historical studies. Lady Welby's letters as well as those of her correspondents have been reproduced always without the names of the places where they were written and their dates. Only the grouping of the letters into chapters, which are arranged by the corresponding period of years (between two and four years), permits the reader to arrive at an approximate chronological order, which is however often incorrect, as N. Cust allocated numerous letters to periods they did not belong to. N. Cust evidently found the common themes of the letters more important than their chronological order. More serious shortcomings of the books are that N. Cust's editing of numerous letters, particularly their beginnings, was not literal, that she sometimes failed to indicate omissions of parts of the letters, the majority of which were reproduced only in excerpts and that she on several occasions pieced together letters written by the same person but on different dates. The two books still have, however, a certain research value as they represent the most extensive publication of letters in this field and also because they contain certain letters which were later evidently lost or even destroyed.⁴

The correspondence between Frederik van Eeden and Lady Welby, which has also been published in part, is also quite extensive. The publication carefully put together by the "Frederik van Eeden-Genootschap" (Eeden/Welby 1954) deals with the period between Aug 13, 1892 and Feb. 11, 1912. Except for the failure to indicate omissions at certain points, this edition represents an extremely reliable source. These letters go beyond the subject of significs and deal above all with the personal relationship between Frederik van Eeden and Lady Welby and with their very contradictory opinions on political and social questions.

The correspondence between C. S. Peirce and Lady Welby, which has in the meanwhile become very famous, already had a colorful history before Hardwick edited it a couple of years ago (Peirce/Welby 1977). Hardwick (1977a) described the sequence of fragmentary publications from Ogden and Richards (1923) up to the 8th volume of the *Collected Papers of Charles Sanders Peirce*.⁵ Although four letters written by Lady Welby to Peirce are missing even in Hardwick's edition, it is in every respect the most painstaking publication of letters exchanged with Lady Welby.⁶ I have included the four missing letters as well as a very informative letter from Peirce to J. W. Slaughter in this volume (cf. Ch. 4.5).

Even during Lady Welby's lifetime some letters addressed to her by Friedrich Max Müller were published (Müller 1902: 63–67, 85f, 104, 273), some of them only in part but all of them with dates.

Lady Welby's scientific remains represent by far the most important and most extensive source. According to my own research, the professional part of her literary remains was more or less arbitrarily divided up and stored in two different archives: the Welby Collection in the York University Archives (Downsview, Ontario, Canada), and the Lady Welby Library in the University of London Library. Her personal remains, such as her diaries and correspondence with family members have not been discovered as yet.⁷ Lady Welby wished her library which contained 3,000 to 4,000 books, to be given to the London Day Training College, an institute for training future teachers, after her death (cf. University of London n.d. b, minute 3593). Since most of her books contained annotations pertaining to signifiacs, and since Sir Charles Welby, her only son, wanted some assurance that her books and pamphlets could be used by the college students, John Adams, the first President of the College, suggested to the University of London taking over the library and intergrating it into the London University Library; as there were philosophy students only at the university (ibidem). In May 1912, the senate of the University of London accepted this offer and the conditions bound to it, which were laid down by Sir Charles Welby (cf. minutes 3595, 3596, 3191). Contrary to the number (3000–4000) given by John Adams, Sir Charles Welby reported that her library consisted of "some 1,500 books" (minute 3595). Since Lady Welby's last residence (Duneaves, Harrow) was to be sold and since the University, for lack of space, was not as yet in a position to take over the library, the books were taken to Denton Manor, Grantham where they were probably catalogued.

Today, the Lady Welby Library of the University of London is made up on the one hand of almost 1000 volumes taken from Lady Welby's library, which is by no means complete. These volumes have been incorporated into the general collection of the university library.⁸ Further, the Lady Welby Library includes 31 boxes with numerous pamphlets, reprints and newspaper cuttings, all of which are to be found in Egham in Surrey at an extension of the University of London Library. Except for the numbers 5, 7, 22, 23, 26, and 28, the boxes 1–33 of the "Uncatalogued Pamphlets" of the university library contain writings and material from Lady Welby's library. In addition, there are four boxes without numbers, containing duplicates particularly of Lady Welby's own publications, some of which were privately printed.

The value of the Lady Welby library is to be found, above all, in the annotations with which she filled the margins of her books and periodicals (including the first 37 volumes of *Mind*) and in the critical index made up of quotations and remarks, which she often added after having read them.

The core of the literary and scientific remains is to be found in the Welby Collection of the York University Archives. Lady Welby's correspondence makes up half of this collection and, according to Bowsfield (n.d.: 1), N. Cust sorted out Lady Welby's personal and family correspondence from the rest and filed it separately. In addition to typed copies and duplicates of, and excerpts from letters already present, Lady Welby's daughter typed some of her own copies and excerpts, probably for the publication of a part of the correspondence (cf. Welby 1929; 1931). The correspondence was subsequently brought back to Denton Manor, Grantham (see: Bowsfield n.d.: 1). The other half of the collection is made up of notices, excerpts, commentaries, etc., from Lady Welby's own publications as well as from those of other authors; then there are many of her essays most of which were unpublished and which she used to send to her correspondents so as to obtain their criticism; in addition to her poems, diagrams, and translations there are also proofs, some publications (particularly those printed privately) which are her own as well as by others, and newspaper cuttings; material concerning Sir Francis Galton's "Eugenics", G. Vailati's publications and the Welby Prize Essay Competition; and finally newspaper cuttings, reviews and notices concerning the three books edited by N. Cust (Cust 1928; Welby 1929; 1931). Towards the end of the 60's, Prof. Henry S. Harris (Glendon College, York University) acquired the whole collection from Sir Oliver Welby, one of Lady Welby's grandsons, for the York University Archives.¹⁰

The Welby Collection represents the major source of my studies. Therefore I will take the quotations from Lady Welby's correspondence as far as possible from her original letters, or from copies and drafts of her letters completed during her lifetime, and not from the books of correspondence edited by N. Cust. Even though I could study only a part of the letters Lady Welby exchanged with more than 460 correspondents, for my purpose, it is very evident that the Welby Collection can be of great value not only for the history of significs, but also for general questions pertaining to the history of religion, of science, and of civilisation relating to the period between 1861 and 1912.

In addition to those mentioned, I have used materials from two other archives, namely: the Frederik von Eeden-Museum belonging to the archives of the library of the University of Amsterdam; and the Tönnies literary remains in the

Schleswig-Holsteinischen Landesbibliothek which is in Kiel (Federal Republic of Germany). The former contains the originals of the correspondence between Lady Welby and van Eeden;¹¹ in addition there are letters from Sir Charles Welby, Nellie Carter, Lady Welby's secretary, and R. Greentree who was Lady Welby's assistant from 1900 to 1904. In connection with this study, these letters are primarily of importance for certain details in Lady Welby's biography.

From the Tönnies literary remains (cf. Zander 1980), which do not contain Lady Welby's letters to Tönnies, I used above all correspondence which could shed light on the role played by F. Tönnies, philosopher and sociologist, in the spreading of Lady Welby's ideas in Germany and France. This correspondence includes letters exchanged with O. Neurath, R. Carnap, H. Höffding, A. Lalande, R. Eucken and others.¹²

Beside scientific publications, various correspondences predominate in the list of sources I used. What value can one attach to Lady Welby's correspondence with numerous eminent scientists who were her contemporaries? How should one assess a positive opinion expressed by a Peirce, a Stout a Russell or a Schiller on a publication or unpublished essay written by Lady Welby who, without ever having had a formal education in the sciences, dared to deal with difficult philosophical and psychological questions? How far do her correspondents take her social status into consideration and how frank and candid are they with her? To what extent does one feel obliged to her, for example, because of her hospitality which many of them enjoyed while spending even weeks as her guests in a carefree atmosphere in the company of illustrious and eminent personalities belonging to the worlds of science and literature? Even though they cannot be answered generally these questions must be posed, if one wishes to evaluate and critically analyze the value of Lady Welby's correspondence as an expression of a form of co-operation with scientists of her time. For some of her contemporaries had already pointed out the problem of possible flattery and polite phrases the contents of which could be overrated.

Thus, F. van Eeden writes to her (July 5, 1904):

"You may call it respect, or politeness, or scruple, but the fact is that nobody is quite frank with you, except the children. Everybody loves you, but nobody speaks freely with you, which I think is a great calamity. O, if you could once play Harun-al-Raschid and perceive the world from the body and with the ears of a sharp-hearing char-woman." (Eeden/Welby 1954: 62)

Four years later (Oct. 26, 1908) he writes again:

"For me you are, and always were, a queen surrounded by over-fond and over-respectful courtiers who never gave you plain, unmitigated truth." (Eeden/Welby 1954: 77) ¹³

Lady Welby's reply (Nov. 5, 1908) shows that she was very well aware of the problem referred to, but at the same time she thought she could avoid or solve this problem by her conduct within the world of scientists and by her good knowledge of human nature:

"You lay stress on the importance of the 'social sphere'. To me except in the most superficial sense, *it doesn't exist*. And in the surface sense I have for years avoided to the utmost the 'sphere' in which I was born." And: "I have in every case refused any longer to ask here anyone who began to 'court' and flatter. Indeed I drive them all away by polite sarcasm!" (Eeden/Welby 1954: 79)

Many a time she reveals herself in her letters — in spite of all the persistence with which she puts forward and follows up her questions — as a modest interrogator and searcher, who does not wish to thrust herself into the limelight, but to motivate others who are probably better qualified to take up and deal with neglected questions and problems. She is obviously concerned with the substance of the matter and therefore repeatedly expresses her fears that she should win recognition owing to her social status and not as a result of her scientific works. Thus, unlike other scientists with comparable positions in society, she can write to Peirce as follows (December 22, 1903):

"Before I say more, may I confess that in signing my book 'V. Welby' I hoped to get rid as far as possible of the irrelevant associations of my unlucky title?" (Peirce/Welby 1977: 13) And further: "But the only honour I value is that of being treated by workers as a serious worker." (ibidem)

In spite of all her efforts there were probably flatterers among her correspondents, or at least those who endeavored towards polite discretion. But I could not find any proof of this in the correspondence I studied, the general tenor of which is always characterized by candor and a sober interest and the letters written by practically all her correspondents contain criticism, yes even polemic and that too quite often. ¹⁴ Further, according to my survey, she never stopped corresponding with someone due to severe criticism as long as the other was prepared to deal with her ideas and questions. If we disregard the theologians who were among her first correspondents, we find that her exchange of letters with scientists lasted the longest; with scientists like Sir F. Pollock, G. F. Stout, F. C. S. Schiller, and F. van Eeden who exercised the sharpest pertinent criticism. If one takes these arguments into account one can on the whole, in spite

of all the necessary caution in each individual case, no longer doubt the particular value of Lady Welby's correspondence as a reliable historical source.

2.2 The Development of an Independent Mind

Victoria Lady Welby (April 27, 1837 – March 29, 1912) whose maiden name was Victoria Alexandria Maria Louisa Stuart-Wortley was the daughter of Lady Emmeline Charlotte Elizabeth (May 2, 1806 – Oct. 20, 1855) and the Hon. Charles Stuart-Wortley (1802 – May 22, 1844). Her life was marked from the very beginning by unusual events and circumstances and by numerous remarkable personalities. She was baptized by the Bishop of Salisbury on June 17, 1837. Her godmothers were her Royal Highnesses the Princess Victoria and the Duchess of Kent, her godfather was John Irving, Esq., and she was named after her first godmother.¹⁵ Five days later this social event received more importance when her first godmother became Queen Alexandrina Victoria and then changed her signature to Queen Victoria after some time.

The greatest influence in Victoria's childhood was probably that of her mother. Lady Emmeline Stuart-Wortley, daughter of John Henry Manners, fifth Duke of Rutland and of Lady Elizabeth Howard, was a well known authoress and poetess during her own lifetime.¹⁶ Her first poems appeared in 1833 and these were followed practically every year by new volumes of poems as well as by descriptions of her travels (1851, 1853 and 1854), three plays written in verse (1840 and 1841), a comedy (1843) and a comedietta written in prose (1844). Lady Emmeline's poetic talent and the relationship to expression and writing, which she esteemed important, found its echo quite early in her daughter Victoria, who wrote her first book (Welby 1852) as a child, and then later many a time some poems (Welby 1886h; 1886i; 1906a) and parables (Welby 1897a; 1897b); N. Cust, Lady Emmeline's granddaughter also showed the same talent and inclination (cf. *Who was Who* 1961: 270).

Not only Lady Emmeline's literary career but also her many travels, which later almost developed into a passion, began after her marriage (Feb. 17, 1831) to Charles Stuart-Wortley, the second son of James Archibald Stuart-Wortley-Mackenzie, first Baron Wharnccliffe. Among her three children, Archibald Henry Plantagenet (July 26, 1832 – April 30, 1890), Adelbert William John (died in 1847) and Victoria, it was the latter who later accompanied her on her longest journeys. At first, her travels with her husband took her through various European countries such as Holland, Italy and Russia where she met many eminent

personalities with whom she corresponded even after many years. In the summer and autumn of 1838 she traveled through southeast Europe (Serbia, Hungary, Bulgaria and Turkey) and central Europe. With her husband's death in 1844 due to the effects of a hunting accident, which occurred before their marriage, and the death of Adelbert her youngest son three years later, her love of travel became an "overmastering passion" (Cust 1928: 17).

At that time Victoria was extremely weakened by a virulent attack of scarlet fever, "that she had been pronounced unfit for the ordinary businesses of girlhood" (Cust 1928: 18). Since Victoria did not attend school due to her sickness among other reasons, but was taught privately, Victoria's mother – according to her biographer, N. Cust (1928: 17) – saw in her weakened constitution a sensible excuse for undertaking long journeys. But Victoria could not have been so weak for she stood the adventurous and strenuous travels with her mother well.

The years of her travels which were also to be the years of her actual upbringing saw her journey through Italy and France in 1848 where the revolution of '48 took place and through parts of the U.S.A., to Canada, Mexico, Cuba, Panama¹⁷, Ecuador, Peru and Jamaica between the spring of 1849 and the summer of 1850. N. Cust wrote the following (1928: 25f) on the objects and purposes connected with the latter journey:

"The American adventure especially had been undertaken in a serious spirit, both travellers being eager to inform their minds concerning a country of which the reports were as various as they were critical. The younger one, from earliest childhood an assiduous and not unskilful artist, had therefore armed herself with a Journal; . . ."

This journal in which among others the meetings with Prof. Agassiz, Prof. Siliman, jr., Daniel Webster, Prescott and General Taylor, the President of the U.S.A., are described, was published in 1852 together with Victoria's own illustrations (Welby 1852). Referring to the goals and intentions of the book the following appears in the preface (Welby 1852: iv):

". . . it is intended for children, – those of her own age, for instance – whom it is her highest aim to amuse, and, to a certain degree, instruct. Her little volume, therefore, lays no claim to the attention of the public farther than its character as a child's book may deserve."

Already in October 1851 mother and daughter were on the move again. This time their travels took them to Lisbon, Madeira, Cadiz, Sevilla, Morocco, Malaga, Madrid, Segovia, Granada and Ronda (cf. Cust 1928: 189–266). In 1853

they undertook another journey, this time through northern Europe and in January 1855 they started out on their last big journey which was to have a tragic end. They reached Antioch via Constantinople, Cairo, Jerusalem, Damascus, Beirut and Aleppo (cf. Cust 1928: 267–333). Spiting all warnings Lady Emmeline did not let anything hold her back. She went on even after breaking her leg near Jerusalem (Boase 1965: 813f). Outside Antioch in the Syrian desert she fell ill with dysentery and soon after even her daughter was sick with fever. Lady Emmeline died on October 20, 1855 on the way to Beirut, having been abandoned by her escorts who were familiar with the area. Shortly after, her daughter received help from Beirut, where news of the disaster in the desert had been received.

In later years Lady Welby mentioned many a time that she had never received a conventional upbringing but was instead deeply marked by the travels with her mother, and in her letter to Peirce, written on December 22, 1903 she adds:

“This I think accounts in some degree for my seeing things in a somewhat independent way.” (Peirce/Welby 1977: 13)

In a letter to Sir Francis Galton she herself explained what she meant by this by using an example which was quite typical of her (Welby 1931: 165ff):

“All through my childhood I have ‘sensed’ space as curved. I have always had the ‘feeling,’ whenever I drew a ‘straight line,’ that it only seemed straight because the curve was so big that one could not perceive it. Thus every parallel must meet somewhere . . . Now why did this notion arise? Apparently because, being unusually long-sighted and observant of landscape (and seascape), I was keenly conscious of the dip of the horizon and thus of the curved surface of the world, and always associated this idea with the apparent general flatness of the whole nearer ‘view.’”
And after a couple of lines:

“Then as I grew older I was shown triangles, circles, etc. (but only in play: I had no ‘lesson’ in anything) drawn with a compass instead of by ‘free hand.’ I asked questions about the ‘supremacy of the curve’: but . . .!

At last when I was 21, having been told that the very elements of Euclid would soon settle my nonsense, I bought a copy and set to work. But I came with a shock upon the axiom of parallels.”

And finally:

“Thus I concluded that while Euclid had in all other cases taken what really existed in our space and perfected them into ideal geometrical figures, etc., he had taken one thing which did not exist – an infinite straight line real in the sense that a curve or a circle or a square or an angle are real – and idealised that into his axiom of parallels.

Well, I pass over the reception which any attempt to express these idiotic ideas encountered. To differ from Euclid! I found I must dissemble or I should be set down as cracked.”

In spite of society's general attitude at the beginning of the Victorian age, Lady Victoria's religious upbringing was similarly unconventional which is essential in understanding her earlier religious publications, some of which were brought out even after 1900. She wrote to F. van Eeden on this subject (unpublished letter of Nov. 22, 1908):

"I am always grateful that my mother would never have me taught any creeds, though my aunts got me to repeat a few prayers. But nothing said by rote seemed to me of any value except in a play, and even in that I was complained of when acting as breaking out into more natural words and only ending with the 'tag'!"

In her later years she saw the advantage of the upbringing she had received in the fact that she was "educated" and never "inducated", which compelled her many a time to initiate her questions and inquiries with "what in others is already induced in school training" (letter to W. J. Greenstreet; Welby 1931: 245f). As she was furthermore hardly subjected to any form of systematic discipline during her lifetime, she was able to more or less preserve the open-mindedness and the independence of thought which she had acquired as a young girl. Even though Lady Welby, while assessing her own development, underrated society's influence on her it is certain that the experience of her own upbringing greatly stimulated criticism of the educational system of her time and served as an important stimulus for her reflections on the consequences which could result from her significs for the education of children.

However, she also realized that she had to teach herself the discipline which she lacked as well as the necessary fundamentals, methods and techniques while preparing her scientific works. In spite of the amazing knowledge and capabilities acquired in the most diverse sciences, she remained conscious of the fact that the education she had received in her youth was quite unimportant when compared with that of other scientists, and was often insufficient to deal adequately with the questions she posed. With this background the extensive correspondence with other scientists also takes on a new meaning. On the one hand this correspondence certainly served to draw the attention of her contemporaries to questions they had probably never seen, overlooked or neglected. On the other hand, however, Lady Welby sought to compensate for the imperfections in one person by pooling thought and work in correspondence.¹⁸

Thus, she wrote for example to Schiller (March 27, 1901)¹⁹:

"Besides I am hampered (among other reasons) by cruel lack of the training and knowledge you represent . . ."

Many a time she called her poor knowledge of foreign languages also an inadequacy. She could understand French but was unable to write it (letter to J. M. Baldwin, May 25, 1903) and was unacquainted with Latin and Greek. She certainly often revealed her modesty when pointing out the imperfections in her education to others. However, she also did this because she was afraid that the subject with which she was dealing would be blamed for her own inadequacies and not she. Thus, she wrote for instance to the philosopher F. H. Bradley (Nov. 17, 1894):

“. . . but I had far rather appeal only to the inner circle of teachers and thinkers and leave for their treatment to more competent hands. Think for instance of the terrible disqualification which total ignorance of Latin and Greek is! I don't want my ignorance to discredit and perhaps bring ridicule on so vital an inquiry as this and deter others from taking it up.”

Certainly for the same reason we find references to her inadequacies even in her last two books (Welby 1903: 235; 1911b: viii). At the latest G. J. Bolland, philosopher at Leiden, revealed to her in his letter (1904) which disqualified his own opinion, that her fears were not totally unfounded:

“Permit me in that case to tell you flatly that if you are unacquainted with German you are ill-prepared indeed to speak or write about the truth at all: your hybrid language shares the fate of the Roman idioms of being quite inadequate to the expression of pure thought, nor will you ever become wise so long as you remain unable to converse with people like me in any language but your own.” (Welby 1931: 123)

And on a later postcard he wrote to her:

“If you have a comprehension to comprehend, you will apprehend by this time that you have lived in the way of innocence till now: *extra logicam Hegelianam*, in fact, *sapientia nulla est*, and if you want to become wise, you would have to hear me.” (Welby 1931: 124) ²⁰

It is unknown what influence the conditions after Lady Emmeline's death had on Lady Welby, particularly since she hardly referred to this subject. One can, however, at least infer from her biographical data that during the following years the conventions and attitudes of her social class had a much greater effect on her than at any previous time. As an orphan she lived from the end of 1855 to the beginning of 1861 with various relatives, but always for short periods: with her uncle at Belvoir, with her cousin Edward Wharncliffe at Wortley, at Cadland with her oldest aunt and at various other places. For the major part, however, she lived with her godmother, the Duchess of Kent (the Queenmother) in her numerous residences (cf. Cust 1928: 18f). When the Duchess died on March 16,

1861, Queen Victoria took charge of all those who had been in one way or another dependent on her (cf. Lee, ed., 1901: 447). One assumes that at this time and as a result of this royal act, Victoria was appointed Maid of Honor to Queen Victoria and belonged henceforth to the royal court. Apparently, she resided at the royal court until her marriage on July 4, 1863. During this period of over two years, she witnessed the visits of foreign heads of state, was part of the Queen's entourage on her visit to Ireland, accompanied the Queen on her journeys within England and Scotland and she still stood in the service of the Queen when the Prince Consort died and when the Prince of Wales married on March 5, 1863 (cf. Cust 1928: 19–24). She made the acquaintance of innumerable nobles, representatives of the government and parliament, but she was apparently not quite cut out for life at the court.²¹ For, 33 years later, she wrote to Herbert W. Paul (December 4, 1896):

“. . . what were (in the sixties) the arid wastes of the conventional London dinner-party, where it used to be a point of honour to be as dull as platitudes could make you, and any suspicion either of scholarship or irony would have caused the table to freeze with horror under your plates.”

During these years of service at the court she must have been ill for a short time with an unknown sickness which threatened to lead to deafness.²² This was certainly the cause of her hardness of hearing, which hindered her in some ways, led every now and then to complications in conversation and forced her to give up music.²³

On July 4, 1863, the Hon. Victoria A. M. L. Stuart-Wortley married Sir William Earle Welby at Belvoir. Sir William (Jan. 4, 1829 – Nov. 26, 1898) was the eldest son of Sir Glynne Earle Welby-Gregory, 3rd. Baronet, and thus became 4th. Baronet (Aug. 23, 1875) after his father's death. Just as his father had done he took on the additional surname Gregory due to a royal law on Dec. 27, 1875 (cf. Boase 1965: 1258). In addition to a career in the English army, customary in his social class, he was a Member of Parliament from March 28, 1857 until Feb. 1884 at first for Grantham, which was situated near Denton Manor, his family residence, and then from 1868 he represented South Lincolnshire in parliament. From 1875 his wife also took on at first the surname Gregory (Hon. Lady Victoria Welby-Gregory) and published until the end of the 80's under her full name (cf. Welby 1883; 1886 j–m). Then from 1890 onwards she published under the name of Hon. Lady Welby and from 1893 she only used Victoria Welby, although she had to sign all official and business documents with her full name.²⁴ After her husband's death the correct address was Victoria

Lady Welby or Lady Welby, as her daughter-in-law now had the right to use the title "Lady" before her Christian name.²⁵

On Jan. 1, 1899 she wrote to F. van Eeden about her marriage to Sir William, who not only tolerated her studies, which were quite unusual for a woman at that time, but also supported and encouraged them, particularly at the beginning:

"Our marriage was indeed a witness to what love can be and do by overcoming. In almost all secondary things we were opposites: there was it is true a deep unity of feeling in hatred of the falsities and waste of a London "society" life, and of love for the dear quiet *country* and our beloved Home; but almost every 'taste' and 'tendency' diverged." (Eeden/Welby 1954: 37)

Her only surviving son²⁶ was Sir Charles Glynne Earl Welby (Aug. 11, 1865—March 19, 1938) who was in a high civil service position in the ministry of war from 1887 to 1902 and was later a Member of Parliament from 1900 to 1906 (Who was Who 1941: 1432). Emmeline Mary Elizabeth (Nina) (1867 — Sept. 29, 1955) was her only daughter. She later became Mrs. Henry Cust and made a name for herself as an authoress and poetess (Who was Who 1961: 270), and on her mother's urging translated Michel Bréal's "Essai de Sémantique" (cf. Bréal 1900) into English.

Hardly anything is known about the first years of Lady Welby's marriage up to around 1870, except for the fact that she founded the Royal School of Art Needlework (Cust 1929: 11) at this time. The preserved correspondence begins from 1870 onwards also at first very meagre and then from 1880 onwards it becomes more extensive; and among the books in her library there are hardly a dozen which were published before 1870. One can thus assume that in the 70's an important change was in the offing which then manifested itself in 1881 with the publication of her second book *Links and Clues* (Welby 1881 a).

2.3 The Search for a Contemporary Interpretation of the Christian Doctrine

"As to Religion! That is where I began. I found out that none of us knew where we were or what we were battling for at the very centre of life, *that which ought to focus all our interests and powers.*" (Lady Welby to C. K. Ogden, Dec. 24, 1910)

As in the case of most authors one does not do justice to Lady Welby's works if one seeks sudden ideological breaks in her thoughts which divide the course of her thoughts into independent periods, or if one assumes that a system of thought which she possibly arrived at toward the end of her life was already

evident in the first publications. Indeed her priorities in her work and even some of her opinions underwent changes during the course of her life but strictly speaking, these do not represent any breaks; and when she writes in her last publication:

"It is but too evident, also, that the message of religion as yet tends rather to accentuate inevitable differences than to interpret and gather up these into an organic richness of response". (Welby 1911b: 82),

it is necessary here as at many other points of her publications to go back to the point where according to her own information she started, in order to understand these lines.

Nothing is known as to how and by what means Lady Welby felt motivated not only to deal with religious and theological questions, but also to publish her ideas. Since the oldest books in her library deal with such questions, it is apparent that this field had been at all events of special interest to her. But even her husband, Sir William E. Welby-Gregory occupied himself with religious and ecclesiastical questions, at the latest from 1871 onwards, however especially under socio-political perspectives (cf. W. E. Welby-Gregory 1871; 1882; 1893). One can learn at least something about her motives from her first (surely privately printed) publication belonging to the period after 1870 (Welby/Bishop of Lincoln 1872); this includes a letter from her to the Bishop of Lincoln and his reply. In her letter she gives two reasons for writing to him about her problems with the "Athanasian Creed":

1. "my deep consciousness of the responsibility of a Christian mother, whose one aim and object is to train up her children in the love of truth and the service of God"; 2. It is not "the doctrines, but the manner of setting them forth, which is a difficulty to me, and makes me feel deeply that the use of this Creed as it stands is a grave hindrance and a real stumbling-block to my faith and spiritual life" (Welby/Bishop of Lincoln 1872: 1).

In addition to the pedagogic problem, she was occupied in the following years above all with the second problem, namely that of dogmatic doctrines and orthodoxy. How can one, she asked herself and others recite a creed which first of all analyzes and defines mysteries too subtle for human analyses and definitions, and then damns everyone who does not think in this way (cf. Welby/Bishop of Lincoln 1872: 2)? More important than this question was her criticism of "Universalism", of the idea that the teachings, definitions and interpretations of Christianity were eternally valid. This brought her, as early as 1881, face to face with the problems of meaning and the possibilities involved

when interpreting a text²⁷:

“It puts time-words and time-thoughts into Eternity, as if adequate or indeed relevant.” (Welby 1883a: xiii) ²⁸

Lady Welby faced the task

“(1) of reversing the prevailing interpretations of the New Testament and (2) of reconciling the spirit and meaning of the whole with our reason and conscience” (letter to Rev. C. Voysey; Welby 1929: 39).

with *Links and Clues* published in 1881 under her pseudonym “Vita” and under her real name in the second edition (1883a).

In doing so her method and her results fitted in neither with the English movement of the evangelical orthodoxy²⁹ nor with the other theological schools of her time. She went her own way and was however supported and encouraged by two theologians who had introduced with their works a new era in the exegesis of the New Testament in England: Joseph Barber Lightfoot, Bishop of Durham, and his younger friend Brooke Foss Westcott, who succeeded Lightfoot as Bishop of Durham (cf. Welby 1883a: x) ³⁰.

Lady Welby’s method of text interpretation and, the conception of language behind it should be of particular interest to us when considering her further development. The starting point for all the following thoughts is indicated in the first chapter: in addition to a perfection which is unrecognizable, and unattainable considering the given capabilities, there is also one which we 1. can recognize and possess and 2. whose nature is known to us through the life, death and commandments of Jesus, i.e.: what God is to us and what our conception of Him may and should be. Referring to this goal, i.e. perfection as the Imitation of Christ, she interprets various passages from the Bible. In the chapter “The Holy Scriptures” (1883a: 31ff) she deals after all more closely with principles of interpretation, four of which she mentions: 1. “The literal”; 2. “The equal, the level”; 3. “The context”; 4. “The tendency of the whole taken as whole”. The first method, which only throws light on what the Bible says and not on its meaning, is rejected as it would lead to a collection of apparently the most contradictory quotations. The second method leads to the “principle of the higher and the lower” which she accepts, with God being represented and manifested on the higher level and man on the contrary with all his weaknesses on the lower. The inclusion of the context of a passage creates a “truer and more wholesome ground” (Welby 1883a: 33) for the interpretation, but incorporates the problem of recognizing the necessary extent of each con-

text to be considered and where one should more likely seek for parallels. The fourth principle after all seems to her to be even better but it can be used only in connection with the second as it would otherwise lead to a mixing up of the higher and lower levels. The second principle is declared to be the leading principle of interpretation and is supplemented by the third and fourth.

In doing so, she is faced with the particular problem of separating the two levels. For the revelation, according to Lady Welby's arguments, always includes the principle of incarnation which explains why God's written word in order to reveal God to us must always reveal man also. After all the Bible was not written by God but by men. She recommends two ways to get beyond the purely human in the Scriptures as well as the anthropomorphic vision of God: 1. at every passage one should ask if the behaviour required by and duly described in it can be attained or not by man without any special enlightenment from God; the higher level we are seeking is then that which is beyond every natural religion or standard. 2. The higher level found in this way is to be used to test and to interpret the rest so as to — as is done for example when interpreting the Old Testament from the standpoint of the New Testament — break through the lower and the superficial human meaning of words. Using the story of the cursing of the fig tree as an example she points out most clearly the effectiveness and the strictness of her interpretation method (Welby 1883a: 70–76).

The arguments for the interpretation method are to be found in Lady Welby's ideas about language and communciation, according to which one cannot rely on the apparently clear and simple "plain, common-sense meaning" (1883a: 44)³¹ of statements or texts, since they are often misleading as are many traditional words of the language in general and their use. Thus the use of "sin" and "sinner" as equivalents has mixed together and equated two different ideas (1883a: 201). Words such as "dogma" were given additional meanings in the course of time, by expanding their area of usage so that negative nuances now overlap the theological meanings (1883a: 223f). Now if language, which is anyhow inadequate, is used in the way it is available to us to talk about spiritual and Godly matters, it becomes even clearer how closely words and word pictures are connected with traditional ideas, which contradict our modern level of knowledge and particularly hinder an adequate understanding of the Divine.

"Remember that the raising, the expanding of thought, is no less necessary with advancing light in natural things than in spiritual. E. g. (1) The sun rises; (2) the air is heavy and oppressive. In both these cases taken at random the under-truth is really the 'reverse' of the popular expression; and the 'judge not by appearance' (or sensation) comes in." (1883a: 311)

For this reason she supposes that some of the greatest truths cannot be expressed by way of human words unless with the help of paradoxes. Thus, the training required of man must include the possibility of choice not only in the field of action but also in the field of interpretation:

“that there should be test, alternative meaning, choice of readings, progress in discernment, alike in nature-revelation and word-revelation, *as there is choice of good and evil.*” (1883a: 314)

It is therefore impossible to give a final interpretation of the Bible but only ever new and modern approaches as well as approaches which are not timeless in which that, which we mean to say with such words, must be broken through to arrive at that which could be the intended meaning (1883a: 166f.):

“supposing the reader to be in the same atmosphere, moral and spiritual, as the inspirer of the words; or, in the case of our Lord’s own words, of the speaker” (1883a: 44; in italics in the original).

For Lady Welby the consequence of this way of thinking is that truths can only be arrived at in accordance with the possibilities of knowing available during an epoch, and that truths can be formulated only with the help of the given means of presentation and expression (1883a: 104). In speaking of a mother – but referring to the church – who imposes her own standards and ideas of truth on her children, she writes:

“and she asks only what was *said once* by them of old time, be they Patriarch, Prophet, Apostle, Father, Reformer; *never what they would say now*, as (always and ever) pioneers and leaders in truth.” (1883a: 82)

In this respect the church is only the guardian of the dogma if “given expressions, definitions of truth” are meant (1883a: 83); the guardians of God’s truth, i.e. of that which is communicated by way of expressions and words are on the contrary the children more than the mother or at least the children to the same extent as the mother (1883a: 83).

Just as with this, the foundation was already laid for Lady Welby’s later devotion to the natural sciences in whose representatives she then saw the “pioneers and leaders in truth” of her time, so can one find numerous passages in *Links and Clues* which bear resemblance to her later criticism of terminology (cf. 1883a: 98ff, 225 f, 246, 265, 307). However, some years had to pass until this occurred.

Although Lady Welby felt herself compelled already while preparing *Links and Clues* to correspond with the most different theologians on questions she

wanted to deal with, her correspondence grew to a great extent with its publication. Among the reactions to her book there were a few negative ones which must have made it quite clear to her that the path she had taken could not easily be made compatible with the social status of a woman at that time. Thus, for example, Louisa, Duchess of Northumberland wrote to her (July 17, 1883):

“If one word is clearer than another in GOD’S Word, it is that women are not to teach in religious subjects save to their children and the children of others, and you say, and I fully believe you, this is not what you wish to be or to do. Yet there is not one of your papers which does not contain words that must mean ‘teaching’.” (Welby 1929: 67)

Although no examples of similar reactions are to be found for the following years, in the course of which her religious publications stepped into the background, one should, however, consider it a possibility that being a woman her role as an outsider among her contemporary scientists also influenced the reception of her ideas.³² At any rate she would have hardly broken down possibly existent prejudices by way of her own conceptions of the intellectual and psychological differences between man and woman (cf. Welby 1886; 1905; 1906c), which were not easily comprehensible for others.

The predominately positive reactions to *Links and Clues* seem to have encouraged Lady Welby to write in addition to a second edition (1883a), short essays, parables, satires and poems in the same style as the book and with the same goals in mind. She got most of them privately printed so as to be able to distribute them among and discuss them with her rapidly increasing circle of correspondents.³³ Thus, she wrote to C. K. Ogden 25 years later (Dec. 24, 1910):

“I used to get endless letters of confession and appeal & c.; and a set of confirmation questions from the point of view now called Significs³⁴ was used for Confirmation Candidates by the great Bishop Lightfoot, Bishop Westcott and Archbishop Benson. But I found that work on the theological and religious side was premature; though it is as promising a field as any.”³⁵

The contents of her texts on religious themes published continuously and in great numbers until around 1891, show that Lady Welby’s ideas were increasingly influenced by her extensive reading (cf. Cust 1929: 11) particularly of literature on natural science. The new view of the world which thus opened out to her and continuously broadened must have certainly affected her religious ideas, for she was accustomed to consider the outward reality as symbolic of an inner spiritual world (cf. 1883a: 150–156). The conventional religious conceptions, the interpretations of the Bible and numerous theological terms proved to

be far too narrow and incompatible with the level of knowledge at her time.

“Stories and signs and words – after all but images or metaphors or symbols – which used to rest securely on the flat world of thought with a solid arch above it, the centre of all ‘cosmos’ we could know of, are now completely ‘undermined.’” (Welby 1888a: 3)

The spiritual world, the religious doctrines took on a new form for her in which they were compatible with the level of scientific knowledge existing during her time. In her opinion, religion and science did not need to be reconciled and she endeavoured to reveal in her writings that they “diverge not in spite of but because of their radiating from one center” (letter to Prof. Henry Drummond; Welby 1929: 197).

This development was ended in 1890 with an anonymous contribution³⁶ from Welby in *The Open Court* (Welby 1890e) in which she repudiates the conception of religion as the ‘veneration of a supernatural godlike personality’, a conception which is important to orthodox believers and the reason why agnostics reject religion as plain superstition. Instead, she advocates that central religious ideas be given a new meaning, which is in keeping with science, in order to work out in this way a “religion of ethics” (1890e: 2194) for the realization of the religion of the future. Already two years earlier she had admitted to Prof. Romanes (May 4, 1888):

“I do not understand allegiance to any Divinity except One whose name and nature is unqualified Truth.”

The results of science alone did not motivate Lady Welby to follow the path outlined here. The methods and the rigid research standards with which she became acquainted, and the critical attitude towards traditional expressions and language usage were just as important to her. She had already arrived at this attitude some years ago and she now felt it to be more and more confirmed. The lesson in scientific discipline, at first a bitter one for her, taught her to tame her “enthusiasm” and “‘rambling’ or ‘wayward’ imagination”,³⁷ but also that every result of a study must be revised when faced with more extensive knowledge. In the way scientific knowledge intensified and extended Lady Welby’s criticism of language and terminology in the fields of religion and theology, it led her to criticize philosophy and the natural sciences in the same fashion. She derived its necessity from the fact that inadequacies of the given language as well as the usage of single words, in particular of metaphors and analogies, which is incompatible with the respective level of scientific knowl-

edge are not only confusing but also hinder the progress of knowledge due to their retroactive effect on thoughts.

Since she felt confirmed in her point of departure, "the unity of creation" (Welby 1885f), by the scientists of her time, she did not accept any "break" or "gulf" any separation or division but only clear and strict conceptual differentiations; and solely on this basis, while protesting against every form of dualism, she declared herself a "monist".³⁸ She criticized the existing definitions of "self", "will", "personality", "death", "immortality"; she pointed out the relativity, often ignored, of temporal and spatial expressions (e.g. Welby 1887b), and the misleading implications of words such as "basis" and "foundation" (and that too not only in their intended use as metaphors); and she complained that the limitations of a given means of expression necessitate the use of negative words to describe that which, in reality, contains or is something positive (e.g.: "inert" or "infinite").³⁹ In the course of these studies and encouraged by the proof that it was possible to develop non-Euclidean geometry Lady Welby represented, from around 1885 onwards, her conception of the "three grades of consciousness" which she expanded and connected with elements of the theory of knowledge and signs in her publications on significs:

"Let us try to realize that the current phraseologies only mislead when supposed to embrace *actual fact becoming accessible first to conception, then to consciousness and experience*. The general tendency of observed order seems to suggest that we have a 'planetary' consciousness, or one which naturally starts from this earth as a mental centre; that since the Copernican era began we have been gradually developing a 'solar' or 'systematic' consciousness, and are already beginning to refer many verified facts to a mental 'sun' as a centre; and that a complete generalization, or satisfying answer to the problems which as yet baffle us, needs a 'cosmical' consciousness, of which indeed the fore-gleams may be discerned in the very questions we ask, in the very doubts suggested to us, in the very paradoxes of which Nature is full." (Welby 1887a: 43)

In order to stimulate and encourage work on the criticism of language and terminology, she planned to found a magazine, *Focus*, in the spring of 1884 as "an occasional (not periodical) Magazine of Comparative Suggestion" (Welby 1887e: 1). The publisher, Alexander Macmillan was willing to publish the magazine, Bishop Lightfoot and others welcomed the plan and Prof. Max Müller agreed to contribute etymological commentaries as well as commentaries on terminology history (cf. Welby 1929: 83–85). However, the plan was never executed probably because Lady Welby did not wish to expose herself as publisher and nobody else could be won over to take over this task. Thus she was obliged to continue her work alone, encouraged solely by her correspondents.

From her criticism of language and terminology she developed a method which she called "translation", which was at first to be used to derive benefit from scientific theories for reconstructing religious doctrines and theological terms. In doing so she combined two different experiences (e.g.: the spiritual and the scientific) which she supposed to be analogically related. The translation then consisted of the formulation of one kind of experience (at first only the spiritual) into language in accordance with the terms and the relationship between the terms, with which the other kind of experience was described empirically or theoretically. In *What is Meaning?* (1903: 287f, 130–138) Lady Welby dealt with and published for the first time, the two most important realizations of translations of this type, "Mental Biology" and "'Translation' of H. Jackson's 'Cronian Lecture'"⁴⁰. However these texts were written in 1888 or 1889. Since it is above all important to find fitting and really illustrating metaphors and analogies when doing such "translations" even her efforts to do so drew her attention to the necessity of "semantics" or "psychological philology" as an independent but still unfounded science.⁴¹

The essay "Threefold Laws" (Welby 1886g) printed in 1886 represents a sort of preliminary form of translation. This is the only text written by Lady Welby in the period before 1898 which she later sent to Peirce (cf. Peirce/Welby 1977: 14). Here, she deals in general with "triadism" and the arguments in support of it and then criticizes Comte's "Law of Three Stages" (theological, metaphysical and finally scientific stage) as inadequate because Comte concludes the development of mental function at some arbitrary point. Lady Welby's attempt to formulate a revision of Comte's "Law" as an alternative, was not taken up again later on. However, since it contains some expressions which refer to the sign theoretical trichotomy, "sense—meaning—significance", which was to follow later, her definition of the law is reproduced here, at first without a commentary. Lady Welby assumes

"that broadly speaking Man passes through three phases of mind which we may consider as (1) the Moral, the Logical, the Philosophical, or the Way of right conduct, right reasoning, and right generalization; (2) the Mathematical, the Critical, the Scientific; or the Truth, abstract, historical, positive; and (3) the Vital, the Energetic, the Generative, or the Life, sensuous, conscious, creative. In other words Man mentally develops by a threefold process; that is, *by the tentative, the corrective, and the effective.*"

"In every form of experience we ought to find the broad principle that the first stage is to grope, to feel our way, gradually to discover and use a means, a medium and a method; that the second is to analyse and verify this, that the third is to translate and apply it in a new and more living sense. And it must also follow that

much of human experience, either individual or collective, must be still in the second if not even in the first stage." (Welby 1886g: 2, 4)

In various letters written towards the end of 1890, Lady Welby looked back on the preceding five to ten years so as to take stock of her own development. This shows that during these years the important event was the reading of literature from Clifford's "Lectures and Essays" (W. K. Clifford 1886), probably 1887.⁴² At that time she discovered that it would be more correct to proceed by means of induction instead of looking for deductive explanations. For this reason she went from philosophy by way of psychology and biology to physics and the elements of experience which must be recognized by everyone as primary. So, she discovered:

"... that below these even there still everywhere arose the prior question: *What do we mean* by time and space, motion and mass, body and consciousness, and so on? *What do we mean* by 'mind' and 'self' – by 'reason' or 'moral sense'? And to my amazement I seemed to find that no one had ever asked the question in my sense or even explicitly recognised that change in some sense underlies all continuity (. . .) So that as a preliminary – giving us the 'prolegomena' to true knowledge of reality – we need a new science, the science of meaning in its changes, or 'Semantics.'" (letter to Sir F. Pollock, Dec. 19, 1890)

From around 1890 onwards the problem of meaning actually moved into the foreground in her own publications.

2.4 The Evolution of the Human Mind and the Neglected Problem of Meaning

"I am rather anxious to emphasise the point of finding everywhere traces of (so to speak) a natural refusal to be misled owing to an organic insight (metaphor of course)." (Lady Welby to G. J. Romanes, Sept. 21, 1890)

In 1890 and 1891, for the first time, Lady Welby stepped out of her private world of scientific correspondence before a more general public. Evidently, she felt adequately prepared to take this step and she believed to have discovered questions which not only justified this step but also – according to her correspondents – practically necessitated it.

At that time her thinking was still strongly influenced by the mathematician and philosopher W. K. Clifford (1845–1879) with whom she shared not only a great interest in religious and theological questions⁴³, but also an emphatic defense and application of the fundamental ideas of the theory of evolution⁴⁴. It must certainly have been of particular importance to her that Clifford confirmed her earlier conception of geometry in his reflections in connection with N. Lobachevski's and G. Riemann's non-Euclidean geometries, and in his idea

that matter is a type of space curvature. This probably favoured the adoption of several of Clifford's other ideas which are to be found above all in the essays "Body and Mind", "On Some of the Conditions of Mental Development" and "On the Nature of Things-in-Themselves" (Clifford 1886: 244–273, 49–73, 274–286). From the latter she seems to have adopted Clifford's differentiation of "object" and "eject"⁴⁵ and at least for a time his "mind-stuff" theory on which she wrote to G. J. Romanes (Feb. 13, 1891):

"whatever we may think of the 'mind-stuff' theory, I suppose it can hardly be disputed that it was an endeavour to express a protest against that dislocating idea which 'cuts the world in two like a hatchet' and to recover what the arbitrary supernaturalism of prescientific ages had imposed upon us, in a truer, i.e. more really natural form."

In addition, she had been encouraged and criticized by an ever increasing circle of eminent scientists during the preceding years. She corresponded – only to name the most important – with T. H. Huxley since 1884, with Herbert Spencer and with the jurist Frederick Pollock since 1885, with the biologist and sociologist Patrick Geddes, with Karl Pearson and with the biologist George John Romanes since 1887, with C. Lloyd-Morgan, with the zoologist Edwin Ray Lankester and with the psychologist F. W. H. Myers from 1888 onwards; and between 1889 and 1891 Andrew Lang, Oliver J. Lodge (physicist), Croom Robertson (editor of *Mind*), Paul Carus, Francis Galton, H. Shadworth Hodgson, Henry Sidgwick, Edward B. Taylor (anthropologist), James Sully (philosopher) and the psychologist E. B. Titchener were added to her list of correspondents. She met many of her correspondents or even invited them for group discussions at her residence so that they could deal with her ideas and questions.

Her correspondence and discussions with G. J. Romanes (1848–1894) were particularly important for her work between 1890 and 1892. In 1888 Romanes had tried to show in *Mental Evolution in Man* that an essential similarity exists between the reasoning processes of higher animals and human beings. His evidence included studies of the theory of signs, which dealt with various levels of the sign-giving capacity, as well as thoughts about the corresponding levels of idea formation.⁴⁶ As a result of this and similar publications Romanes became an important advisor to Lady Welby as she began in 1890 to speculate on the question of how human intelligence probably developed. Thus, three lectures and publications (Welby 1890a; 1890c; 1891a; 1892b) concerning this subject were drawn up and brought out, and they later served as the basis for chapters 22–25 in *What is Meaning* (1903: 165–194). Peirce (1903), in his review of the

latter, recommended that exactly these chapters be read first as they could take a second reading later on.

Towards the beginning of 1890, Prof. Lloyd-Morgan had questioned Lady Welby about her ideas concerning the beginnings of human intelligence. She answered these questions informally in a paper for private use entitled "Why and how did we get off the Track in Mind?"⁴⁷ and which she discussed with Romanes, among others, who encouraged her to rewrite it into a publishable text. After being fully approved of by Romanes (letter to Lady Welby, Sept. 3, 1890), the paper was then read (Welby 1890c) in her presence⁴⁸ at the Leeds Meeting of the British Association for the Advancement of Science held in summer. In 1891, the Anthropological Institute published a revised version of this paper after it had been read and discussed without Lady Welby present, at a meeting (cf. Welby 1891a) held on Dec. 9, 1890, during which she was made a member of the Anthropological Institute. On being urged by Andrew Lang she read a completely new paper (Welby 1892b) on the same subject at the International Folk-Lore Congress in the summer of 1891.⁴⁹

All three papers deal with the question as to whether and how far primitive religion and especially its cult of the dead, as expressions of one of the early stages in the development of the human mind, are consistent with the theory of evolution. In handling this subject Lady Welby proceeded from the assumption of two fundamentals which were essential for the evolution idea: 1. "Appropriate reaction to stimulus, direct or indirect." 2. "The invariable tendency of such reaction on the whole in the direction of the development, preservation, and reproduction of life." (Welby 1891a: 304). Every deviation from or reversal of this order would have to be justified by irrefutable evidence and accounted for in a corresponding theory, or one would have to ask if that which seems to be a deviation cannot be backed by a hypothesis which still contains the unbroken continuity of evolution.

At the beginning of evolution there were probably adequate stimulus-response patterns between the environment and living creatures, in which the former forced itself and its "practical meaning" on the latter; otherwise survival would not have been assured. This intimate and well-functioning relationship between organism and the environment seems, however, to have been broken by the development, of a certain degree of organic energy usually called "brain-power or intelligence". The anthropological theories on primitive religion prevalent during Lady Welby's time seem to her to presuppose even a complete break: a leap from the compelling influence of natural facts on physiological and psy-

chological reactions to the wildest unbridled and grotesque imagination. Faced with such theories she asks herself if development of the primitive human mind started with a "complete break and therefore blank" and further led to universal agreement in favour of illusion or instead conveyed certain self acting points of reference to the imaginative and intellectual realms whereby these points were derived from the physical world by way of the organic. She explains her point of view to Romanes (January 31, 1890):

"I am not satisfied with any of the ordinary views of the matter, as it seems to me that they are all unconsciously influenced by the assumption that one kind of 'faculty' comes into play without effectual check from an older established one, whereas the presumption is surely all the other way. It seems to me nothing less than a gratuitous paradox to suppose that a late and painfully acquired mental power should from the first break loose and run riot in even elaborate ways."

Accordingly, she assumes that three mind "centres" developed on three different levels in the course of time. On the lowest level the senses correctly relate our ideas and actions to our environment. These senses are, however, connected to the developing brain in which the highest center, namely the intellect, is formed and whose control of higher activities is thoroughly dependent on an undisturbed correspondence between object and thought. According to Lady Welby, an " 'imaginative' centre" was situated on the level found inbetween. Religious ideas and practices developed in this center and were not only inconsistent with apperception and inference at a higher level, but also in its extreme impact even endangered the survival of certain groups of human beings. Thus, she rejects the hypothesis of an absolute break in the evolution of the mind and poses the alternative question,

". . . whether there may be in primitive cosmology and natural history an underlying element of true 'mental shadow' of outward fact; an unbroken continuity of response in consciousness answering to the unbroken series of structure, function, and organic reactions; a mine, as it were, of valid suggestion, carried on within us and prompting more and more definite expression." (Welby 1891a: 321)

But in order to give a positive answer to this question she has to explain why primitive man's ideas could have developed in spite of their inconsistency with the controls found at the lower and higher levels. However the attempt to do this found in her earlier works is inadequate; there, she explains these ideas and practices as

"largely failures of 'translation'; failures to express worthily things which lie deep down in the centres of human experience, were true then and are true now, form

part of natural order, and may soon for the first time be able to find scientific expression." (Welby 1891a: 322)

Later in *What is Meaning?* (1903: 172) she goes beyond this attempted explanation and explains this survival of primitive ideas in the face of the cited contradictions by declaring that these ideas and their forms of expression owe their power over the primitive human mind to the fact that they are attempts to meet an "original organic demand". In addition, the "sense-scheme" of the primitive mind was evidently more dominant than it was later on and it reacted to more subtle appeals from the realm of nature, whereas the "meaning-scheme", highly developed today, was at that time still in embryo and the element of "significance" had not as yet been assimilated (Welby 1903: 193). Primitive man's existence depended on the correct "translation" of the "sense of hunger" into the intake of food and not on the "translation" of more indirect stimuli whose "translation" could have thus been purely tentative.

Both the earlier and later explanations share the assumption that certain forms of the "sub- or pre-conscious reaction to natural stimulus" (Welby 1903: 191f) have survived up to the present day all through the development of the human mind, even though they have been overlaid by the increasingly dominant role played by the intellect, and they have therefore become stunted.

In 1891, Lady Welby reasoned that if one adopted her explanation one would then have to give up the anthropological theories, and primitive ideas would have to be interpreted anew with regard to their basic achievements. But this would require a

"... closer study of *signification* in the light of recent developments of psychology; more especially on the side of language and of expression in the most general sense." (Welby 1890a: 3; similarly Welby 1890c: 973; 1891a: 322f)

She showed us what the results of such a new interpretation would be like in three further publications (Welby 1891b; 1892b; 1893b), in which she tried to prove that one arrived at a better understanding of primitive ideas and practices if one takes them seriously as expressions of instinctive and intuitive understanding of actual facts relating to nature and man.

Criticism of Lady Welby's explanations was, as far as it has become known (cf. Welby 1891a: 323–329), certainly justified to an extent. A part of it was, however, based on a misunderstanding on the one hand of her view of primitive cultures, which was in some ways quite modern, and on the other, of her definitions, still quite vague, of the processes of interpretation and knowing. In

retrospect, one recognizes in these publications the basis of her organismic "sense"-concept which was later the presupposition for that which she called "mother sense" or "primal sense" from 1907 onwards⁵⁰. Also the word "translation" is used here not only to describe the special interpretation method she used, but also to describe an everyday method which can be rediscovered moreover in stimulus-response sequences and in all processes of perception. Finally, it is clear that at that time she considered the problem of meaning to be primarily a problem concerning the historical semantic change of words, and one of the remediable or irremediable ambiguity of language expressions.

Lady Welby's correspondence with Romanes reveals that she considered the main point of the publications just discussed to be a "side-issue", by way of which she wanted to arrive at the topic actually intended, namely "Semantics". She had already discussed this with Lloyd-Morgan at the beginning of 1891. In May, 1891, she completed a paper on the topic "Did Man ever Go out of his Senses?", the second part of which later became "Meaning and Metaphor" (Welby 1893b; in this volume). Referring to this essay, she wrote to Romanes (May 10, 1891):

"In the new Paper I have asked three questions, all inter-connected. (1) What causes the very first welcome of the ghostly or animistic (the first notion of dream); and if merely the play of 'variation' in mind, why is it so consistent and persistent? (2) May some current modern theories depend on the survival of geocentric modes of thought in unsuspected forms? And, (3) What really *is* meaning, and what do we really mean by our symbolic acts and statements or our equally symbolic protests against given acts or statements? Might not a special inquiry into the real conditions and variations of meaning precede much future work which otherwise must be in danger of betrayal by its own premises?"⁵¹

Paul Carus, who followed Lady Welby's efforts with great interest, then accepted "Meaning and Metaphor" for *The Monist*. This publication is an introduction to questions concerning the meaning of language expressions, and at the same time a challenge to take up these questions and deal with them in detail. Proceeding from the problem of the arbitrary use of metaphors and analogies and the misunderstandings resulting from it, Lady Welby first calls for an understanding of the sign nature of language and thus for a strict differentiation between signs and the designata. However, this alone is just as insufficient in ensuring interpersonal understanding as the efforts to arrive at clarity of speech. Instead, importance should also be placed on criticism of the existing understanding of "metaphorical" and "literal" and above all of "Plain Meaning".

For, and here the communication orientation of her approach is very clearly revealed:

“We have been virtually assuming that our hearers and readers all share the same mental background and atmosphere. We have practically supposed that they all look through the same inferential eyes, that their attention waxes and wanes at the same points, that their associations, their halos of memory and circumstance, their congenital tendencies to symbolise or picture, are all on one pattern. (. . .) We take his words, we take his phrases, we fill them out with the same content as our own, we make him mean precisely what we ourselves mean. And be it noted that it is always what we mean *now*.” (Welby 1893b: 512f)

But she also considers criticism of traditional language with its outdated imagery a necessity; this criticism should be based on a systematic study of meaning and of semantic changes. Parallel to the study of means of expression one must also analyze the interpretation process. In this connection she finally defines, still very vaguely, “Meaning” – in the broadest sense of the word – as “the only value of whatever ‘fact’ presents itself to us” (Welby 1893b: 524), and “significance” as “the one value of all that consciousness brings, or that intelligence deals with; the one value of life itself” (ibidem). “Meaning” and “significance” were thus attributed at that time to any type of experience or item of consciousness. With regard to the term “meaning” Lady Welby did not change her opinion until 1896 after the term “sense” was introduced.

Lady Welby never thought that the studies she called for in this article would lead to changes in language, in attitudes towards means of communication and in the capacity for and process of interpretation. Instead, she was and remained convinced that these goals could only be reached by realizing that something such as a problem of meaning even existed, and by changing the system of education so that it could take account of the results of studies done on the theories of signs and communication. In 1891 she brought out a privately printed pamphlet “Witnesses to Ambiguity” (1891c) so as to encourage her contemporaries from the world of science to understand the problem, constantly ignored or even contested, of the misleading or even paralyzing ambiguity of linguistic expressions (cf. Welby 1891c: 3). This booklet, which was followed by many others, is a collection of quotations which generally point out the margin of error in understanding language and criticize the absence of accuracy in scientific terms.

At the same time she used other methods to stimulate research on this field of semantics, as it was referred to at first, and to discuss her own ideas on this topic.⁵² During the Easter week in 1892, she organized a conference at

Denton Manor and invited the following scholars to discuss semantics: Romanes, O. Lodge, R. Lankester, Lloyd-Morgan, Geddes, Sully, Shadworth Hodgson, E. B. Titchener, "(+ Wundt's Leipzig Laboratory,) & c." (Welby to P. Carus, Jan. 14, 1892). I was neither able to find out if all those invited were present nor who was supposed to come from Leipzig. However, on April 1, 1892, Romanes wrote in his journal:

"We spent a week at Malvern, (. . .), and then went on to Denton Manor, where a company of the wise, including Ray Lankester, Professors Poulton and Shadworth Hodgson, and Mr. Sully, were. Also others, including Lady Cecil Scott Montagu, who walked abroad with a divining rod, a real act of courage considering who were among the party." (Romanes 1896: 277)

One can therefore assume that this gathering was attended by illustrious personalities whose opinions and ideas certainly influenced the development of Lady Welby's thoughts. Each and every topic of discussion is unknown, but it could be very possible that the question concerning the naming of the new field of research – "semantics", "sensifics" or "significs" – was raised, since the term "significs" appears already in letters written in 1894 (cf. Ch. 2.5).

But they most probably talked about the ways and means of culling attention of other scientists to the problem of meaning and how they could be persuaded to study this problem in particular. For, immediately after the conference Lady Welby prepared a pamphlet which she herself described as "one practical result" ⁵³ of this meeting: "The Use of the 'Inner' and 'Outer' in Psychology: Does the Metaphor Help or Hinder?" (Welby 1892c). And furthermore in connection with a report on her future plans concerning her work and publications, Lady Welby wrote at that time (May 28, 1892) to Romanes – and later she wrote the same lines again and again:

"My object as you know is not to write myself but to get the subject worthily written about and I am reluctant to comply with the other Editors' wishes. However if no one else will do it I must make shift to set the ball rolling with however awkward a push. But I shall need some months yet anyhow." ⁵⁴

Similar to all of Lady Welby's publications criticizing terminology, the pamphlet is a unique and rich source for studies concerning the history of terminology. In addition to a short introduction the pamphlet includes a collection of quotations, each of which is briefly commented on, and which were taken from numerous contemporary psychological and philosophical publications in which the metaphors "internal/external", "inner/outer", "within/without", "inside/outside" and "inward/outward" are used to express the opposites "psychical/

physical", "subjective/objective", "thought/thing" and "conscious/non-conscious". In her introduction Lady Welby refers to these metaphors and their particularly confusing nature, which is above all evident in the fact that their traditional and habitual use in psychology had made scientists as well as laymen oblivious to the absurdity of the conclusions which these could lead to (Welby 1892c: 4). For if one wants to apply these spatial images consistently, then one must also consider and designate that which separates the inside from the outside and the standpoint from which the spatial separation is carried out. However, man can then look at things outside but not at his thoughts inside. But if one wants to forego the spatial implications of the metaphors in order to avoid the resulting problems, then the expressions used lose their significance. If the metaphors continue to be used without being checked as to which implications could affect one's own thoughts or those of others, and in what manner this occurs, then the author or reader could be misled to falsely posed and therefore unanswerable questions.

The anonymously and privately published pamphlet was then distributed among the participants of the International Congress of Experimental Psychology held in London at the beginning of August 1892. The pamphlet and Lady Welby's participation at the congress certainly had some consequences. In his "Presidential Address" (Sidgwick 1892: 5), Henry Sidgwick expressed his favourable opinion of the pamphlet "... which illustrates forcibly the confusion caused by one established antithesis of terms"; and almost 20 years later G. F. Stout, who was one of the first to recognize the legitimacy of Lady Welby's criticism of psychological terms, took up again and carried on this criticism using the example of the differentiation between 'inner' and 'outer' experience (cf. Stout 1901: 361f).⁵⁵

At this congress Lady Welby met among others J. M. Baldwin, with whom she corresponded until 1908, and above all she made the acquaintance of Frederik van Eeden. At the end of the congress she invited the latter to Denton Manor and thus an intimate personal relationship as well as an intensive exchange of ideas began between the two of them, in the course of which van Eeden's ideas were increasingly influenced by significs (cf. Eeden 1897; Eeden/Welby 1954). However, Lady Welby did not live to see the results of her influence on van Eeden, namely, the signific movement in the Netherlands.⁵⁶

One year later, Lady Welby introduced her third pamphlet giving examples for the ambiguity existing in the meanings of terms and phrases (Welby 1893a).

This collection of quotations, “bearing on changes and defects in the significance of terms and in the theory and practice of logic”, shows once more how extensively she read and how critically she regarded the publications of her contemporaries. It also shows how convinced she was that a large number of corroborations were necessary to point out effectively and impressively the unsatisfactory condition of language as well as the failure to understand the difficulties of interpersonal communication. But she did not stop at such appeals. The criticism of terminology came to be much more the point of departure and a stimulus for her own studies on the neglected problem of meaning.

2.5 Significs: A New Science

“It is now decided that this is to be called SIGNIFICS as the study of sign, especially of course articulate sign, and its various modes and degrees of value which we call sense, meaning, signification, import, purport, significance, (and others). (. . .) You will see that it must include your own great study.” (Lady Welby to M. Bréal, Nov. 10, 1900) ⁵⁷

Various authors have seen Lady Welby’s article “Sense, Meaning and Interpretation” (Welby 1896; in this volume) as the beginning of significs and they are justified to a certain extent in doing so. For here for the first time, even though somewhat vaguely, a field of study in its own right is staked out with its own new concepts, introduced for the first time, to be used in analyzing this field. Precisely this comprises the first part of the essay. In the second part an attempt is made for the examples of logic and psychology to show that a new science is required because the given subject matter has so far not been handled by other disciplines and encompasses at the same time basic problems of all scientific disciplines and of human society in general. Finally, the third part deals with possible objections that such a science is impossible or undesirable, since it would further pedantry and bind free thought.

Lady Welby defines the field of research in terms of three problems located at different levels:

- a) “the difficult art of conveying our own meaning”;
- b) the problem “of interpreting the meaning of others”;
- c) the question of “the genesis of sign, symbol, mark, emblem, & c.” (Welby 1896: 24). The answers to these questions should also reveal the extent to which ambiguity of meaning can be resolved and whether improvement of the communication difficulties determined is possible. Whereas the third problematic field is to be dealt with by a sort of fundamental research, both of the others

must be analyzed on the basis of the third, namely with the goal of preparing a speaker and listener training which should help maximize successful communication.

She gains her central concepts by attempting to outline the general field of "meaning (or Intent?)" (1896: 25) with the aid of expressions that are used directly or indirectly in the English language in the same context of meaning as the word "meaning". She then uses these expressions to designate that segment of the problem of "meaning" with which already existing disciplines or special cultural forms of expression deal primarily. Subsequently the definitions of these expressions follow, thereby making them official theoretical terms.

"Signification" is assigned to philology and, since it refers primarily if not exclusively to words and phrases is defined as the term for the "value of language itself" (1896: 25). "Import" she relegates to logic and according to her interpretation it marks the intellectual character of logical processes in which more is involved than the pure linguistic value of expressions or propositions. In her assignment of "sense" to "science" (above all "physical science") she relies on three common meanings of "sense": a) the 'sense' of observation and experiment in opposition to 'senseless'; b) if this first 'sense' is associated with "meaning", the second is associated with "judgment" as a rough equivalent; c) "sense" as "the starting point and ultimate test of scientific generalisation" (1896: 26) that is, the physical sense that makes perception possible. She argues that since, according to the etymology of "sense" as explicated by Murray⁵⁸ the various meanings of this word represent a relatively recent development, we are dealing here with an indication of language which points to the original relation between the ideas still designated today by the same word:

"the word seems to give us the link between the sensory, the sensible and the significant: there is apparently a real connection between the 'sense' – say of sight – in which we react to stimulus, and the 'sense' in which we speak or act." (Welby 1896: 27)

Proceeding from this organismic foundation⁵⁹ of her concept of "sense", which she did not give up even later, and definitely in the tradition of strongly simplifying theories of signs she defines as follows:

"A given excitation suggests what is not itself and thus becomes a Sign and acquires Sense." (1896: 31)

She calls the act or process by which a sensory perception, an impression or an object is assigned sense or meaning the "act or process of *sensifying*", and for

the fundamental tendency to ascribe sense and give meaning she utilizes the expression “‘sensification’” (1896: 31). For, so her justification is formulated, the lowest forms of reaction to a stimulus become a means of physical and mental elevation only because and to the extent that they ascribe some meaning or other to the stimulus and thereby encourage the development of the discriminatory function.

Conforming to the terms thus introduced she coins the new expression “‘sensal’” to express the difference between “‘mere ‘sense’ (as meaning) and ‘reality’”⁶⁰ and to limit the expression ‘verbal’ usually used in this way to the realms of philology and of literary style (1896: 29). Finally, she assigns “‘significance’” to philosophy, poetics, and religion. Facts, events, or signs in general have “‘significance’” in addition to “‘import’”, “‘sense’”, or “‘meaning’” insofar as they indicate or imply matters of grave consequence, demand serious attention or decisive actions, or modify our mental attitude toward something in a more or less fundamental manner.

In the general semantic field of “‘meaning’” she differentiates a secondary word meaning given by the words “‘import’” or “‘purport’” and a primary meaning also expressed by “‘intention’” and “‘purpose’” and associated with the meaning of “‘end’”. “‘Meaning’” in the sense of “‘volition’”, “‘intention’”, and “‘end’” is therefore determined as “‘the most general term we have for the value of a sign, symbol or mark’” (1896: 28).

As a designation for the called for general study of meaning she uses “‘sensifics’”, and once in addition also “‘significs’” (1896: 32).

If one takes the still vague descriptions of “‘sense – meaning – significance’”, which remain practically unchanged later as well, and compares them with the expressions “‘tentative – corrective – effective’” of 1886 (Welby 1886g: 2) and their more detailed explication (cf. Ch. 2.3), the agreement between both trichotomies becomes obvious, at least between the definitions of the first and last expressions. Apparently the continuity in Lady Welby’s thought was more marked than it has generally been assumed.

In relation to the above mentioned third part of “‘Sense, Meaning and Interpretation’” one must above all take note of Lady Welby’s concept of language, since she explicitly emphasizes that the signfic question is “‘more than a merely linguistic question’” (1896: 29). In this article and later as well she uses an organic analogy for language and is therefore not interested in a systematic description of a state of language, but rather in the analysis of language functions

and developmental potential of language means to fulfilling such functions. Language criticism therefore means to her the calling of attention to lag of the "development of adaptive *expression*" (1896: 191) behind the changes above all of scientific experience. A critique of language must, however, be accompanied by a critique of the use of language resources in speech and writing since in these areas carelessness, ignorance and surviving conventions lead to a shrinking of the expressive function and overtax the interpretative abilities of the hearer/reader. Furthermore these abilities cannot be presupposed as given, but must be developed and trained like others, too.

Remaining consistent, she then turns down both the favorite solutions to the problems of interpersonal understanding, the definitions of terms and the construction of a new international language. Definitions at a general level would suppress the most highly significant quality of language, its adaptability and its flexibility. She argues that this suggested solution furthermore proceeds on the basis of the false assumption, that linguistic suggestibility and flexibility are failings just like any ambiguity and as such are to be eliminated rather than accepted as inherent characteristics of language which make it possible to express oneself under constantly changing conditions. The only vagueness that must be eliminated is that which exists relative to the foundations and preconditions of interpersonal understanding. And for precisely these reasons a new language is also no solution, since it would only shift the problem and that at a point in time when the central problem of meaning still has not been investigated.

The main impact of "Sense, Meaning and Interpretation" during Lady Welby's lifetime -- on Baldwin (cf. Ch. 4.4) and Lalande (cf. Ch. 4.1) -- was one that she had intended only incidentally, namely to eliminate as far as possible the ambiguity and confusion of scientific terms and to reach a unified terminology. However the impact of this article, which made Lady Welby's ideas known to an international audience, may have been much more far reaching indirectly, for a large number of scholars were involved in its preparation and in the discussions on the preliminary drafts. Of these mention should be made above all of G. F. Stout (1860–1944), psychologist and philosopher (cf. Passmore 1952) with whom she had corresponded since 1894 and who encouraged her up to the final edition of the text, which he published as editor in *Mind*, and provided editorial support. Stout helped her to find an assistant, Miss Meyer, a student of Moral Sciences, for the work on the manuscript of this article and of several other publications (probably until 1898).

The essay as it exists in published form is based originally on three different texts by Lady Welby: "Psychology and Significance", "Logic and Significance" and "Philosophy and Significance". However only the first two were directly used. In 1894 she sent copies of the first two manuscripts to Samuel Alexander, Henry Sidgwick and James Sully, who were all of the opinion that an article on this subject should be written for *Mind* (Lady Welby to Baldwin, April 28, 1894). Apparently, however, Lady Welby wanted to publish at least one of the texts in Baldwin's periodical *The Psychological Review*. So Baldwin and his colleague Cattill read her manuscript and encouraged her to pursue the subject further, above all with regard to the question of an "unambiguous nomenclature" (Baldwin to Lady Welby, June 5, 1894). Henry Sidgwick passed "Logic and Significance" on to the "Cambridge Logicians" and the logician B. Bosanquet (Lady Welby to F. H. Bradley, Nov. 8, 1894) of whose approval he also informed her. Finally, Stout wrote H. Sidgwick what he himself thought of Lady Welby's approach in regard to "Psychology and Significance" (Dec. 6, 1894):

"In my opinion, the point which the writer wishes to bring out is one of real and fundamental importance; and her complaint against current psychological literature is well founded."

In a letter to Lady Welby he added (May 4, 1895):

". . . , and I am keenly conscious of having neglected it [that point] myself, though I do not think I am so bad an offender as some others."

In the middle of 1895 Lady Welby then, following Stout's advice, began writing an article for *Mind* from the various manuscripts. In the process she had to be repeatedly urged to limit her critical discussion of logical and psychological literature to a few main points. While it is not possible to document in detail the points concerning which the persons and groups mentioned above may have mutually influenced one another, since the content of the discussions was primarily by word of mouth, yet it is apparent that a sort of cooperation existed and that the principal addressees of the *Mind* article had been confronted with its content before its publication. In any event, this would have to be taken into account in studies on the history of psychology and logic in England.

So far the explication of the creation of Lady Welby's *Mind* article has made no reference to the formation of designations for the new discipline: "sensifics" and "significs". These designations caused even her contemporaries difficulties. Thus Vailati suggested that she should substitute "Semiotics" for "significs", since this would appropriately identify her research approach and had further-

more already been introduced by Locke (letter to Lady Welby, March 18, 1903). She replied:

“Neither Locke nor any other thinker, it appears has ever yet analysed on ‘signific’ lines *the conception of ‘Meaning’ itself.*”⁶¹

Later Vailati then spoke out in favor of the designation “significs” (cf. Lady Welby to Peirce, Nov. 18, 1903; Peirce/Welby 1977: 6). André Lalande, on the other hand, was not able to accept the translation of “significs” into French that she desired, namely “signifique”, because of existing rules for word formation. It can be seen from Lady Welby’s reply (Oct. 4, 1903) that in England as well the form “signics” had first been discussed. However since this appeared not to express the value or the operation of the signifying power of a sign, the form “significs”, which formally left room for improvement, was finally accepted. Stout and H. Sidgwick at least were among those who favored this designation (Lady Welby to F. Pollock, Jan. 14, 1901). In her correspondance with F. Tönnies, who had suggested terms like “Symbolonomy” and “Rhematomy” among others, Lady Welby described the developments leading to the final name “significs” as follows (Aug. 6, 1900)⁶²:

“. . . ; the question of the title of the ‘discipline’ which I hope will some day form an integral and vital part of all mental training. I began, of course, with the word ‘Sémantique’ then not even naturalised in England. I believe that Prof Earle⁶³ was the first person to use it in English; but I had already seen it in Darmesteter⁶⁴, & c. Only I found that I could not make the word travel sufficiently far beyond strict philological limits, and was always met by the remark that my friend was not interested in linguistic research. (As if I was, in the old sense!) Then it was that I arrived at the Sensifics which you define so well. But I found this strongly objected to by philosophical friends in England on account of the special associations in philosophy of the word ‘sense’. Then I resorted to the word Significs because it was free from this drawback and found favour at Oxford. But please note that what I really want is as usual a word which does not exist; a word which shall convey to the hearer or reader the combined ideas of Sign-and-Sense.”

It would be wrong to put aside the cited discussions on what to name the new discipline as petty, insignificant or immaterial. For every name of this sort is implicitly bound to programs, historical points of reference and differentiations from existing or possible research approaches. And that is precisely what the discussions of the names make evident. It was therefore also significant for the establishment of significs as an independent discipline that a characteristic name should not only be found but that it should if at all possible also be generally acknowledged. A dictionary with the explicit goal of clarifying and defining

scientific terms was naturally particularly well suited to the last named purpose: J. M. Baldwin's *Dictionary of Philosophy and Psychology* (Baldwin 1901–1905).

The opportunity arose when Baldwin, who was familiar with Lady Welby's works, asked Stout to write a dictionary entry on signification in the spring of 1900 (Baldwin to Lady Welby, May 18, 1900). Stout passed the request on to Lady Welby, who then sent him a rough draft of an entry and at the same time inquired if it would not be a good idea to include definitions of "translation" and "sensal" in the dictionary, since both of them had been introduced by her as technical terms (Lady Welby to Stout, Nov. 3, 1900). Stout was in favor of this desire, which aimed at the consideration of all the signification terms thus far introduced (Lady Welby to Baldwin, Nov. 21, 1900). Baldwin, who had already accepted "sensal" as a term allowing a new well-founded differentiation, proceeded to adopt all three entries in his dictionary: "Translation" (Welby 1902b) as Lady Welby's own contribution; "Sensal" (Welby/Stout 1902) with supplementary material by Stout, and "Signification" (Welby/Stout/Baldwin 1902) revised by Stout and with supplementary material by himself. I was not able to determine precisely which parts were by which author. However, at least the etymological comments on the terms introduced, the foreign language equivalents and the references to German authors were probably added by Stout.⁶⁵ The three essential elements of "signification", which also transcend the vague explication of 1896, are as follows:

"(1) Signification implies a careful distinction between (a) sense or SIGNIFICATION (q.v.), (b) meaning or INTENTION (q.v.), and (c) significance or ideal WORTH (q.v.). It will be seen that the reference of the first is mainly verbal (or rather SENSAL, q.v.), of the second volitional, and of the third moral (. . .). Signification treats of the relation of the sign in the widest sense to each of these.

(2) A proposed method of mental training, aiming at the concentration of intellectual activities on that which is implicitly assumed to constitute the primary and ultimate value of every form of study: i.e. what is at present indifferently called its meaning or sense, its import or significance."

And:

"Signification as a science would centralize and co-ordinate, interpret, interrelate, and concentrate the efforts to bring out meanings in every form, and in so doing to classify the various applications of the signifying property clearly and distinctly." (Welby/Stout/Baldwin 1902: 529)

I find three points of this text worth noting. 1. The first part of the definition makes clearer than Lady Welby's article of 1896 the extent to which the signification approach transcends the traditional theory of signification. Not only because

it overcomes the interpretation of words as consisting of a tight bond of form and meaning (or concept), but also because this definition is here based on a general concept of signs according to which every object, for example, is a sign to the extent that meaning can be ascribed to it. It is, however, worth noting that here only the relation between signs and their possible interpretants (in Peirce's sense) is the topic whereas relations to an object or referent are not mentioned.

2. By *significs* Lady Welby always also meant a method of improving the ability to communicate or express something and interpretative abilities. Thus with her *signific* studies she also had pedagogic and social intentions.

3. The wording of the last section of the quotation allows the conclusion that Lady Welby saw *significs* as not yet being a science, at least not an accepted and established one, and that her collection of tasks for *significs* as an independent discipline was more along the lines of a program which was supposed to convince people of the necessity and the value of a new scientific discipline.

Now the issue at stake was not only to gain acceptance for the name of the new discipline and its central terms (cf. Murray et al., eds. 1919: 38), but also to encourage research in this area and to awaken the interest of scholars in the questions raised. I have the impression that the awarding of a "Welby Prize" was supposed to serve these goals. Preparations for this prize were begun shortly after the publication of "Sense, Meaning and Interpretation" (1896). The Anglo-American psychologist Edward Bradford Titchener (1867–1927) spent the time from the end of July to the middle of August, 1896, at Lady Welby's Denton Manor. Stout and Sully accepted Lady Welby's invitation to join them from Aug. 6–8 whereas James Ward, who was also invited, was unable to take part in the meeting. On this occasion it was decided to advertise the prize. On this subject Lady Welby wrote Paul Carus (November 23, 1896):

The offer of the Welby Prize was suggested during the summer by Mr. Stout and Prof. Titchener and I consented to the plan on condition that I should not be personally named. The two editors therefore undertook to make all the necessary arrangements."

Thus Lady Welby wished to remain anonymous in the background as donor of the prize, i.e. she once again tried to be a mere stimulus and patroness and to leave the real field of action to recognized scholars. Their view of their cooperation with Lady Welby was in this case expressed by Stout (Stout to Lady Welby, August 17, 1896):

“What Mr. Titchener or myself do in the matter is a labour of love. We are glad to take part in a work which we both believe will be of real service to the cause of Philosophy.”

Sully, Stout and Titchener offered to serve as members of the committee of award. Titchener recruited the psychologist Oswald Külpe (Würzburg) ⁶⁶ as a German committee member. Stout endeavored to win the philosopher Alfred Fouillée ⁶⁷ as a French committeeman, but he declined because of trouble with his eyes. The French philosopher Fr. Paulhan ⁶⁸ also declined. However the philosopher Emile Boirac ⁶⁹ finally accepted. Meanwhile, however, the first prize announcement had been published by Titchener in American journals and Stout had sent it to European journals and to various professors. This first announcement made no mention of Lady Welby as patroness and in the USA only Titchener was given as the addressee for essays to be submitted. ⁷⁰ Solely in *Mind* (Advertisement 1896: 583) were the donor and the complete committee of award given, aside from the still missing French member. The announcement reads:

“A prize of £50, to be called the Welby Prize, is offered for the best treatise upon the following subject:

‘The causes of the present obscurity and confusion in psychological and philosophical terminology, and the directions in which we may hope for efficient practical remedy.’

(. . .)

The donor of the prize desires that general regard be had to the classification of the various modes in which a word or other sign may be said to possess ‘meaning’, and to corresponding differences of method in the conveyance or interpretation of ‘meaning.’ The committee of award will consider the practical utility of the work submitted to them as of primary importance.”

The deadline was first set for October 1st, 1897. But shortly thereafter the date was postponed to January 1st, 1898, because it was not until January, 1897, that the new announcements naming the French committeeman as well could be published. ⁷¹ The participation in this competition was extremely disappointing. By October, 1897, only two essays (“both of them good”) had been submitted in England (Stout to Lady Welby, Oct. 29, 1897). This could be interpreted as a sign that the interest in a clarification of fundamental terminology and above all in questions involving the theory of signs and communication actually was as slight as Lady Welby had been claiming regretfully for years. However, the prize offered could also have been too small. For Paul Carus wrote Lady Welby as early as December 8, 1896, that is before he could have

known about the low participation in the competition:

"I believe that the sum which you stipulated is rather small as an inducement for men of prominence, and would only serve to induce advanced students of philosophy to compete for it."

Since the two essays submitted did not quite meet the high expectations after all, it had already been decided not to award the prize when in July, 1898, Stout received a manuscript which had been sent to Külpe on time.

"He [Külpe] was much impressed by its merits: and after carefully reading it through, I entirely agree with him. It is an excellent paper, full of good matter, well written, and to the point. It certainly fully deserves the prize." (Stout to Lady Welby, July 23, 1898)

After all the committeemen had voted unanimously for this essay, Stout (August 26, 1898) informed Lady Welby of this decision and added:

"It turns out to be written by no less a person than Dr Ferdinand Tönnies. I am sorry that you cannot read German; but an English translation will be published in *Mind* (. . .) You have succeeded in catching a big fish with your bait."

The wife of the logician B. Bosanquet did the translation, which was then checked and revised by Stout, and the essay was published in *Mind* in 1899/1900 under the title "Philosophical Terminology" (Tönnies 1899/1900). Six years later Tönnies published the original German version as a book (Tönnies 1906). The German philosopher and sociologist F. Tönnies introduced mainly sociological aspects into the discussion on the theory of signs (cf. Ch. 4.2) in his essay, whose influence on the further development of Lady Welby's significs was, however, limited to subordinate points (cf. Welby 1901a; Tönnies 1901). It proved to be of more consequence that this event led to a long lasting correspondence and personal relationship between Lady Welby and Tönnies during which Tönnies came to interest himself more and more for significs and then became the intermediary between Lady Welby and prominent German and Austrian scholars (cf. Ch. 4.2).

Mid 1897, that is still before the "Welby Prize" had been awarded, when Lady Welby became acquainted with Bréal's work on "sémantique" she was so enthusiastic about it that she tried to persuade Stout to accept Michel Bréal as an additional member of the committee of award. This, however, was no longer possible. Even though she saw in Bréal's "sémantique" only a research approach covering only a part of her significs, she still considered him to be an important ally who helped further and propagate the study of the complex problem of

meaning, here above all the questions of historical changes in meaning. For this reason alone she considered an English translation of the “*Essai de sémantique*” (Bréal 1897) to be highly imperative (Lady Welby to Bréal, October 19, 1897). Bréal actually gave her permission to take the steps necessary for a translation which was then finally undertaken by Lady Welby’s daughter, Mrs. Henry Cust (i.e. Nina Cust) with the assistance of Charles Whibley (cf. Bréal 1900).

Lady Welby’s own publications following the article of 1896 are also primarily guided by the intention of continuing to call attention to the need for a new science and to what would hopefully result from it. In 1897 “*Grains of Sense*” (Welby 1897a) appeared in print, a small book which she first wanted only to circulate privately (Lady Welby to P. Carus, January 25, 1897), dedicated to “the misunderstood”. In numerous short essays, parables, satires and some aphorisms which are very stimulating and worth reading even today not only because of their linguistic brilliance but also because of their persuasiveness and the significance of the thoughts formulated in them, she deals above all with subjects pertaining to the critique of language and scientific and pedagogical ways to improve mutual understanding. Even though this book brought her to the attention and interest of G. Vailati (among others – cf. McC. 1897), it still is not a scientific treatise nor was it intended to be one ⁷²:

“I need hardly say that it claims to do no more than indicate and illustrate in a light and popular fashion a question which I hope to see taken up widely as well as seriously, and which I know has a special interest for you.” (Lady Welby to P. Carus, May 20, 1897)

At roughly the same time – between the fall of 1896 and the summer of 1897 – Lady Welby herself was testing the possibility of putting her signfics (or sensifics) to pedagogical use, something which she had long since called for (Welby 1896). She gave two of her grandchildren, who were just eight and ten years old, ⁷³ a total of 12 signfic lessons which were secretly taken down in shorthand. She used the records on the one hand to demonstrate the possibility and the success of such instruction to her scientific colleagues. In addition, she developed on this basis a “scheme of lessons to be carried out in the North London Collegiate by Mrs. Sophie Bryant” (Lady Welby to S. Alexander, June 19, 1897). She later published excerpts from the records in *What is Meaning?* (1903: 306–313), and they show that she had a knack for putting her views on the theory of signs to pedagogic use and for conveying them. She described her method in the first lessons to Stout as follows (Sept. 18, 1896):

"We are now doing 'Talking Crambo' & then mean gradually to do less & less, through 'Dumb Crambo' to mere change of facial expression or voice-intonation all which ought to begin a training in the art of 'Interpretation'. Then we shall try various modes of Translation."

Nowadays we would call this a general and fundamental communication training!

In 1898 Lady Welby published on her own her fourth pamphlet of terminology critique: "The Witness of Science to Linguistic Anarchy" (Welby 1898b). In it she presents a collection of lamentos over and analyses of the confusion, shortcomings and the lack of uniformity of the terms in the natural sciences. She attacks by means of statements of its own representatives the terminology of that branch of the sciences which is always admired among the social sciences and humanities for the clarity and unequivocal nature of its terms. In the process she points out in her introduction that the so highly honored scrupulous experiments of the natural sciences are often falsely understood as if language itself were not an essential part of just these experiments (Welby 1898b: iv).

In order to reach the intended addressees directly and in large numbers, she distributed the pamphlet among the participants of the fourth International Congress of Zoology, Cambridge, August 22–27, 1898,⁷⁴ and among those of the Meeting of the British Association for the Advancement of Science at Bristol (1898). She sent ten copies to Paul Carus, who forwarded them to prominent scientists and scholars in the USA, including C. S. Peirce.⁷⁵

The turning point from the nineteenth to the twentieth century also became a turning point in Lady Welby's personal life. When her husband died on November 26, 1898, it meant more than just a great loss to her, which she mourned for a long time. Rather she now had to conform to the ruling conventions in her social surroundings and leave Denton Manor, the family seat, since it now belonged entirely to her son and his family. Early in 1900 she moved with her servants first to Hampstead N.W. (54 Fitzjohn's Avenue). As of April she then lived at The Fosters, Hendon, in the northwest of London, and exactly one year later she moved into Duneaves in Harrow where she spent the remaining years of her life, aside from her annual summer vacation in Scotland.⁷⁶

After having left Denton Manor she put her still considerable financial resources to work for her scientific projects. This involved continuing the hospitality of her home for all her numerous prominent acquaintances and also employing a secretary (Miss Nellie Carter) and an assistant and the part-time employees who

translated scientific treatises from Italian (mainly articles by G. Vailati) or German (e.g. publications by Tönnies and Erich Gutkind) into English for her.

In the following three years she intensively and with more self-assurance than before pursued various plans intended to help signifiics make a breakthrough. First of all it was in this period that the already discussed dictionary entry in Baldwin's *Dictionary* and the prize winning article by Tönnies appeared in print. In the latter, Tönnies had proposed founding an international academy of liberal arts which should have the task of summarily formulating in an international language the findings of these disciplines and creating a uniform terminology in the process (Tönnies 1899/1900: 37). Lady Welby adopted this plan seeing as how she herself had already previously called for a similar academy (cf. Welby 1897a: 82f), and starting in mid 1900 she tried to organize a conference which was supposed to address itself to this plan and to other topics of the prize winning essay. The participants envisaged for this "signific conference" were Stout, Titchener, Sully, Baldwin, Mr. Warren, Külpe, Boirac, Eucken ⁷⁷, Tönnies, Höffding ⁷⁸, Bréal and Vailati (cf. Lady Welby to Stout, June 5, 1900).

The conference was supposed to take place in Oxford, where since mid 1900 Lady Welby had her most important cohorts, Stout and F. C. S. Schiller as well as several other proponents of "personal idealism", which had come into being since 1902. Although there were already numerous acceptances, the conference first had to be postponed until 1901 for organizational reasons (Lady Welby to Baldwin, November 21, 1900), then until the next year (letter to Baldwin, July 18, 1901), and finally the plan was given up entirely.

From the spring of 1900 on, Lady Welby felt that she again had need of an assistant to work through her previous numerous privately circulated essays and the publications and to summarize them to a larger work on signifiics. "Wanted, a youth in need of a career' – or merely 'Wanted, a youth of intelligence and open mind'" and she added (letter to H. W. Paul, March 10, 1900):

"I should like to make it clear that I have no 'views' to impose. – I am that unfortunate person, a nonpartisan: and at least therefore my youth would be left in peace with his views if he had any."⁷⁹

Starting about the end of May, 1900, she engaged R. Greentree, a young Oxford philosopher, as assistant who was possibly found by the intermediary help of Stout. ⁸⁰ Hardly anything is known about Greentree, who was her assistant until 1904, i.e. one year after the publication of *What is Meaning?* His letters to Lady Welby (also cf. Welby 1931: 53 ff) show him to have been an enthusiastic co-

worker. A letter which he wrote to F. van Eeden at the beginning of his assistantship (June 12, 1900) shortly after the task of systematically bringing Lady Welby's papers and material into order had been taken on together sheds more light on him and his attitude to Lady Welby's work:

"I hope something will be made of Lady Welby's papers; one does not like to think of a great part of the labours of a life-time being lost. I remember you pressed her for definiteness, in which demand I heartily and humbly concur. I think she has been too much captivated by physical science; would not you say that most of the true aperçus which have influenced mankind for good have been delivered not by scientists like Huxley or Herbert Spencer but by quiet mystics and philosophers like Plato, Spinoza, Dante, Ruskin and the like?"

Despite the difference of opinion, the collaboration with Greentree met with Lady Welby's full approval. The preparations for *What is Meaning?*, which now began, were influenced by Lady Welby's acquaintance with F. C. S. Schiller (1864–1937) (cf. Ch. 4.7), whom she met at the end of May or the beginning of June, 1900, on a visit to Oxford. Schiller eagerly adopted Lady Welby's stimulating signific ideas and used a paper by Lady Welby on "The Aim of Significs" from July, 1900, "for propagandist purposes" in Oxford (Schiller to Lady Welby, July 11, 1900). Apparently Schiller and probably Stout as well were successful with their propaganda for significs, for at the end of October, 1900, Lady Welby was invited to Oxford for talks on significs. As can be seen from one of her letters to F. Tönnies (Nov. 1, 1900), she considered the results of these talks to be an important step in the direction of obtaining recognition for significs as a new science:

"I have just come back from Oxford and have much to tell you. (. . .) I made great progress in my 'crusade' at Oxford. I never expected that the welcome from the 'Fellows and Tutors' would be so warm or that they would be so eager to hear what a humble unlearned person ventured to suggest. They speak of founding a Society for discussing Significs and I hope a Lectureship and Scholarship will be founded. They were quite unanimous that Significs must be the name of the suggested discipline: and I think their reasons were good. So that is settled and the word is to be included in the Philosophical Dictionary." 81

In the spring of 1901 Lady Welby's plans for a new book began to take on a more definite form and she discussed them above all with Stout and Schiller, then later also with Baldwin, the physicist T. Clifford Allbutt and J. P. Postgate, who had been dealing with questions of historically oriented semantics since as early as 1877 (cf. Postgate 1964: xix). Stout and to an even greater degree Schiller repeatedly urged her to concentrate more heavily on the central points of

significs and to set herself apart from the ideas of other authors more clearly in the development of her own ideas (cf. Schiller to Lady Welby, Dec. 9, 1901). In mid 1901, when a synopsis of the book had been completed, for which F. Pollock suggested the title "What is Meaning? An Essay in the Development of Significance" ⁸² to her, she aptly characterized the subject of her book to Baldwin (July 18, 1901) as ". . . a comprehensive statement of the subject [significs] from my point of view, which is also a summing up of my work so far". ⁸³ In April, 1902, Stout finally declared the manuscript to be ready for print and at the end of February, 1903, *What is Meaning?*, the first signific book published, appeared in print, with Lady Welby's presenting in summarized form the results of her thought over the previous 20 years.

To characterize the contents of *What is Meaning?* more clearly, a translation of the commentary by F. Tönnies written in German about the above mentioned synopsis of the book is presented here. ⁸⁴ Since this commentary was a key to me myself for understanding the thoughts presented in this book it may possibly help others as well in finding better access to Lady Welby's mental world.

"First of all I must confess that I can only *imagine* the whole profusion of the contents from the summary and I am therefore not in a position to introduce my criticism at any one point which stands out especially plainly in my opinion. Rather I can, at least after having read through it once (from p. 11 on), give only a general impression, this being one of a large mental construction with high towers and a far reaching view. It is very individual in conception and in its manner of expression, in its foundations and in the building stones. For someone who has himself thought a lot along the same lines, it takes an exceptional effort – in more mature years – to translate the philosophy 'of significance' into his own 'language', i.e. into his own conceptual schemata and I foresee that it will take me *several* readings of the *whole* text to master this difficulty, to pose myself the precise questions 'What can I assimilate? What can I let stand? What must I reject?'

That which I understand to be the main point I find highly congenial. I see therein a new attempt, undertaken with thorough knowledge of the problems, to regain the *harmonious system of knowledge* that Aristotle completed within the bounds of antique thought and that the leading minds of Scholasticism made into the foundation of a *system of faith* buttressed by revelation. – The most sound results of modern science are to be translated here: they are all found to merge in One direction, in One *meaning*, namely in pointing to a *cosmic connection* which is just as determining and controlling for that area of experience that we conceptualize as the *solar system* as the latter is for our nearest and closest world and experience, the earthly (planetary) ones. On account of this final meaning, the authoress places the full weight of her judgment *on the fact* that we learn and teach from youth on to *express* ourselves correctly, i.e. to the point and i.e. in accordance with the life of the universe and also to *interpret* such correct expressions, be they material or verbal, or, if possible, to translate all multifarious and flawed expressions into this

one language. This *one language* is not to be confused with a (natural or artificial) world language. It is not a matter of language as a system of words, but (or at least primarily) of a uniform *manner of expression* which is to be newly created or at least newly formed *for each individual language*, that is it is a matter of the principles according to which we should express the meaning of what we experience and know, in other words *the truth*, so that the manner of expression be *adequate*. She wants to end the tyranny of language and to make a simultaneously free and (in the biological sense) plastic manner of expression the norm insofar as the potential for such expression is called forth, cared for and furthered starting with children's upbringing. It is therefore of special importance to master *figurative* expression, to control, limit, and modify it. For it either evokes associations and these are often antiquated, false, in short meaningless, or it does not, and then we lose the great value which metaphorical expression *can* and *should* have as the embodiment of *real analogy*.

The analogy of naive (geocentric) thought with the sense of touch appears to the authoress to be such a real analogy as does that of scientific (heliocentric) thought with vision and – if I understand correctly – that of transcendent ⁸⁵ (supranaturalistic and religious or cosmotropic) thought with telescopic sight.

In and of itself the problem of a good, i.e. functional, i.e. unequivocal and internally consistent manner of expression is purely *formal*: such a manner of expression is equally necessary for different kinds of thought. ⁸⁶ However, Lady Welby skillfully interweaves her solutions to this task with the *material* call for the scientifically *correct* expression, under the condition that the principles thereof exist – or to the extent that they exist. However she understandably adds such principles which she *wants* to posit at the same time or considers to be existent. The reference to the solar and the postulate of cosmic experience are to be understood in this way.”

After *What is Meaning?* Lady Welby's signifiCS reached its peak with considerable international recognition. The reactions of Bréal ⁸⁷, Schiller, Stout and Vailati to the book were full of praise and recognition. The most important reviews, that of Peirce (1903) and Vailati (1911c; first in 1905), point out the contributions of the book to a theory of signs and its value for the rediscovery of the old problem of meaning.

Lady Welby proved to be exceptionally interested in a particular circulation of her book, in order to hear the opinions of scholars she held in high esteem and in order to stimulate them to deal with the subject matter of the book themselves. Not only did she herself send copies of the book (e.g. to Peirce, Vailati and her English friends), but her friends also functioned as mediators. Baldwin was supposed to take on this role in the USA, Schiller called W. James' attention to the book, and Tönnies sent copies to W. Wundt, B. Erdman, R. Eucken, H. Höffding, F. Paulsen, C. Stumpf, W. Dilthey. ⁸⁸ The success with which Lady Welby and her numerous helpers had propagated signifiCS as a new scientific discipline caused her to hope that she would now be able to find

qualified scholars who would make significs their field and that the institutionalization and academic underpinnings of significs would thus be achieved.

2.6 The Failure to Institutionalize Significs

“I shall now have to ask you and other friends whether you can help me by finding some suitable candidate for taking up Significs systematically with a view to becoming a Lecturer and Teacher of the subject.” (Lady Welby to Baldwin, May 25, 1903)

The increasing recognition and popularity which Lady Welby won as a result of *What is Meaning?* must have greatly motivated and encouraged her to follow her numerous new plans and seek further contacts with eminent contemporaries. One goal comes to the fore ever more clearly in her publications and even more so in her correspondence and co-operation with various scientists and movements from 1903 until 1911: to hand over significs to a competent person and thus ensure that it would be kept alive, investigated and taught at a university.

The personal contact already existing between Lady Welby and F. C. S. Schiller was to have served this goal to some extent and in 1904 she tried in vain to win B. Russell's support of significs (cf. Ch. 4.6). In this connection she placed high hopes also on F. van Eeden, F. Tönnies, and G. Vailati (cf. Ch. 4.2 and 4.8). Her last candidate from the end of 1910 until the end of 1911 was C. K. Ogden, who once again aroused great expectations in her at the time she felt she was losing her strength (cf. Ch. 4.9). However, she began her search as early as 1903 when she asked various acquaintances and friends to name a suitable scientist who could make significs into a subject which could be researched and taught, and for whom she wanted to get a grant from the Carnegie Institute. However, this plan came to nothing with the final rejection of her application by the Carnegie Institute in 1906.

But already in 1903 other opportunities presented themselves within the framework of the “Sociological Society” later called the “Institute of Sociology” the founding of which was being prepared. Lady Welby made the acquaintance of Victor V. Branford, a student and colleague of Patrick Geddes, who like Geddes was very impressed with her studies of significs and above all shared her interest in a reform of the system of education. Even though Lady Welby played an important role in founding the “Sociological Society”, by offering the use of her house for conferences, by using her international contacts to win

founding members, and by providing the services of her employees to help out with the necessary correspondence, she did all this not only in the service of sociology. Her interest in this society was based much more – perhaps above all – on the fact that the main reason for its foundation (unlike other national sociological associations) was the perceived necessity that sociological projects be planned, discussed and executed while keeping practical goals for reform in mind. As to the necessary reform of the English educational system, Geddes and Branford, the two main promoters of this new society, agreed with Lady Welby that significs should play an important role in it and in defining the new topics necessary.

F. Galton's Eugenics was one of the first projects studied by the "Sociological Society" during their meetings in 1904 and 1905. Lady Welby logically used her two commentaries on it (Welby 1905; 1906c) to introduce significant aspects into the discussion. William Macdonald was very impressed by the first of these commentaries (cf. Welby 1931: 189) and with the help of Mrs. Geddes and Branford he became Lady Welby's new assistant from March 1905 (until April 1911). On the average he worked every other week for and with Lady Welby, and received a salary of £110 per annum. In Macdonald she had won the services of a writer, well known at that time, whose experience in publishing and writing positively influenced the form of her publications to a great extent.⁸⁹

At about the same time a new movement to promote and establish significs developed. Once again it was Stout who offered her his support. Lady Welby wrote on this to Peirce (June 2, 1905)⁹⁰:

"Among other things I showed him the syllabus of ten possible Significant Lectures which I had drawn up in answer to a challenge, as one does, half in joke. So he asked for a copy and said, when I lamented that there were no lecturers to take up that sort of line, 'I'll get you a lecturer!'"

Stout would certainly have tried to keep his promise, but there are no indications as to whether his efforts were fruitful or not.

Some of Lady Welby's hopes placed in the "Sociological Society" seem to have been fulfilled in 1906. At the "Sociological Congress" (June 30 – July 7) held in London, which F. Tönnies and F. van Eeden attended at Lady Welby's request, she met the physician John Lionel Tayler (1874–1930)⁹¹. He was so interested in significs that he gave up his private practice and took up residence close to Harrow in order to write a book on "the evolution of the meaning of words in relation to the senses" (Tayler 1931: 330). At the same time, William

John Greenstreet (1861–1930), a contributor to *The Westminster Gazette* and editor of *The Mathematical Gazette* contacted her as he wished to have material on significs; he intended writing two articles so as to familiarize his scientifically oriented readers with this subject (cf. Greenstreet 1906; 1907)⁹². Lady Welby expressed the importance of these two events to her in a letter to Peirce (Nov. 8, 1906) (Peirce/Welby 1977: 62):

“[I] begin [to] think [I] have perhaps carried [a] horror of publishing and ‘booming’ and [a] desire for personal effacement to undue lengths so that [the] work which [I] hold dearer than life (since [it] makes for something better than we call that) has never yet come to its flower and fruit. So [I] am anyhow feeling that by all means matters must now be pressed on while my brain is still in healthy work.”⁹³

However, the co-operation with Tayler did not bring the awaited results. Referring to this, Tayler made a lapidary notice in his autobiography:

“Co-operation on the language research question (. . .) which ended without any published results in 1909.” (Tayler 1931: 331)

Greenstreet, on the contrary, remained faithful to her and to her work. In autumn 1911, i.e. a couple of months after Lady Welby and W. Macdonald had parted and after the publication of *Significs and Language*, Greenstreet worked with her on the preparation of a last book on significs, which was however never completed.

In autumn 1907 the editor of the *Times* asked her to write an article on significs for the eleventh edition of the Encyclopaedia Britannica. Lady Welby and Peirce (cf. Peirce/Welby 1977: 65 f, 79) considered this an important step towards a general recognition of significs. This article (Welby 1911a; Peirce/Welby 1977: 167–175), which she turned in as early as March 1908, represented the greatest progress made in the theoretical foundation of significs since *What is Meaning?*. Lady Welby herself must have recognized this fact, for she sent the manuscript to her most important correspondents and even used it to familiarize others with significs. However, the article was published too late to obtain the desired results during her lifetime.

In 1909 she sent copies of this new article to the Austrian teacher and philosophical writer Johann Kleinpeter (1869–1916) and to the philosopher and educationalist Wilhelm Jerusalem (1854–1923)⁹⁴ among others. They had both been recommended to her by the anglicist Leon Kellner (1859–1928)⁹⁵ as very suitable persons who “will be delighted to spread your ideas in Germany and

Austria" (Kellner to Lady Welby, July 3, 1908). However, neither of them adopted signifiics.

In spring 1909 ⁹⁶ a new and promising attempt was made to persuade various scientists, who had expressed favorable opinions of signifiics, to write their own articles on any one of Lady Welby's central themes, and finally to publish the resulting contributions in the form of a book entitled *Essays on Signifiics*. Thus on the one hand, one would have arrived at the point where internationally recognized scientists were dealing with fundamental problems of signifiics ⁹⁷, and on the other hand, where signifiics was advanced to the status of an important and recognized discipline ⁹⁸. Stout and John Willis Slaughter ⁹⁹ declared their willingness to take over the function of editors. The latter was known to Lady Welby since 1905 as a member of the "Sociological Society" (cf. Welby 1931: 261 f). Stout wanted to write the introduction to the book, H. Höffding contributed an article on "Identity and Analogy", M. Calderoni sent in an article on "Pragmatism and Meaning", which he had written together with G. Vailati. F. Tönnies, C. S. Peirce, the economist William W. Carlile, the mathematician Philip Jourdain, whom Lady Welby had known since 1907, the logician Alfred Sidgwick, J. P. Postgate and Slaughter also promised to send in contributions. Peirce intended to write on "Assurance from Reasoning" (Peirce/Welby 1977: 477), namely on "the *quality & grade* of assurance that the three classes of reasoning afford" (Peirce/Welby 1977: 151) ¹⁰⁰, but its completion was increasingly delayed by his illness and his depressing personal and social situation. ¹⁰¹ However, Stout and Lady Welby placed so much importance on Peirce's contribution that the printing of the book was postponed again and again to be able to include his article as well. Lady Welby's last letter to Peirce (Dec. 31, 1911) reveals that his article was still being awaited. Shortly after, the whole project was abandoned, not least because of Lady Welby's death three months later. ¹⁰²

During the last two years of her life, Lady Welby had once again two opportunities of handing over signifiics to someone else, thus ensuring its eventual continuity in the form of an institutionalized discipline. The first came in the form of an inquiry from C. K. Ogden (Tuesday, Nov. 15, 1910) who, after having read *What is Meaning?*, wished to deal with signifiics more intensively. She wrote to Samuel Alexander on Nov. 21, 1910 describing how important this inquiry was for her, and what she expected from this contact with Ogden, which finally led to a co-operation which lasted over one year, as follows:

“And it comes opportunely at this moment which is rather a momentous one for me. The Secretary of the ‘Heretics’ Club at Cambridge has written to ask whether I will supply him with material for a Lecture on Significs to be followed by a discussion, at Cambridge and another at Oxford.

This of course is a great step forward as I don’t know him at all. He is coming here tomorrow for his first exploration of my materials. Please congratulate me!

I have so longed for someone to take up my position seriously *and see how it works*. Indeed, though my thought remains clear, my memory and strength are both failing fast now in every direction except that of my zll-engrossing [sic!] subject, which I may now hope will be recognised before long as the clue to all our differences and puzzles.”

As the co-operation with Ogden ended at the end of 1911, it must have been a disappointment for Lady Welby who saw her last great hopes and expectations come to nothing. In retrospect, however, it can be established that some of her hopes in Ogden were fulfilled at least to some extent, even though this occurred many years later (cf. Ch. 4.9).

The second opportunity presented itself in spring 1911, but was, as far as I know, not made use of either. The only information I have is what Lady Welby wrote to Samuel Alexander on this subject (April 10, 1911):

“I don’t think I told you that I had a private conference the other day with the Headmasters of Eton and Harrow on the educational side of the question, at which my Cambridge representative [Ogden] was present. Significs made much more way than I expected in spite of my great shortcoming and the severe cross-examination of the two very able men.”

With these two last fruitless opportunities, Lady Welby’s efforts to institutionalize significs as a science and to introduce signific aspects into a reformed private and public system of education finally came to nothing. In this matter the fact that she did not hold any position in an academic institution was just as important as her efforts to keep significs open and independent of existing or arising scientific schools of thought. Thus at a later date, one of her statements on significs was confirmed in a sense which she had not at all intended:

“It [Significs] founds no school of thought and advocates no technical specialism.” (Welby 1911a: 81)

Lady Welby’s publications after *What is Meaning?* were directly connected only to some extent with her simultaneous efforts to institutionalize significs (cf. Welby 1905; 1906c; 1911a). However, an indirect connection seems to exist with the articles in which she analyzed some of her contemporaries’ publications from a signific standpoint (Welby 1906b, 1907a, b; 1908b; 1909a, b, c; 1910a)

-- something she had never done publicly -- and criticized the language and the terms used by the authors or their attitude to language. Furthermore, it is remarkable that in 1909 and 1910 as many as four of her articles dealt with the problem concerning the formulation of religious ideas and tenets into language (Welby 1909a, c; 1910a, b), and that for the second time she published in a periodical just one of her numerous poems in 1906 (Welby 1906a)¹⁰³.

All this reveals that Lady Welby was much more self-confident with regard to her work and the importance of significs during this time. One of the reasons for this was certainly the fact that she felt herself accepted as a serious partner for discussions in her correspondence with such important scientists as J. Cook Wilson (since 1902), Peirce (since 1903), B. Russel, H. Höffding (since 1904), H. Bergson (since 1905) and Philip E. B. Jourdain (since 1907). However, one must keep in mind that during these last nine years she still depended very heavily on the judgement and encouragement of old friends such as Stout, Schiller and Geddes, as well as on the co-operation and commitment of her assistants, especially W. Macdonald and later W. J. Greenstreet.

Thus, a couple of months after the publication of *What is Meaning?* Stout and Geddes went through her excerpts and manuscripts at her home. Both of them forbade her to destroy any of her material and wanted three more books to be published:

“(1) More Grains of Sense, (2) Parables, Poems & Aphorisms, (3) Links & Clues, Second Series. And Dr. Stout offered to edit the material for the first two.” (Lady Welby to F. Tönnies, Nov. 29, 1903)¹⁰⁴

Just as little as Stout's plans, Lady Welby's hopes, which existed almost around the same time, of publishing a second and improved edition of *What is Meaning?* (cf. Welby to Peirce, Nov. 18, 1903) were never realized. This edition was to include, at Peirce's request, parts of his letter written to Lady Welby on Oct. 12, 1904 (cf. Peirce/Welby 1977: 35).

At the end of 1903, Lady Welby began addressing herself to two topics which are closely related to one another: time as a derivative and therefore secondary idea; and “mother-sense” or “primal sense” as a largely lost human ability for intuitive or quasi instinctive knowledge. With both these topics, which had previously only been alluded to in *What is Meaning?*, she returned to considerations which dated back to the time around 1890 (cf. Welby 1890c; 1891a). The concept of “primal sense” (cf. this volume) was discussed with various scholars, but primarily among the founding members of the “Sociological Society”,

where it was also presented in two lectures (Welby 1905; 1906c) in connection with the discussion of F. Galton's presentation of his conception of "eugenics".

The first text was presented by Miss N. Carter at the Sociological Society's Meeting on May 16, 1904, and the second paper was submitted at the meeting on Feb. 14, 1905.

In these lectures she attempts to point out the possibilities of women to make a contribution to the realization of eugenic goals, especially the goal of developing innate human qualities to the greatest advantage of mankind. In this context she finds central importance in the view, which is considered to be well founded, "that women have, as a rule, a larger share of so-called 'intuition' than men" (Welby 1905: 77). This characteristic, which she considers to be particularly marked among older women, was in her opinion originally a quality of all people which, however, was largely misunderstood or falsely used (e.g. as the basis of fortune telling) to the extent that it was present. Due to the special development of the valuable but at the same time dominant analytic and constructive faculty of man something was at the same time lost, namely

"a direct and trustworthy reaction to the stimuli of nature in its widest sense, a reaction that should deserve the name of intuition as representing a practically unerring instinct" (Welby 1906c: 44).

By the loss of that which she then still called "mother-sense, or the sense of human, even of vital origin and significance" (Welby 1906c: 45), however, the problem arose that the value of the achievements of the analytic faculty was completely dependent on the validity of the presuppositions from which they proceeded without the possibility of proving or establishing this validity experimentally, argumentatively, or by universal experience. Therefore the advancement and regeneration of "mother-sense" is necessary if an increasing aberration on the way of one-sided rational development is to be avoided.

Accordingly Lady Welby then proceeds on the basis of such intuitive knowledge which the "mother-sense" makes possible – with Leibniz it is the "intuitus" which guarantees this ¹⁰⁵ – in her study on "Time as Derivative" (Welby 1907a. 383):

"The following suggestions are made wholly from the starting-point of our presuppositions; from the initial, germinal, as it were nuclear ideas which come fresh from the generative matrix of primitive awareness, or of *sense*, as an organism may be said to 'sense' or have a sense of the condition in which it lives."

Stimulated by the assertion that all our expressions for time and time relations are borrowed from those for movement and space and that this borrowing is irreversible ¹⁰⁶, she attempts to show that time is the result of our experience of movement and its precondition, namely space, and that it is therefore to be understood as a translated application of both these original ideas:

“Time is really the translation of diversity-*in*-position, through change-*of*-position, into succession; and is the effect of a mental condition corresponding to the pre-visual stage of sense-perception.” (Welby 1907a: 395)

For just as space is successive for the blind person due to his limited perceptual possibilities, time is successive for us, too.

The difficulty in understanding Lady Welby's argumentation for Peirce (Peirce/Welby 1977: 46–49; Welby 1907a: 390), Stout (Welby 1931: 131 f; 1907a: 394) and for others was based on the fact that the particular nature of linguistic expressions for time that she had determined, that is, an etymological argument, was taken to be the main support of her view whereas for her this was only a significant fact leading to further considerations. The actual main point here as also in her positing the primacy of the curved line over the straight one was the “genetic (not as a question of ‘time’ but of developmental order)” (Welby 1931: 14). From this point of view, she had to consider many a prevailing conception to be an “artificial standard” which had usurped the place of the “natural”.

For her, the grand confirmation of these ideas, which she had already attempted to formulate many years before, came in 1905 with her reading of H. Bergson's “Introduction à la métaphysique” (Bergson 1903). In 1890 Lady Welby had written in a text entitled “Prior Questions”:

“(1) I ask whether we do not (for the moment) need to read into all experience – as the conceptual limit, the ultimate symbol – the idea of motion, not matter; of activity, not passivity or ‘rest’; of change, not fixture or stability; of rhythm, not equilibrium; of energy, not substance; of function, not structure?” (Welby 1931: 353)

Bergson how wrote (1903: 25):

“Cette réalité est mobilité. Il n'existe pas de *choses* faites, mais seulement des choses qui se font, pas d'*états* qui se maintiennent, mais seulement des états qui changent.”

The agreement between that which Lady Welby called intuition or “primal sense” and Bergson's concept of intuition was not so extensive. But they shared

the assumption that just like philosophy, science must proceed from intuition in order to have a valid point of departure. Only on this basis can a reasonable scientific analysis be founded whose essential characteristic is that it operates with symbols. If it is forgotten that science, too, relies on intuition as a starting point for analysis, then it is rightly considered to be relative.

“Est relative la connaissance symbolique par concepts préexistants qui va du fixe au mouvant, mais non pas la connaissance intuitive qui s’installe dans le mouvant et adopte la vie même des choses.”

(Bergson 1903: 29; italicized in the original) ¹⁰⁷. In light of this far reaching agreement, Lady Welby wrote Bergson (June 5, 1905):

“. . . and with the greatest satisfaction found that it set forth with commanding ability the very thesis for which during many years I had vainly sought a hearing.”

Somewhat later she sent him a translation of his “Introduction” which she had done and a copy of *What is Meaning?*. Bergson, who was familiar with her *Mind* article of 1896 (Bergson to Lady Welby, 1er juillet 1905), was greatly impressed by her book and by her translation and allowed her to publish the translation (letter of 16 juillet 1905; Welby 1931: 67 f). This never came to be, however. ¹⁰⁸

The significant progress from Lady Welby’s point of view in the development of significs resulted in its final and all encompassing formulation of the subject, method, and goals of significs in the Encyclopaedia Britannica entry (Welby 1911a). There she declared the 1902 definition of significs (Welby/Stout/Baldwin 1902) to be out of date. To set off Bréal’s “sémantique”, which had mistakenly been identified with significs by various authors, she defined the former as a reform and expansion of the etymological method, which could, it is true, be described as an application of significs within strictly philological boundaries, but differed from the more comprehensive significs in two essential points: for one thing, semantics did not include the investigation and classification of the terms of meaning and for another it did not aim for a clear recognition of the basic significance of these terms

“as rendering, well or ill, the expressive value not only of sound and script but also of all fact or occurrence which demands and may arouse profitable attention” (Welby 1911a: 79).

The formulation “all fact or occurrence . . .”, which corresponds to “all other types of human function” at another place, is used here as a general phrase to

point out the generality of her comprehensive concept of signs. Such an extension of the sign concept beyond the class of conventionalized signs posed no problem for a semiotician like Peirce, but did for other contemporaries such as Ogden and Tönnies, for example. Tönnies' criticism of this point is based on the fact – and rightly so – that among other things the cited extension remains unexplained and unfounded and therefore comes into disparity with the rest of the exposition:

“But then very types [of human functioning] seem to remain somewhat obscure in the present paper, the examples used being all taken from language and accentuating *linguistic* reform.”¹⁰⁹

Lady Welby seems also to have realized this, however she did not alter her text:

“As to the application of Significs to all human action – if only that of harnessing a horse or lighting a fire – as being ideally significant, I could do nothing more in the space of such an article, than state it . . .” (letter to Tönnies, July 6, 1908).

On the other hand it is evident that precisely her organismic sense concept presupposes at least a mediation by signs, if not a sign nature, of all experience as far as such experience arouses our attention. She proceeds to formulate this in her new definition more clearly than in earlier publications:

“The classified use of the terms of expression-value suggests three main levels or classes of that value – those of Sense, Meaning and Significance.

(a) The first of these at the outset would naturally be associated with Sense in its most primitive reference; that is, with the organic response to environment, and with the essentially expressive element in all experience. We ostracize the senseless in speech, and also ask ‘in what sense’ a word is used or a statement may be justified.

(b) But ‘Sense’ is not in itself purposive; whereas that is the main character of the word ‘Meaning,’ which is properly reserved for the specific sense which it is *intended to convey*.

(c) As including sense and meaning but transcending them in range, and covering the far-reaching consequence, implication, ultimate result or outcome of some event or experience, the term ‘Significance’ is usefully applied.” (Welby 1911a: 79)

This makes visible for the first time the difference between “sense” and “meaning” in relation to verbal interaction or interaction mediated by signs in general, that is, communication. Accordingly it can mean two things to understand an utterance or a gesture. For one thing, the sign in question can be understood in one way or another to the extent that it appears as a meaningful and therefore generally understandable sign to the person who perceives it and interprets it. But under this condition also the sense of the sign is not singular and determined

but rather it depends on elements of knowledge, suppositions and expectations which the perceiving and interpreting individual draws on to determine the sense. The possibility that under altered conditions for the interpreting individual another sense could be attributed to the sign always remains open. This is the justification for the question "In what sense?" On the other hand, a sign can be understood according to the intended sense of him who produced the sign. To achieve this at least approximately is for example the goal of the hearer in verbal communication. Therefore the person who is concerned with the meaning, the intended sense of an utterance or of sign usage in general can also ask "In what sense?"

Yet even in this article what is to be meant by the signfic method remains unclear. Instead, the influence of language is discussed, above all that of the images of language on thinking, the necessity of a strict critique of language, and the significance of taking account of signfic ideas in education. But in any overall evaluation of this article one point must not be overlooked which Lady Welby introduces at various places, including the present one (Welby 1911a: 80):

"In attempting to inaugurate any new departure from habitual thinking, history witnesses that the demand at its initial stage for unmistakably clear exposition must be not only unreasonable but futile."

At the same time, Peirce's review of *What is Meaning?* should be called to mind, where he writes (Peirce 1903: 308):

"She has wisely abstained from any attempt at formal definitions of these three modes of significance. She tells us what she means only in the lowest of those three senses. To have gone further would have shunted her off upon a long and needless discussion."

This conception was founded in several ways, at least for Lady Welby. For one thing, she felt the state of research in her area to be totally insufficient for giving an unmistakably clear presentation of signfics at that time. For another, even in the case of more advanced research, she would have hesitated to provide strictly formal definitions of the concepts and of the problem because she always saw the disadvantage of such definitions as having a tendency to hinder the further development of a science. She placed too high a value on flexibility and the ability to adapt to changed conditions, which is characteristic of any form of life with a chance to survive, to act contrary to them unnecessarily. Finally, she had furthermore encountered the argument all too often that her

goals for significs were very understandable, but that the fact that they were so understandable was at the same time just another indication of the practical superfluity of significs, which after all aimed for the improvement of human expressive and interpretative abilities relative to language (cf. Lady Welby to Ogden; Welby 1931: 336 f). But it is useless to confront such arguments with definitions of signific concepts alone. Instead it only helps to take account of the complex problem of interpersonal communication, its fundamental fallibility, its susceptibility to deception etc. However, Lady Welby was at that time not able to go into this in detail, although she definitely pointed out to her critics that the determinable understanding was not solely the result of linguistic understanding but also of the interpretation of the tone of speech, of facial and body expression etc. (Welby 1931: 336), that is, of mutual perception and of non-verbal communication in fact-to-face interaction as we would put it nowadays. The discussion of exactly these questions, which were raised by Lady Welby herself or by others in connection with the article for the Encyclopaedia Britannica, was continued in the final work on *Significs and Language* (Welby 1911b; in this volume), her last publication.

As early as shortly before *What is Meaning?* appeared in print, the idea for a second book on significs had arisen, "a second volume of 'Applications of the Signific Method' " (Lady Welby to Baldwin, Feb. 21, 1903) ¹¹⁰. This initial plan obviously changed, for *Significs and Language* finally became, as Lady Welby aptly put it, "a short book of *Appeal* for Significs" ¹¹¹. As she herself reports in the preface to the book, it is based on different papers which she had sent to her correspondents in past years in order to explain her standpoint. The present collection of essays resulted from the revision of these papers undertaken with Macdonald's assistance. For these reasons alone, the reader cannot expect to find thoughts or ideas in this book which, compared to the previous publications of Lady Welby, are new or which represent a further development of significs. Rather, the individual essays discuss in brilliant form central topics and goals of significs, for example the necessity of social control of the use of linguistic means, the epistemological status of the imagery of language or figures of speech, problems of scientific terminologies and their interdisciplinary borrowing, the value of verbal and non-verbal means of expression, and the value of ambiguities in language. In the process, the appendix illustrates impressively the abuses in the usual use of language criticized by Lady Welby.

In addition to a reference to previous definitions of signifiics (Welby 1911b: 3), a description kept in very general terms is to be found in the preface which caused considerable differences of opinion between Lady Welby on the one hand and Macdonald and Ogden on the other:

“Signifiics may be briefly and provisionally defined as the study of the nature of Significance in all its forms and relations, and thus of its working in every possible sphere of human interest and purpose.” (Welby 1911b: vii)

Instead of this explicitly provisional definition based on “significance” alone, Ogden and Macdonald were in favor of citing one of the older already published definitions in which signifiics should have been introduced as a concept related exclusively to language and the use of linguistic means. For the reasons given above, Lady Welby felt that she was not in a position to formulate a completely satisfactory definition at that time (cf. also Welby 1911b: vii). Furthermore, she could not concur with a limitation of signifiics to the study of linguistic signs because of her broader sign concept. And since according to her conception of “significance” it always presupposed “sense” or “meaning”, she could not accept criticism on this point. This was even more the case in that she considered the goal of human interpretative efforts to be strived for to consist of the understanding of the significance of a sign. The controversy over this point, together with other reasons led to Macdonald’s dismissal.

It is doubtful whether *Signifiics and Language* could contribute to a better understanding of signifiics beyond the intimate circle of scholars surrounding Lady Welby. For one thing, too many unspoken prerequisites unknown to the reader who was not familiar with Lady Welby’s writing entered into this book. For another, the predominant more everyday assumptions on language and communication apparently made it difficult for many readers to understand her ideas. Thus, one reviewer believed that signifiics aimed only “to tighten the connection between words and things” (Kettle 1912: 175), for which reason it could not be a matter of a new science, since this goal is as old as “articulate utterance”. In comparison, the evaluation of scholars who were more knowledgeable was unanimously positive. One of them, Calderoni, for example, wrote Lady Welby (June 30, 1911):

“‘Signifiics and Language’ appears to me an extremely important contribution towards the ideal of perfecting the instrument of thought, an ideal which, alas!, seems to be more and more neglected in philosophic circles nowadays, especially under German influence.” 112

In the fall of 1911, Lady Welby began preparations for a further book. She wrote Ogden about it (Nov. 11, 1911):

"I am VERY hard at work starting the new book with the editing advice of Mr. Greenstreet. It will be emphatically a book of reference on the subject." 113

It is to be assumed that it was supposed to be a sort of "Handbook of Significs" (Haan 1915: 458). 114 Yet her work on this book came to an end only a few months later. At the end of January, 1912, she had a bad case of the flu which led to poor circulation and insufficient circulation of the brain, causing a partial aphasia and paralysis of the right hand. 115 Her condition improved again at the end of February so that she could speak better in the middle of March and those around her began to hope for a complete recovery. Then she died, however, on March 29, 1912, in Harrow and was buried in Grantham (Lincolnshire).

2 copies Matter, Motion, Force.
 What's it matter?
 Does it matter?
 Asked two friends my wits to scatter

1890
 V.H.

Only motion
 With emotion
 I replied -- for lack of notion

But of course
 Without remorse
 We're crushed, and told that "all is force".

MATTER, MOTION, FORCE

What's the matter?
 Does it matter?
 Asked two friends, my wits to scatter

Only motion
 With emotion
 I reply--for lack of notion.

But of course
 Without remorse
 We're crushed, and told that "all is force".

V.H.

3. Significs as a Communication Oriented Theory of Signs

3.1 Lady Welby's Critique of Language and Terminology

“Let us then resolve that articulate expression shall at last become worthy of Man, of one whose first duty and highest power is to interpret and thus to reveal; . . .”
(Welby 1911b: 91f)

In the foregoing chapters, I have outlined Lady Welby's biography and intellectual development. In the course, ideas, assumptions and definitions of concepts were discernable which she adhered to during the last 10, 20, or even 30 years of her life. But there were also additionally – as could hardly be expected otherwise – innovations, alterations, and supplements in even greater number. Since there is after all no conclusive not to mention final presentation of significs by Lady Welby herself and, in her own understanding of scientific knowledge and its communication by means of language there never could be one, an overall view of significs such as that which is to be attempted here is confronted by several difficulties. Limiting oneself to the analytical presentation of one of her principal publications may do justice to her and to that portion of her work, but would be related to her thinking at a particular point in time and thereby possibly to a mere segment of significs. The counterpart to this extreme, a collage of citations from her complete works, is also to be rejected for obvious reasons. Eschbach (1983), who was the first to submit a careful analysis of the fundamental elements of significs, adopts a reasonable middle course between these two extremes. He concentrates on Lady Welby's last two books (1903; 1911b) and thereby includes the major part of her older reflections which she summed up in *What is Meaning?* (1903) and still considered timely in 1903.

For good reasons, my presentation of significs will limit itself to Lady Welby's publications between 1903 and 1911 and will only have recourse to older texts or letters where this seems necessary to explain more recent text excerpts. For construing the context in which the individual texts are to be placed, the reader is referred to the preceding chapters, in light of which he can discern and judge the constructive nature of the following explication. For my systematization of Lady Welby's thinking about signs, language, and communication cannot be found in this form in any of her publications and it is not a summing up of her texts, but rather of a superior order like any interpretation. This is not changed by my practice of supplementing or corroborating my statements by individual quotations.

All the classifications and characterizations of Lady Welby's work to date, e.g. those of Kretzmann (1967: 403) and Hardwick (1977b: xix–xxiii) suffer from two shortcomings in contrast to Eschbach's (1983) presentation. For one thing, her work is not analyzed and appreciated for its own sake, but rather from the perspective of present day semiotic theories and it is considered in light of the heroes of semiotics or semantics. For another, they have been led astray by superficial aspects of her publications ("a strong moral tone in her work"; "an almost evangelical zeal" (Hardwick 1977b: xxiii)) which in the long run were obviously not understood, and thus arrived at biased judgements and systematizations (cf. Ch. 1.1). I would like to counter this development with the thesis that Lady Welby's significs as a whole can only – or at least better – be understood if it is taken as part of a tradition which in hidden or open form persists throughout the entire history of (at least) European civilization. Ungeheuer (in press) has designated this tradition as that of the "cognitio symbolica" because it bears all the features of "symbolic knowledge" introduced by Leibniz in his "Meditationes", which is contrasted there with "intuitive knowledge". Whereas Leibniz calls adequate and intuitive knowledge the utmost but hardly humanly attainable goal of knowledge, the symbolic, that is knowledge with the intermediary help of signs, is the most widespread in the field of distinct knowledge, to which scientific knowledge belongs. Here signs are used in place of things, in thinking words are used instead of ideas. The words have meanings such that we are able to understand the individual words often arbitrarily and to speak intelligibly about a thing when we have no command of the idea of that which we express in words. (Cf. Ungeheuer 1979b: 2; in press) Ever since Plato, the ever present danger has been attributed to symbolic knowledge that it can lead to chimaeras which fictionally unite elements which are irreconcilable with one another, and that the attempt to grasp or communicate founded knowledge is thereby doomed. The most varied efforts to provide methodical procedures improving the path to well-founded knowledge and communication, conceding our inability to remove the risk of chimaeras, are typical for this tradition to which, according to Ungeheuer's studies, Wolff, Lambert, Nietzsche, Frege, and Bergson belong, next to Plato and Leibniz. Such a procedure was dialectics for Plato. For Wolff it was the reduction of symbolic knowledge to intuitive knowledge, and – herein lies the crux of my thesis – Lady Welby prescribes significs for science and everyday communication. It is precisely in this sense that significs, related to science and scientific knowledge, is to be

understood “as a fundamental science” (Eschbach 1983). In relation to everyday communication, it is supported by pedagogic and communication ethical goals.

Since 1890 at the latest, Lady Welby’s reflections concern signs in general as the means of expression of experiences and thoughts, as the means of thinking, and as the objects of human interpretation processes. However, the most important of these signs in general are linguistic ones. Accordingly, she is not interested in language as a static system of signs; this would be a strictly linguistic approach, an extracommunicative one, which she explicitly rejects as being insufficient. Rather, she deals with the functions of language in use and those which are possible, the actual sorts of use to which they are put and their neglected potential uses.

“I will only say now that I *always* assume that function creates instrument. By ‘brain’ I *always* mean ‘a mode of complex motion’ and never a piece of crumpled ‘stuff’.” (letter to F. C. S. Schiller, July 12, 1900)

She constantly uses an organic analogy for language and emphasizes language’s plasticity and flexibility to the extent that she finds them given and calls for them wherever they have been lost due to the forms of language usage and inadequate views of language. We have here the old idea of εὐπλαστος λόγος in Plato’s work and that of the adaptiveness of language (“Bildsamkeit der Sprache”) in German philosophy of language of the 18th century (cf. Ungeheuer in press; 1980a: 69f). Plasticity is a necessary quality of language if it is to remain a suitable means of giving expression to the numerous changing experiences in constantly changing situations from the perspective of the most different individuals. Words therefore cannot be “the counters of wise men” which Hobbes considered them to be,

“. . ., since wise men know that a counter has no life in any sense – never changes and never develops – whereas a word shares the life of its speaker.” (Letter to Charles Whibley; Welby 1931: 77)

But words also share in the life of a society to whose language they belong, and they must therefore be able to adapt their meanings to the growth of knowledge in this society. Thus, plasticity is required if language is to be a suitable means of obtaining and communicating knowledge.

“The living world is plastic, and it is life which has mind and language whereby to express it. Thus rigid definition (and the results obtained by it) must always be secondary, plastic definition primary. Language must mainly follow the inexhaustible subtleties of organic phenomena.” (Letter to Philip Jourdain; Welby 1931: 315)

Finally, plasticity of language is also a condition for the possibility of the adaptation of linguistic signs and their use to the most different and altered goals and objectives. Only on this condition can signific ideas and methods lead to the improvement of knowledge mediated by signs and of communication. But this conception of language serves at the same time as criticism of the present state of language, of other views of language, and of everyday understanding of communication and interpretation processes. Thus we find the following concerning the general state of language:

“Man, then, has been organically and typically plastic. But his language, except in secondary senses or for superficial purposes, is still rigid.” (Welby 1911b: 64)

Since the days of Horace, this rigidity has been expressed by means of the trope of “language usage as the absolute teacher of languages” (“*si violet usus / quam penes arbitrium est et jus et norma loquendi*”). In the 18th century, they spoke in terms of “language usage as tyrant” (cf. in this connection: Ungeheuer 1980a: 75–82). In a conscious or unconscious continuation of this tradition ¹¹⁷ Lady Welby transforms this old formula to the “royal slave” (Welby 1897b). In a parable, Lady Welby has man enter the scene as the slave of language, the alphabet, speech, punctuation marks etc., which characteristically tell him:

“The words used your forefathers as we use you to-day, remember that.” (1897b: 433)

Man’s wishes to make some changes in language are categorically rejected. Not until “Expression” offers man his services as a servant but not as a slave does man realize the position he is to adopt relative to his potential for expression:

“The Man began to show some awakening sense both of unused power and of shame.” (1897b: 434)

Corresponding to this early parable, Lady Welby’s criticism of language is a criticism of the forms of language usage which have been handed down, to the extent that they prove to be limitations and restrictions of the need to express oneself and communicate, or that they are associated with meanings, ideas, or associations which have become untenable in light of the latest scientific knowledge or according to the results of signific analyses. Criticism of language and a breaking down of linguistic rigidity are furthermore necessary, because the given language influences thinking and sometimes even paralyzes it:

“Paralysis of thought. For do what we will, we cannot escape the law which unites, as in our very eye, image and object, reflection and reality, sign and what it signifies,

figure and the figurate, and, generally, token or symbol and what they stand for.”
(Welby 1911b: 37)

This relation between language and thought which Lady Welby supposed must, however, not be understood as if she supposed at the same time a stable relationship between signs and their meanings, which are furthermore also strictly defined and determined. Rather, it is part of the plasticity of language that the semantic variability of words over time and in their context of usage be realized. For:

“Only the utmost degree of plasticity compatible with persistence of type can give the needed adaptiveness to varying circumstance.” (Welby 1903: 60)

Lady Welby understands the mutual adaptability between word and context in analogy to the adaptation of the organism to its environment. By means of this mutual adaptability, the respective meaning of the individual word is just as determined as that of the context. The reciprocal effect between word and context thereby brings to light the actual inadmissible language use which can be discerned by the fact that the context destroys the essential part of a word's meaning in that as the result of the reciprocal effect, a central difference in meaning between the word used and another disappears (Welby 1903: 40 f).

These reflections also imply a criticism of the everyday conceptions of language and communication, above all that of “plain meaning”. For Lady Welby's conception of the relation between signs and their meanings is a mobile one in contrast to the stable one which she criticizes. The meaning attributed to a sign is for her not only dependent on the context of use and the situation, but at the same time on a series of purely subjective processes on the part of the person using the sign: the changes of his attention, his conclusions and associations, the connections he places to his memory and to the present circumstances, and his specific propensity to use this sign instead of another one. Therefore it becomes as much a problem to communicate his own thoughts and experiences to others as it is to interpret the communications of others. The semantic variability of words is, to be sure, the condition allowing us to use existing language for the communication of individual thoughts, feelings, etc., but at the same time it leads to the impossibility of our understanding one another completely. This is the result to which his reading of *What is Meaning?* had led Shadworth H. Hodgson, the first president of the Aristotelian Society. Lady Welby answered him (Welby 1931: 74):

"If we did *not* agree to differ – if we insisted on a monotony of mechanical duplication of view – we should mentally sink back into the primitive cell-form."

And she wrote to Charles Whibley:

"If I am right, I can never convey my 'meaning' – what I intend you to infer – except obliquely, inferentially. If I could, I should have less need to write as I do! Indeed, I should disprove my own contention and undermine my case. The only as yet available illustrations of my thesis are the rare cases in which we have in fact abandoned phrases or terms no longer applicable; or acquired, for new experiences, virtually fresh ones which in their turn must not be allowed to coerce us with outgrown association.

All this would sound hopeless but for the marvellous plasticity of language which, in a really trained form, would instinctively balance all enrichment and expansion by increased simplicity and directness." (Welby 1931: 273 f)

The problems of interpersonal communication are therefore not only made visible by Lady Welby's reflections, but they are at the same time made into a mainspring for significant positions for the solution of or at least for decreasing these problems. Simplicity and directness are required of the more effective forms of expression, that is, qualities which should enable the deciphering of an intended meaning 'at first glance' without long intermediary paths of deduction. In terms of language, Lady Welby had in mind economizing measures such as telegram style, shorthand or "shortwit" of the nature of an epigram or proverb. Expressions from the area of slang she finds acceptable if only they indicate the essence of the intended sense and let it be grasped concisely and pregnantly like the above mentioned forms. In the extralinguistic field she proposes illustrations, diagrams, and further developments of gestures, that is, signs which are no longer completely arbitrary but which indicate their individual meaning components as directly as possible by means of their outer form. Thus a direction of the significant reform and expansion of language here becomes visible which for Lady Welby always implied an improvement of thinking and imagination as well, precisely because their potential is thereby improved and enlarged. Contributing to this reform as well as the demand for communicating according to the best possible understanding of the foundations and prerequisites of interpersonal understanding is for her a communication ethical maxim. The "strong moral tone in her work" (Hardwick 1977b: xxiii) to which Hardwick objects is to be understood from this standpoint and from the standpoint of the morality which has always been associated with the search for truth and the fight against error and chimaeras.

Lady Welby's conception of ambiguities in language is characterized by the assumption of or call for the plasticity of language and generally by her mobilistic conception of the relation between sign and meaning. She differentiates the following cases of ambiguity:

1. Intended and healthy ambiguity, of which the author and the reader are equally conscious, which is adaptive and meets new requirements. It is "the condition of the highest forms of expression" (Welby 1903: 74).
2. Deliberate deception; 3. Involuntary or unconscious misleading; 4. Ambiguity of the context: it is more frequent than that of the word and often goes unnoticed, because the "self-evidence of expression in words" (Welby 1903: 75) is relied on. Yet the context itself needs a context if it is to be understood and still has nothing better than exactly the words and sentences which it is supposed to shed light on.
5. Three types of harmful ambiguity: a) "defective 'tuning' of language" (Welby 1903: 75), i.e. attention is not paid to the perfect relation between the elements of expression; b) "defective mental ear and eye on the part of the 'performer'" (ibidem), i.e. neither the speaker nor the listener discover the true causes of the general inability to successfully communicate and understand; c) "distorted organs or instruments of expression" (Welby 1903: 76), which arise from the fact that signfic abilities are not trained during childhood and that this lack is not recognized. – Thus, ambiguities are primarily positive constituents of any language and constitute part of its adaptive capacity. Solely those ambiguities can have negative effects which arise or which cannot be remedied due to inadequate understanding by the communication partners of the inevitable communicative regularities.

From her signfic point of view, Lady Welby must reject both repeatedly suggested methods of eliminating ambiguity and adjusting natural languages in form and meaning to the respective state of the sciences. These are the construction of international (auxiliary) languages and the definition of all or of the most important expressions of a language. For an international language which is supposed to conform to the need for dependable knowledge based on the intermediary help of signs and for effective communication can, in her opinion, only be drawn up when the necessary foundations of such a language have been found by a theory of signs. Thus, Lady Welby wrote P. Geddes about Esperanto (April 22, 1903):

“And it must be distinctly understood that until language in general has felt the influence of attention centralised from early youth on the questions of ‘Significs’, a common language would tend afresh to perpetuate the very disabilities and monstrosities which we need to leave behind.”

Definitions, on the other hand, can hardly be given so precisely for each word that the respective word meaning is determined for everybody in such a manner that the meaning could not be modified any more by any context whatever. If this were nevertheless to be achieved, the most significant quality of language, its plasticity and in this connection its adaptability to individuals and circumstances, new thoughts, and imagination would be lost in the process. The net gain would only be the illegibility of all scientific treatises (cf. e.g. Welby 1896: 194), a hypermacrology making any understanding nearly impossible.¹¹⁸ And dependable knowledge would also still be unattained, since the work of definition and of the reconstruction of language would not be guided by an understanding of the sign theoretical foundations of symbolical knowledge. Thus, significs must also precede such an undertaking.

The second essential assumption of Lady Welby's concerning natural languages on which the analyses and methods of significs are based in a specific manner is the conception of the thoroughgoing presence of tropes in natural languages. With a similarity to corresponding semiotic-linguistic ideas of the 17th and 18th centuries in the works of Du Marsais and Lambert (cf. Ungeheuer 1980b; 1980c: 370; 1981) which is amazing, Lady Welby views the lexico-semantic basic relations of language as the same as those which are presupposed in the study of tropes, which is usually assigned to the field of rhetoric. She thereby anticipated a development which was not yet able to find acceptance in systematic linguistics and which has only begun to find increasing interest in recent years (cf. Lakoff/Johnson 1980) – although without recourse to a knowledge of Lady Welby's ideas or those of earlier authors.¹¹⁹ She formulates her conception in “Time as Derivative” (1907a: 399) and similarly in other passages (such as Welby 1903: 157; 1906b: 451) as follows:

“Of course it must not be forgotten that our vocabulary of ‘physical’ or ‘material’ terms is itself originally borrowed from that evolved by our own conscious activities: that the language of ‘motion’ and ‘matter’ is borrowed from ‘mind’. And certainly no one refuses to admit that in this sense we translate the physical into the psychological; we impose our own character upon material phenomena. The difference is that in this case we borrow back the terms thus bestowed upon the physical world and describe our feelings and indirectly even our emotions in terms of the physical. But as we have seen, we do not borrow back the Time-terms

derived from Space and enrich our conceptions of Space with them. Why is that impossible? Because, as we have also seen, they symbolise part of those very conceptions, including those of change and motion.”

The significance of this phenomenon and its relation to the problem of knowledge and communication based on the intermediary help of signs is given in two ways. 1. Whether it is tropes that are used, which as such presuppose or assume similarities or related meanings, or whether it is analogies that are supposed to express relationships, correspondences, or partial identity between objects, in any case either the chosen image or the assumed correspondence can be false or there can be unclarity of the meaning of the trope used due to the ever present possibility of different stages of the usage of the tropes.

“If we are sometimes tempted to suppose that this is a playing on words, or the laying of undue stress on casual figures of speech, we are forgetting that while language itself is a symbolic system its method is mainly pictorial. Now a word or a group of words is often supposed to stand for a clear thought or at least for a definite idea, when it really stands only for a feeling or an instinct. Here lies the danger. 120 For if we use the wrong words (under the delusion that it does not matter, that it is merely a ‘verbal’ question), we rouse, in ourselves and others, if not the wrong thought or idea, the wrong feeling, which rises to emotion and sways conduct.” (Welby 1903: 38)

And yet the possibility of doing without tropes and analogies does not exist in language and as a result we cannot “cancel the automatic process of translative thinking. Everything suggests or reminds us of something else.” (Welby 1903: 34)

2. In a similar way, the functions of comparison, establishing similarities, and imagery of ideas are fundamental and unavoidable in the process of gaining knowledge.

“The most important elements of experience are distinction and unification, comparison and combination – analysis and synthesis. We first analyse what is called a confused manifold, really a generic or ‘given’ manifold. Then we synthesise what we have distinguished to the uttermost.” (Welby 1911b: 13)

And:

“We describe the less by the more familiar; we express the higher by the aid or the lower.” (Welby 1903: 35)

Images and figures as intellectual instruments finding expression in the correct and fitting use of tropes originate – thus says Lady Welby – in a general and accurate sense with the “retinal image” which indirectly makes the material

world accessible to us. They are therefore based on perception. (Welby 1911b: 13) Or to put it differently: by determining similarities between elements, classes are constituted, whereby the strange or new aspects are taken together with the familiar or the old. In the process, the perceptual image of the new is united with that of the old just as at the creation of a metaphor the thing compared is taken as one with the likeness. But the natural languages, as they have grown to be by the contributions of everybody and as they are used, do not follow the rational procedure of the knowledge gaining process outlined above, or follow it at the most only partially. (Cf. Welby 1911b: 13; 1903: 54) Many of the traditional linguistic images are therefore either antiquated and therefore erroneous and misleading – compared to the present state of scientific knowledge – or they are incorrectly used out of carelessness and lack of understanding of the basic problems of symbolic knowledge and communication.

To be sure, the expressive and illustrative capacity of “images” and “figures” also has its limits, since they are never in a position “to ‘cover the whole ground’ ” (Welby 1911b: 32). But since the indirect means of expression frequently – if not, in fact, as a rule – is the only possible one in order to communicate important matters, it must be analyzed, ordered and then methodically applied (*ibidem*). Thus, Lady Welby prescribes in this problem field as well, which concerns knowledge based on the intermediary help of signs and communication, *signific* analysis and *signific* procedures of the methodical use of tropes and above all of analogies in order to improve them and make them more dependable.

“SIGNIFICS in fact suggests a new starting-point from which to approach the subject of analogy, and implies the emergence of a systematic and scientifically valid critique of imagery. Thus it obviously makes for a new departure in philosophy as well as in psychology.” (Welby 1903: 23; cf. also 1903: 52)

The absolute necessity of the method of analogy constitutes the point of departure for *signific* studies.

“. . ., the only method we have for most of our mental work, involved indeed in its primary presupposition, i.e. the likeness between our reader's mind and our own. This we have to assume though we cannot prove it, or our writing becomes an absolute waste. No one can even controvert this statement, giving reasons for dissent, without the use of analogy.” (Welby 1903: 24 f) 121

And just as we test and establish this fundamental analogy on the basis of its effects and their results, namely the process of understanding and the resulting

modifications of goals, notions and actions of someone else, every other analogy and every tropical expression must also be tested (Welby 1903: 25, 36; 1911b: 34). A general possibility of testing is provided by graphic representation. Metaphors can be tested by experimental use in widely different areas or also by the criterion according to which one should be able to translate the metaphor back into other words if it has been appropriately used (cf. Welby 1903: 42f). However, for analogy as for the truth of a statement, the rule holds that the "test by result", "result on a living mind" (Welby 1903: 120f) is preferable to a test by formal criteria applied strictly mechanically in formal analysis. In this matter she is well aware that the conclusion by analogy is only a probabilistic conclusion and that therefore even obvious analogies must be carefully substantiated and founded on evidence before they are tested on the basis of their power and results.

The testing procedure takes on a different form if the reader or listener is confronted by the use of an "image" by an author or speaker, for here the intended meaning of the linguistic image is not known, but must first be construed by interpretation. According to Lady Welby, three questions arise for the reader/listener in such a situation (Welby 1911b: 34):

1. "Does he mean what he says? That is, does he really intend to convey the image which the words express?"

And what does the image then signify?

2. "Is he telling us the actual truth, or is it on some other fact, unavowed or unrecognised, that he is really 'taking his stand'?"
3. "Is he figurating accurately, that is, appropriately and thus helpfully? The last question is hardly ever asked, and yet it is the key to the other two."

Thus we are dealing here with a definition of the tasks of the speaker/author as well as those of the listener/reader in the case of the communicative use of tropes. An equivalent is not known to me from the literature.

In this context Lady Welby brought extreme effort to bear on the criticism of false analogies and metaphors, which crosses over into the field of the critique of terminology. The harshness of her criticism appears pedantic at first glance, probably because there are often hardly any alternative possibilities for expression. Yet more careful examination always shows the justification of her criticism to be apparent. Several examples are here brought to bear.

Against the

“idea of Foundation as the ultimate need (an ‘unfounded’ idea being false or worthless) and the corresponding idea of the earth as ultimate centre and as resting on an ultimate basis” (Welby 1903: 32)

she contends that

“in fact the (really) ‘solid’ reality on which alone we can live and act, has no foundation at all.” (1903: 33)

The criticism of negative concepts or expressions is drawn through all of her publications.

“‘Infinity’ by negating the less implies the more, but never gives us the most. Its use is that it thinks away space, as the use of ‘eternity’ is that it thinks away time. Only, alas! we generally use both terms as a sort of overflow or extra of space and time – a further away and a further off, or a greater amount of the same entity. But thinking away, ruling out (if we merely abstract), leaves us with No Thing, and more, with Nowhat and therefore with Nowhy. And this applies to all words beginning with ‘ab’; the use of the ‘absolute’ to symbolise the fullest of realities is itself an ‘unresolved’ contradiction.” (Welby 1903: 119; cf. also Welby 1911a: 80; 1931: 87f)

Accordingly Lady Welby impugned the expression “immortality” and its associated notions in many passages:

And she wrote on this point to Schiller (December 1, 1904), who carried out and published a questionnaire study of ideas about immortality and life after death in 1903 and 1904, the following sentences which conjure up the dangers of uncontrolled symbolic knowledge in a characteristic manner:

“It seems to me that we are devoting enormous labour, patience, enthusiasm & courage to brave ridicule, to the discovery of the centaur, the phoenix, the hippogriff and the unicorn . . .

We are omitting, in short, in our quest for ‘knowledge’ on the subject of immortality, to be clear on what we are looking for and asking about.”

In other passages she impugns the common practice of reification of linguistic images and illustrations (such as Welby 1911b: 22) or she criticizes – citing Karl Pearson – the fundamental errors of physics which have arisen from a fetishistic use of the expressions “matter, mass, motion, force, space, time, cause, atom, body, law, etc. (especially in text-books)” (Welby 1911b: 18). These expressions were then adopted by biologists, physiologists, and psychologists and they “have taken them perforce in untenable and misleading senses” (1911b: 18), used them further in a direct or figurative sense, and finally passed

them on to literary and popular language usage. In the process the fact was overlooked that many of the biological and psychological premises failed as soon as the obsolete connotations of the physical terms were rejected by physics. But as in this case, patterns of speech and thought in other similar borrowings of scientific expressions and notions in other sciences and in everyday usage also changed much more slowly than in the areas where these expressions and notions were developed. This is precisely the way that chimaeras become ensconced in outdated tenets of science and in everyday life. Or, as Lady Welby put it:

“For the securest stronghold of myth is just the mind which, in the name of common sense, refuses to question its own certainties.” (Welby 1911b: 19)

Precisely because of such historic alterations of meaning in language Lady Welby felt that historically oriented semantics were necessary about 1890

“as a preliminary – giving us the ‘prolegomena’ to true knowledge of reality --” (Letter to Sir F. Pollock, Dec. 19, 1890);

and in 1911 she then declared that Bréal’s semantics was a part of significs:

“Semantics may thus, for present purposes, be described as the application of Significs within strictly philological limits; . . .” (1911a: 79)

Lady Welby’s critique of the language of her times and of the terminologies of the sciences and of obsolete ideas, ways of thought, and attitudes, as I have thus far presented it, places the diagnostic aspect of signific investigative procedures in the forefront. The typical form of this process, writes Lady Welby (1903: 51), is, however, “Translation”. She thereby appears to emphasize “translation” as an essential method of significs.

3.2 “Translation” and the Unity of Science

“. . . , that word *translating* seems to me to contain profound truth wrapped up in it.” (Peirce to Lady Welby, March 14, 1909) 131

The development of the method which Lady Welby calls “translation” dates back to the year 1888 (cf. Ch. 2.3). In 1902 she gives the following definition in Baldwin’s *Dictionary*:

“The statement of one subject in terms of another; the transference of a given line of argument from one sphere to another; the use of one set of facts to describe another set, e.g. an essay in physics or physiology may be experimentally ‘translated’ into aesthetics or ethics, a statement of biological into a statement of economic fact.” (Welby 1902b: 712)

This definition makes it clear that by “translation” Lady Welby means, in contrast to “the rendering of one language into another” (Welby 1902b: 712), a methodical construction of analogies, primarily of proportionality analogies, structural and functional analogies. This is indeed one element of “translation”, but it is not the only one, as her letters and above all her explanations in *What is Meaning?* show. In any event, there is a close relation between her reflections on the role of analogies in processes of thought and communication and the thoroughly tropical nature of language on the one hand and her conception of “translation” on the other. This becomes evident from the sentences with which she introduces “translation” in *What is Meaning?* (1903: 126 f):

“But there is a method both of discovering, testing, and using analogy (or in some cases homology), the value of which does not yet seem to be recognised; and this may be called in an extended sense Translation. While emphasising and illustrating what R. L. Nettleship called the apparently ultimate fact that ‘all language and all expression is a form of *translation*,’¹²² Significs claims to extend and develop the application of that idea in practical directions.”

Language, as indeed any use of signs, implies translation in this sense to the extent that the experience of sign usage in a given situation must be translated into a previous or simultaneous experience of an object in order to interpret the sign. On the other hand, from the point of view of someone using a sign for or in place of an object, the object is translated by the sign.¹²³ In this connection the term “translation” does not encompass the entire field of meaning intended by Lady Welby. On the contrary, other expressions such as “Transference, transformation, transmutation, transfiguration, and, above all, transvaluation” (Welby 1903: 126) represent further aspects of the process she has in mind. “Transvaluation”, which she emphasizes, points to the connection of what she means by the translation process with the triad “sense”, “meaning”, and “significance”, which she explicitly designates as levels or classes of the “expression-value” (cf. Welby 1911a: 79). Attributing or assigning “sense” to an object or “meaning” to a sign would therefore from this perspective be translations in her sense of the word.

By the above named goal of significs, applying the idea of translation “in practical directions”, that is meant which Lady Welby designates in another passage as “upward translation” (letter to F. C. S. Schiller; Welby 1931: 120), as translation from the “lower” to the “higher”, just as humans are “upward translations of a tadpole and even of a worm” (ibidem) from an evolutionary perspective. Lady Welby has in mind using “upward translation” for the purpose

of a new moral constitution of man. Rather than undertaking the hopeless attempt of eradicating deep seated tendencies of human nature, she aims at translating them into higher forms: “adulation” is to be transformed into “reverence”, “license” into “orderly freedom”, “ ‘gambling’ ” into “ ‘venture’ and ‘daring an issue’ ” (Welby 1903: 127).

She describes the function of her method to serve toward discovering, testing, and utilizing analogies in the following passage:

“The mere attempt to state one subject in the terms of another, to express one set of ideas in those words which seem to belong properly to another, changing only the leading terms, could not fail, if done systematically and critically, both to enlighten us on points of connection or correspondence which have not been suspected, and also, perhaps, to reveal ignorance in some cases where we have taken knowledge for granted. It would automatically sift the superficial or partial from the deep or complex likeness; and it would lead to the recognition of a wide difference between the casual, the merely illustrative analogy, and that which indicated inter-relations not yet recognised and utilised.” (Welby 1903: 128)

Thus, she is concerned with the use of analogies, which can by all means be experimentally constructed, for the gaining of new knowledge, or at least for developing stimulating hypotheses. From the context in which these reflections are carried out, it can be concluded that the translation of a “set of ideas” A into terms of a conception or theory B amounts to the same thing as the elaboration of the “significance” of B for A or in the field of A. It should, however, be remembered here that “significance” presupposes and includes “sense” and – if given – “meaning”. If one keeps in mind that Lady Welby plans to test analogies primarily on the basis of the results attained with their help – Lady Welby herself presented her translations to the specialists of the respective disciplines to be evaluated – then it becomes evident how superficial similarities, coincidences, and illustrations are to be distinguished from genuine relations and correspondences.

If, however constructions of analogies are supposed to be able to serve the implied objectives, what sort of linguistic signs used thereby and above all what sort of sense and meaning are required so that a gain in knowledge is indeed achieved? Does there exist “a class of ideas which cannot be considered as merely literal or as merely figurative, but as combining both” (Welby 1903: 139) where, as in a good painting, a combination of the factual and the symbolic is present? In the same manner in which knowledge is obtained by means of scientific methods not only by means of direct observation but also indirectly

(e.g. by means of a telescope) and doubly indirectly (a telescope combined with photographic equipment) whereby everybody assumes that they are dealing with the same 'realities', Lady Welby assumes

"that what we take for mere metaphor may in some cases be *indirectly perceived fact*, which must be expressed, if at all, analogically" (Welby 1903: 139).

However this presupposes that one has not only the two possibilities of a) direct expression of the "simply Actual or Literal" (1903: 292) and b) of indirect or reflective expression of the "simply Figurative or Metaphorical" (ibidem), whereby the former gives expression to a fact whereas the latter gives an illustration at the most, "essentially casual and partial, and therefore never to be treated as evidence" (1903: 139). Rather there must then be at least a few words within a given context which represent an intermediate field of meaning "which combines the literal and metaphorical, actual and figurative" (1903: 292) and which pertains to direct, indirect and doubly indirect experience (1903: 139).¹²⁴ Now this is not a subsidiary problem as the formulations in *What is Meaning?*, which are phrased hypothetically and in the interrogatory form, might suggest. Rather this is a matter touching on the core of that which she calls "translation", namely, is it only a play on words, only a product of the imagination, only "fancy", as she was wont to call that sort of imagination whose products are necessarily chimaeras, or is it a usable signific method, by means of which new knowledge can reliably be obtained or at least prepared?

The "diagram of meaning" published in the appendix to *What is Meaning?* (p. 292) underscores her efforts to handle this central point of "translation" in a serious and methodical manner. This diagram represents instructions for methodically examining any word with accepted variations of meaning together with the respective context required to find out if and to what extent there is a "Gradation" from the "literal" to the "metaphorical" (and vice versa) and where the boundary is to be drawn between the "literal" (or "actual"), the combined "literal"- "metaphorical" and the "metaphorical" (or "figurative") field of meaning.¹²⁵ By means of repeating such tests with numerous words it is finally to be investigated whether such a gradation of meaning is a general feature of linguistic signs.¹²⁶

The importance of this problem, which is part of the drawing up of a "se-
mantic tectonics of vocabulary" (Ungeheuer 1980b), is underlined subsequently by the fact that it is found to be the result of the given state of language and of the prevalent " 'mislocution' " (Welby 1903: 140), a fluctuation of senses

and meanings of words and contexts between everyday usage and scientific usage of which speaker and listener are unaware. At the same time words and sentences fluctuate between the “literal” and the “metaphorical”: in the same act of speaking one switches from one mode of using words to the other. In addition there are long term fluctuations of this sort which deserve to be investigated as to the underlying thought development. However this fact is blurred by the everyday assumption of “‘plain’ meaning” (Welby 1903: 143).

Lady Welby explains how she pictures the possibility of language as a means of discovering opposites and associations between facts, notions, and fields of thought in light of this background as follows:

“For a thing is significant, both in the lower and in the higher sense, in proportion as it is expressible through bare sign or pictorial symbol or representative action. In the higher sense (that of vital or moral or rational importance) it is significant in proportion as it is capable of expressing itself in, or being translated into, more and more phases of thought or branches of science.

The more varied and rich our employment of signs (. . .), the greater our power of inter-relating, inter-translating, various phases of thought and thus of coming closer and closer to the nature of things in the sense of starting-points for the acquisition of fresh knowledge, new truth.” (Welby 1903: 150)

She illustrates this once again by means of the example of “translation” from the “‘physical’ ” to the “‘mental’ ”. “‘Sense’ ” as an ambiguous expression, whose ambiguity is however of high value in that it refers to one reality in different forms contains a perfect translation from the perceptual to the conceptual, for it has “‘references of observation as well as of ulterior meaning’ ” (1903: 151).

Therefore “translation” as a possibility has its roots both in the plasticity of language and in language’s thoroughly tropical nature. However, it owes its strictness as a method primarily to the construction of analogies. “Translation” is Lady Welby’s concept of an interpretation process broadened in its realm of application and validity and methodically strengthened. Therefore it comes as no surprise that she considers “translation” to be a component of any communication process. For her, the communication of thoughts is

“the very supposition of all thinking, and is essentially translation in the sense now suggested, that is, as including transformation, transmutation, and transfiguration, making translucent and transparent . . .” (Welby 1903: 153)

The element of translation here – as her quotation from a lecture by Ernst Mach confirms (1903: 294 f) – consists of the fact that new communicated facts are compared to already known similar ones: the new ones are translated

into those already known. At the same time, in her opinion, "translation" should also enter into the process of communication in form, e.g. in the discussion of different standpoints; it should be the task of each partner to "translate" the other's position for the other and thus to argue from the standpoint of the other and to call his attention to that which the first partner should have perceived from his own point of view but has thus far overlooked. This is, on the other hand, a precise description of the process of translation as it appears to Kuhn (1970: 202 ff) to be a necessary prerequisite for persuasion and conversion in discussions between the proponents of incommensurable theories on the problem of the choice of a theory. Lady Welby, however, goes one step further in her setting of goals of the uses of "translation". She is in the long run concerned with a synthesis of sciences, their unity facilitated by processes of translation.

"Thus Significs involves essentially and typically the philosophy of Interpretation, of Translation, and thereby of a mode of synthesis accepted and worked with by science and philosophy alike; profoundly modifying what we wrongly call the 'root' ideas of religion, of ethics, of poetry, of art, and, lastly, of practical life in all forms." (Welby 1903: 161)

And she wrote to R. Greentree, her assistant during the preparation and completion of *What is Meaning?*:

"We must also learn to translate inter-sensually and inter-functionally. As we translate sight into hearing, and feeling into both, so we must translate emotion into intellect and both into will, and conversely. Thus we shall learn how to translate mathematics and physics into poetry, religion, ethics; philosophy into science; and all this again both backwards and forwards." (Welby 1931: 54)

In light of this background information, it is more easily understandable why it was precisely Lady Welby who was in a position to and also undertook to play the role of intermediary between opponents of the most varied orientation and of different character and to contribute to lessening the gap between B. Russell and Peirce, Russell and Cook Wilson, and Peirce and Schiller (cf. on this point Lady Welby's letter to B. Russell from Feb. 12, 1905; Welby 1931: 110 f).

3.3 "Sense", "Meaning" and "Significance"

"Our first queries are: What really is meaning? and (of every proposition) in what sense?" (Welby 1931: 355)

If the everyday conceptions of language and communication are inaccurate and misleading, that is, if there is no “plain’ meaning”, if on the contrary the natural languages must be characterized rather by plasticity, irremediable ambiguities and thoroughly tropical nature; if on the one hand definitions of meanings of all words used which are introduced for the purpose of certainty of knowledge and for the effective communication of certain knowledge at best lead to hyper-macrology and thereby to the ineffectiveness of the communicated message and if on the other hand uncontrolled language usage on the part of speakers/listeners likewise is characterized by fluctuation of the word and context meanings between the literal and the metaphorical, then an adequate understanding of the sign character of language is needed which includes a knowledge of the possible forms of the meaningfulness of signs. Lady Welby prescribes symbolically mediated knowledge and communication signification as a fundamental science (cf. Eschbach 1983) in precisely this sense, to attain and secure knowledge and communication by the results of a preceding analysis of the problem of meaning.

The central concepts which she introduces in this context are “sense”, “meaning”, and “significance”, to which she later adds “primal sense”. I find two aspects of these concepts especially essential for an adequate understanding. For one thing, Lady Welby was completely aware of the fact that she provided no unequivocal formal definition of these concepts. Rather she hoped that her diverse vague formulations would be taken as a stimulating impulse and would thus be the starting point for necessary systematic studies (cf. Peirce/Welby 1977: 6 f). For another, these concepts and their general definitions must not be considered apart from their terminological and metaphorical context within Lady Welby’s thinking, where they occupy a systematic position. The synopsis in terms of a table summarizing these connections (pp. xcvi), however, not only aids in the interpretation of the three central sign theoretical terms, but helps at the same time to better understand and to place in a comprehensive net of interrelations the terms and metaphors as they appear repeatedly in various publications of Lady Welby and above all in her letters. The sequence of the lines in the table does not represent any sort of terminological hierarchy, and they could have been arranged in any other manner. Important is solely the total inventory of the expressions and their triadic ordering – with the exception of the pair of opposites “monocular” – “binocular”. It should, by the way, be mentioned that Lady Welby addressed herself critically to the “triadism” and its grounds right from the beginning when she introduced such trichot-

omies for the first time and still she came back to them again and again. Long before Peirce (1903), the philosopher Bradley had seen therein an influence of Hegel on her. That might be the case. On the other hand, Lady Welby denied such an influence on different occasions (cf. her letter to Peirce, November 18, 1903; Peirce/Welby 1977: 7).

The unusual facet of Lady Welby's use of the term "sense" lies in the fact that in deviation from everyday usage but also differently from its use in the field of science (for instance "Sinn" in Frege's works) she always has the etymology of this expression and thereby its most comprehensive realm of meaning in mind. Her concept of "sense" is basically organismic. Her point of departure, namely, is a view based on the theory of evolution within which "sense" represents an important link between the world of animals and that of humans. Adaptation, she argues, is in its evolutionary sense the condition for that which is usually called experience. We live and reproduce because we are and insofar as we are 'in touch' with the world — mediated by all of our senses. Thus, since "sense" is the typical means of adaptation, "sense in all 'senses' of the word" (1903: 27) is for Lady Welby the suitable term for that which constitutes the value of experience in this life and on this planet. Man has "sense" in common in its organic form with other forms of life, but in man the original simplicity of "sense" has become differentiated into "'special senses'", which has resulted in extremely varying types of reaction (touch, smell, taste, hearing, and sight) (cf. Welby 1903: 268). Despite this differentiation "sense" remains an "organic response to an environment" (1911a: 79) and is therefore largely a function of instinct or of direct spontaneous reaction. However, human sense sensations are not the environment itself but organic reactions to stimuli from surroundings; they are the first "translations" of part of the surroundings with which we have come 'in touch'. The value of the experience which is had therefore consists of the sort of organic reaction to a stimulus which is at the same time an interpretation or translation of the stimulus influenced by the physiology of human senses (F. Mauthner speaks quite correctly of our "Zufallssinne" (chance senses)). It is important in this connection that Lady Welby herself understands "value" in this sense when she speaks of the "value of 'experience'" (1903: 27) or of "expression-value" (1911a: 79). On this point she writes Alfred Sidgwick (August 29, 1908; that is after the completion of Welby (1911a)):

The Terminological and Metaphorical Context of "Sense", "Meaning", and "Significance"

"three main levels or classes of expression-value" (1911a: 79) 127	"sense" "tendency" (1903: 2); "signification" (1903: 28); "organic response to an environment" (1911a: 79)	"meaning" "intention" (1903: 2); "the specific sense which it is intended to convey" (1911a: 79)	"significance" "ideal worth" 128; "essential interest" (1903: 2); "ideal value" (1903: 46)
"the reference" 128 (1903: 46)	"verbal (or rather) sensal" 128; "instinctive" (1903: 46)	"volitional" 128 (1903: 46)	"moral" 128 (1903: 46)
"levels of psychic process" (1931: 216)	"instinct" (1931: 216)	"perception" (1931: 216)	"conception" (1931: 216)
"the ascent from the first dim sensation through consciousness to intelligence" (1903: 48 f)	"consciousness" (1903: 48 f)	"intellect" (1903: 48 f)	"reason"; "the rational" (1903: 48 f)
"types of experience" 127 (1903: 30); "types of knowledge" (1903: 94); "three grades or levels of consciousness (and therefore of experience)" (1903: 95)	"planetary" (1887a: 44; 1903: 30); "for all practical purposes fully developed" (1903: 96)	"solar" (1887a: 44; 1903: 30); "Copernican" (1887a: 44); metaphor: "light" (1903: 98); "scientific activities" (1903: 96)	"cosmical" (1887a: 44; 1903: 30)
the "three types of experience" answer to representatives of the "three types of experience"	"touch," "smell," and "hearing" (1903: 30) "geocentrist" (1903: 163); "modern psychology" (1903: 96)	"feeling" (1903: 30)	"sight" (1903: 30) "cosmicist" (1903: 163)

“three forms of ‘apprehension’ which . . . we call understanding” (1903: 163)	“to stand over or upon” (1903: 163)	“to stand under” (1903: 163)	“to stand within” (1903: 163)
“three forms of experience rendered by metaphors” (1903: 163)	“one of line” (1903: 163)	“one of surface” (1903: 163)	“one of cube” (1903: 163)
three forms of thinking rendered by metaphors (1903: 233)	“on one line” (1903: 233)	“on many lines on a flat surface” (1903: 233)	“in cube” (1903: 233)
two types of thought rendered by metaphors (1931: 44, 48 ff)	“monocular” (1903: 37)	“binocular” (1931: 50)	

“The nearest definition available of the main concern of Significs is, I suppose, Value; only ‘value’ is too much restricted to what we reckon as ‘good’, and thus as ‘gain’; and we conceive that there is or may be that which is real and is not good. Significs of course claims to interpret *all* experience — good and evil included — since it brings into full play the very nerve, so to speak, of the interpretative function. Thus I would prefer Implication, indirect Reference or intimate Response, and even organic Reaction, to ‘Value’ in describing the finer touch and wider range of the signifiical exploration.”

Since in man there is no undifferentiated organic reaction to a stimulus but rather an organic reaction differentiated according to his different physiological senses, the question “In what sense?” is meaningful at this stage of development. But how does Lady Welby manage to establish a connection between “sense” as “organic response to an environment” and “sense” of a word or an utterance as “immediate interpretant” (in Peirce’s sense)? First of all, she does not admit anything like the sense of a word, but only the sense in which it is used — “the circumstances, state of mind, reference, ‘universe of discourse’ belonging to it” (Welby 1903: 5). Therein lies the basis for her differentiation between “verbal” and “sensual”; whereas “verbal” in an extracommunicative view (cf. Ungeheuer 1970) is related to the linguistic means at hand, “sensual” is reserved for the “expression-value” of utterances actually situated in communication, which corresponds to a communicative view:

“The verbal is question of symbolic instrument regarded as a thing detached and out of actual use; the sensual is question of value conveyed thereby on any particular occasion. The two are at present hopelessly confused. But no word in actual use is merely verbal: there and then it is sensual also.” (Welby 1911b: 79)

Lady Welby then explains the cited connection as follows:

“That is, the mental process which rises through sense (as ‘meaning’) to meaning proper answers to the organic sense-process. Supposing someone came in and reported something utterly strange in the garden. We might ask *in what sense* (as *by means of what sense*) it was perceived? By sight? hearing? smell? touch? & c. and our action on the report would probably depend on the answer. If for instance most of the ‘senses’ witnessed to it, we should be more likely to take the matter seriously, as more than a mere effect of light or echo, & c.” 129

The sense of the report in this example is construed on the part of the listener as follows. He ascertains by interpretation the specific manner of use of the words in this concrete case by relating them to the circumstances of perceiving and experiencing which are reported on and to the rest of the linguistic context, as well as to the situation in general in which they are used. The sense of the report

remains definitely able to be differentiated from its “meaning” as “intention” or “the specific sense which it is intended to convey” (1911a: 79). For the interpretational definition of “meaning” in Lady Welby’s works is always oriented toward the respective specific communicative intention and in the example in question it could certainly consist of calling for help, explaining a state of shock, giving as detailed a report as possible of an unusual occurrence, etc. Lady Welby gives the following explication of the differentiation of “sense” from “meaning” and “significance” in a letter to Alfred Sidgwick (August 29, 1908):

“The ‘sense’ of a statement, rather the sense in which a statement is made (an important difference for Significs) is, I imagine, one which may, like Intention, be deliberately conveyed, but which also, unlike Intention, may be unconsciously and even unwillingly suggested. The sense in which one holds a given view may be called its mental direction, ¹³⁰ context, or environment: and perhaps few of us fully realise thus the full or special *sense* in which their expositions or contentions are taken by their readers or hearers. ‘It was plain what he meant’, says one: ‘Yes’, says another, ‘but he did not mean it in your sense. You forget that you are a Geologist and he is an Admiral’. The Geologist perhaps retorts, and this may start an interminable argument. In reading we don’t even get this chance of ‘clearing the air’.

. . . But we don’t *mean* (intend) to have or to use Sense; we can only *mean* (intend) *to act upon it*; and we may learn to train Sense in its higher forms as we train our sight or hearing for technical work. Sense, again, (like awareness, closely akin to it) is immediate: significance remote. We may have an ‘instinctive’ Sense of mystery or strangeness; but this is superseded at once when significance is grasped through valid inference, even when the feeling of wonder succeeds that of mere problem, or puzzle and guess. That is where the Sense of the verge on which growing knowledge is always keeping us, prompting the ‘next step’, comes in.”

This makes it easier to understand why in Lady Welby’s view the truth of a statement depends on the sense in which it is made and not on formal accuracy and clarity (cf. Welby 1903: 120). And so she can write Russell (Nov. 14, 1905) in citing his well known example from “On Denoting” (Russell 1905):

“. . . in speaking of the ‘present King of France’ as bald, we intend to convey what is sheer mistake or sheer nonsense. That is, it is not meaningless (or purposeless) *but senseless*.”

Or, in other words, that which we intend to convey is in no sense true, but is not meaningless.

“Sense” as “expression-value” belongs in Lady Welby’s opinion to the level of consciousness and experience which she calls “planetary”. This lowest level of

the physical and of the psychical is completely geocentrically oriented. The planetary consciousness is fully developed for all practical purposes on this earth, and the world is here the standard measure of all usual experience and of everyday ideas, conceptions and theories. "The 'struggle for existence' has secured this." (Welby 1903: 96) It is merely the rational thinking about the world, hindered by the shortcomings of language, which lags behind the other developments. Characteristic of this level of consciousness are the senses of touch, smell and hearing, since they admit possibilities of experience and thereby also of thought which are dimensionally particularly limited. Planetary knowledge is obtained directly by means of observation and experimentation or by inductive and deductive processes. The systems of thought which can be formulated here are all planetary insofar as in them everything can be grasped as of this world, as having arisen in it and by means of it. Modern psychology, by going on the assumption e.g. that " 'mind' " has its origins on this planet, proves to be just as geocentric as anthropomorphizing Christianity (1903: 96 f). The proof, which must in each case be undertaken, that a theory is more than merely planetary, depends on the theory's power to predict, harmonize, and absorb facts (1903: 94 f).

"Sense" is elevated in man to its higher form of development, which is above all expressed "by meaning, that is by volitional, intentional, purposive, rationally idealised sense" (Welby 1903: 27). Man sees and uses meaning – according to Lady Welby – because he understands himself to be a citizen of a world which is larger than the secondary planetary one, and he grasps the " 'meaning' " of this world as its relations to that which lies beyond it. The "sense of meaning – the highest kind of sense" (1903: 28) opens the specifically human era. To be sure, nothing in planetary experience necessarily points to " 'meaning' " or "purpose", yet there is in the world of life a teleology, an unconscious striving toward a purpose; and man is from the very beginning conscious not only of sense as a reaction which is called forth but also of his own intention which guides his activities.

Thus, meaning is part of the level of consciousness which Lady Welby calls "solar". The intellect develops at this level and man, in that he now asks about the meaning of the world and of life there, discovers

" . . . that this attitude of demanding the inclusive and the transcendent 'centre' and looking there for his answers, is the only one tolerated by science" (Welby 1903: 87).

The solar or Copernican consciousness is not directly necessary for the preservation and reproduction of life. It is more or less vague. But it stimulates poets and artists, it is the point of departure for the ordering activities of reason, and therefore it is the province of mental and moral energies (1903: 91 f). However, a clear and definite formulation of 'solar' facts in 'planetary' language is impossible as long as the potential necessary for such endeavors has not been developed in this language.

'Solar' knowledge is gained indirectly, not directly. Lady Welby's favorite image for this is the use of the telescope by the astrophysicist. The characteristic mode of experience is "feeling", since it surpasses the senses of touch, hearing, and sight, especially in relation to the perception of the sun's heat. "Light" she uses as a metaphor for the intellectual, rational, and moral needs of man at this level of experience which is now – in a metaphorical sense – two dimensional, just like thinking. Furthermore "monocular" thinking, thinking in alternatives and pairs of opposites, is here supplanted by "binocular" thinking, in which heed is paid to that which joins, which unites opposites and separate things on a higher level.

In *What is Meaning?* Lady Welby defines "meaning" as follows:

"The Meaning of a word is the intent which it is desired to convey – the intention of the user." (1903: 5)

And meaning is the "volitional, intentional, purposive, rationally idealised sense" (1903: 27) or, to put it shortly, the "intended sense" (1903: 69). In "Significs" (1911a: 79) we find:

"But "Sense" is not in itself purposive; whereas that is the main character of the word "Meaning," which is properly reserved for the specific sense which it is *intended to convey*."

While "sense" can for one thing be a "value" of any experience and, on the other hand, is an attribute of the specific manner of use of a sign in a strictly communicative view, "meaning" is primarily defined in terms of communication as the expression-value of intentional and willed use of a sign whose value consists of the communicative intention, of the intention of the speaker or writer. Therefore, meaning is not identical to the linguistic entry in a dictionary, it is not attributed to the word as a sign in vocabulary, but it is rather the sense alone which a communicator means to convey in a concrete communication situation by using a word or an utterance in general. Although Lady Welby at

no place in her work takes a stand on this point, I find it justified on the basis of my understanding of her texts to assume that the meaning of a sign which has been used is not identical to the sense in which the communicator uses the sign, and that the meaning of an utterance also cannot be reduced to the sum of the senses in which the individual signs of which the utterance is composed are used. For the intention of the speaker always encompasses more than could be expressed in any number of words. If one grasps the sense of an utterance, that is “the circumstances, state of mind, reference, ‘universe of discourse’ belonging to it” (Welby 1903: 5), then one has understood the utterance in the speaker’s sense. Yet this understanding constitutes merely the basis for the interpretative construction of the communicative intention which is possibly entailed with this utterance, of the meaning. Otherwise Lady Welby could not maintain that the sense in which an utterance was made could not only be intentionally communicated like the intention but could also be unconsciously or even unintentionally suggested – quite unlike the intention (cf. the above cited letter to Alfred Sidgwick). Also, she then could not speak of senseless but meaningful utterances, which she did, however, at various places (cf. e.g. Welby 1903: 309 f).

However, meaning is not restricted to words uttered with communicative intention, but rather occurs in all cases where one can discern a will or an intention, as in actions. Thus Lady Welby writes in “To What End?”, an unpublished essay dated June 8, 1907¹³¹:

“But when a man approaches us with a knife we have to decide swiftly whether he *means*, that is *intends*, to kill us or to release or heal us. His action is ambiguous, because it may have many or at least alternative senses.”

Finally, “significance”, Lady Welby’s third term for a specific expression-value, she assigns to the level of consciousness and experience which calls “cosmical”. ‘Cosmical’ knowledge is “in a sense doubly indirect” (1903: 94). The favored image for this is the use of a telescope attached to photographic equipment. However, the cosmos can also only be interpreted in terms of our own sense experience in that our own sense scheme is transposed to the surroundings. That which transcends sense experience can only be deduced. Proceeding on the basis of perception, which Lady Welby assigns as the second level of the mental process to solar consciousness, man construes, deduces and creates his world in a rational order, which includes its analysis. As an essential result of this cognitive process, she finds that not only the planetary world is secondary

and derivative, but also the “sense-scheme” (Welby 1903: 101). She expresses what she means by this in an analogy to physiological assumptions:

“All action is literally ex-cited – called from beyond; all physiological phenomena are generated, not self-created. The presumption, then, is that we do not originate and then ‘project’ our highest conceptions; we receive and pass them on, though it may be in woefully childish dialects.” (Welby 1903: 101)

Thus, she conceives of the highest human ideals in this post-Copernican world view – once again in a physiological analogy – “rather as ‘injected’ than as ‘secreted’ ” (1903: 113). And her frequently used expression “man, the expression of the world” is to be understood accordingly, namely:

“. . . as it were ‘expressed from’ it by the commanding or insistent pressure of natural stimuli not yet understood” (Welby 1903: 6).

“‘Sight’ ” is for Lady Welby the characteristic mode of experience of the cosmic type of experience, for it is “the only sense by which we respond to the sideral universe” (1903: 30); the experience and thought potential at this level of consciousness are metaphorically designated as three dimensional or “cubic.” “Significance” has in Lady Welby’s thought a close relationship to the terms and metaphors belonging to the “three grades or levels of consciousness” similar to “sense”. For she explicitly describes it as a goal of the signific method to make possible “the philosophy of significance” (1903: 165). As soon as this philosophy is given, it can then be correctly maintained for the first time that man is in a true sense the expression of the world, since it finds in him “articulate description and definition”. And Lady Welby continues:

“and therefore significance (the pressure of the Excitant, the Answer-world, stimulating us to Question) is the bond of bonds and the very character of true unity.” (Welby 1903: 165)

In *What is Meaning?* Lady Welby defines “significance” as follows:

“The Significance is always manifold, and intensifies its sense as well as its meaning, by expressing its importance, its appeal to us, its emotional force, its ideal value, its moral aspect, its universal or at least social range.” (1903: 5 f)

In “Significs” (1911a: 79) the definition reads as follows:

“As including sense and meaning but transcending them in range, and covering the far-reaching consequence, implication, ultimate result or outcome of some event or experience, the term ‘Significance’ is usefully applied.”

The defining aspects of “significance” given here indicate that one should first speak of the significance of a word or an utterance. In this use of the word, the “expression-value” called “significance” is to be found in every sort of consequence deducible by the listener from the word understood, regardless of whether the speaker predicted, intended, afterwards recognized these consequences or not. The fact that significance includes sense and meaning can only mean that the listener’s conclusions proceed from the sense determined and the meaning assumed. For to the listener the uttered sounds of the speaker only have value as signs, and this value is given to him as the sense or meaning of the signs. In this sense, “significance” like “sense” and “meaning” is primarily defined communicatively.

But there is also a more general use of the expression “significance” in Lady Welby’s works starting with *What is Meaning?* and then above all in her essays, letters, and publications following the completion of “Significs” (1911a) in March, 1908, which no longer necessarily includes “sense” and “meaning”, and which can only be valid in the sense of the cosmic level of consciousness as “expression-value” (see above). The key to this more general and more comprehensive content of “significance” is given by the question associated with this expression, namely, “What Does It Signify?” (cf. Welby 1977b) which corresponds to the question “In what sense?” in relation to “sense” and the questions “What does it mean?” and “In what sense?” in relation to “meaning”. For in the manner in which Lady Welby poses and answers this question it follows that every impulse and impression, every appearance and every stimulus for attention and action has for man a demonstrative or at least an indicative or implicative value and is therefore to be taken as a sign having significance in the most general and most fundamental sense:

“The barest gabble, the most purposeless antic, the wildest folly, the idlest dream must at least *signify* in some context, reference, direction, – sense. Many things may be senseless; many things are meaningless, – that is, outside the purview of Intention, still more of deliberate Purpose and Design; many things may be unimportant. But when we say that anything is in-significant we ourselves are at least ambiguous. For not only every fact or thing if it be one, or if we take it for one, somehow signifies, but nothing thus can be insignificant except in the sense ‘of no account in certain contexts’; negligible for a purpose in hand, ignorable. Even thus its very predication acknowledges its signifying quality: the crassest mistake or merest omission must signify if only the absence or lack of somewhat.” (Welby 1977b: 182 f) 132

Thence is derived the most general definition of significs that Lady Welby ever proposed in her writing:

“Surely therefore it follows that Significs, the study of that of which all experience is the Sign: Significs, which seeks to clear our ideas of what that experience brings, offers, bestows upon us; . . .” (Welby 1977b: 183)

What can be said to summarize Lady Welby's sign theoretical approach? In answering this question we encounter the difficulty that Lady Welby in all the texts and letters known to me only dealt with one sort of sign relation. The only exception to this statement is a passage in “Grains of Sense” (Welby 1897a: 43), which, however, entails particular problems for being understood. So let us begin with the type of sign relation she handled.

In “Significs” (Welby/Stout/Baldwin 1902) she writes:

“Significs treats of the relation of the sign in the widest sense to each of these [sense, meaning, significance].”

At the same time she says there about “sense”, “meaning”, and “significance”:

“It will be seen that the reference of the first is mainly verbal (or rather SENSAL, q.v.), of the second volitional, and of the third moral (. . .).” (ibidem)

As we have seen, the relation between sign and “sense” is for one thing generally defined in that to a stimulus from the organism's surroundings, to the sign, there is assigned as value (i.e. “Implication, indirect Reference, or intimate Response”) a direct spontaneous reaction of the organism. In addition there is the more specific definition from a communicative view in which the relation between linguistic or non-verbal sign and “sense” is influenced by the specific manner in which the sign is used, that is, by circumstances, by the “state of mind” of the speaker, by the “universe of discourse”, etc. But since generally speaking not every sign used in communication has “sense” it remains the fact in both cases that “sense” is the reference mediated by signs to the reality as it can be experienced by the senses. To put it more precisely, it is the reference to previous, present, or potential sense experience. At the same time, a sign is here and elsewhere in Lady Welby's work generally speaking something that stands for something else: “. . . a sign always stands for something” (Welby 1903: 311). The relation between a sign and “sense” is, however, not given in the sense of the one being assigned in a stable manner to the other. Rather it is always construed anew by the stimulated organism, that is to say by the listener/reader

who interprets with understanding or by the speaker/author communicating under the given circumstances.

Whereas the relation between a sign and “sense” is built up directly, quasi instinctively, the assignment of “meaning” to a sign is always – that is, in or outside of communicative processes – based on an intention, namely on the part of the one using the sign. This is clearest in cases where someone invents and uses a new sign to communicate a specific intention by means of it. Furthermore, a sign from a given language, for instance, can be used to communicate an individual intention (“meaning”) only because the speaker can determine to use it in this way, because he makes the relation between sign and “meaning”. The fact that this procedure on the part of the speaker can come into conflict with linguistic conventions and with the usual language usage is a point of departure for Lady Welby’s critique of language. Another starting point is her finding that numerous linguistic expressions are “senseless” in her sense of the word, in and of themselves or as they are used.

The relation between a sign and “significance” can also be produced by a person who perceives this sign, namely by interpretation and above all by conclusions. This can on the one hand be mediated by the analysis of the sign’s “sense” or “meaning” or, on the other hand, it can quite generally proceed from the quality inherent to every sign, its indicative character. But in the latter case the relation between the sign and “significance” as such is not determined by the person who perceives the sign, since only the respective sort of “significance”, i.e. the placing of the sign interpretation in connections of a higher order, is determined by him and his conclusions. However “significance” as such is part of every sign in its capacity as sign and therefore it stands for the principal of the possibility and the necessity of the interpretation of signs at all.

In contrast to other sign theoretical approaches, Lady Welby thus does not proceed from definitions of signs and their features in order to then investigate the relations into which signs with certain features can enter. She starts at the other side, so to speak, and concentrates on the problem of meaning, that is on questions of the interpretation and the communicative use of signs, and this she does in following theoretical and practical intentions. Herein lies the essential merit of her reflections.

The passage mentioned above in which further sign relations are possibly dealt with is the following, which follows a criticism of different common metaphorical descriptions of language and communication:

“But indeed in all the metaphors used for language we miss the idea of Meaning as distinct from both thought and expression and yet common to both and their primary value. And when Meaning – really conscious Intention – may not be there: when we doubt if it is well to talk of the ‘meaning’ of gathering clouds or falling leaves, there is still something which is indicated, denoted, or implied to us by all that happens. What is that something? We look out of the window: we see something: we speak, ‘naming’ what we see: but the ‘sense’ of the words we use is not our thought itself but a link between that and language. They are inseparable but they are not identical.” (Welby 1897a: 43)

“Meaning” or “sense” thus appear to be not only values of linguistic signs but also of thoughts, but they are not identical with thoughts or signs. It also seems to be valid that “meaning” and “sense” are the link between signs and thoughts, but that sign and thought are not identical. The main question is what is to be understood by the statement that a thought has “meaning” or “sense”? Should thought have the same relation to “sense” or “meaning” as the sign? It could be said that the sense of the thought in this example consists of the mental reference to the present sense experience whereas the sense of the names uttered lies in the reference to precisely this sense experience, which would mean that the names refer indirectly at the same time to the thought and represent it. The relation between sign, “meaning”, and thought could be formulated analogously. But what is the resulting assertion of the identity of or the correspondence between the intention of a thought and the intention of an utterance supposed to mean? This is a question which must go unanswered.

As has already been mentioned (cf. Ch. 2.6), Lady Welby was entirely aware that with her reflections on some of the bases of interpretative and communicative processes resulting in the triad “sense”, “meaning”, and “significance” she could improve the understanding of essential connections which had, however, been ignored and could thereby make knowledge and the communication of knowledge mediated by signs more effective, but that she could not adequately ensure them. I assume that it was precisely the fact that she realized this which led her to further develop her concept of “mother-sense” or “primal sense” from earlier thoughts around 1904. These earlier thoughts go back to the time around 1890. Their further development was to build up all symbolic knowledge on the basis of intuitive knowledge. “Intuition”, as she writes at various places instead of “primal sense”, is for her not the unreliable and suspect road to knowledge which the majority of her contemporaries considered it to be (cf. Welby 1931: 191). Rather she sees the ability of intuitive knowledge as being anchored in the

controlled and successful organic reaction to stimuli from the surroundings which comes from the realm of animals. Thus the designation “primal sense”.

Lady Welby does not specify how intuitive knowledge comes about concretely and what constitutes the specific features of such knowledge. However, she assumes that the propensity for it is present above all to a great extent in children and that “the natural insight of children” (Welby 1911a: 80) therefore must not be suppressed in the process of their upbringing but must be encouraged. From the furthering of intuitive abilities and generally from education on the basis of significant knowledge, she hopes to achieve a fundamental change and further development of the existing natural languages, improved interpretation and communication capabilities and potential, more rapid and well founded processes of obtaining knowledge in everyday life and science, and, finally, a gradual solution of pressing social problems.¹³³ These hopes have not been fulfilled up to the present day, yet they were certainly the driving force for the continuation of her scientific work during long years on end for Lady Welby. And as I have attempted to show in the previous chapters, only a few of her thoughts have lost their timeliness up to the present – 80 years after the publication of *What is Meaning?*

4. Lady Welby’s Influence on Some of Her Contemporaries

When a scholar has published as much as Lady Welby and above all has been engaged in such an intense and long lasting exchange of thoughts by letter as she was with most of the important scholars and scientists of her day, then it is in fact hard to imagine that the thinking and ideas of the former has not in one form or another had some influence on the thought and the resulting publications of at least some of the latter. Lady Welby’s influence on the later significant movement in the Netherlands is obvious and can be well documented – namely through the work of F. van Eeden, J. I. de Haan and G. Mannoury. But what is the situation with relation to Lady Welby’s other contemporaries and what should be understood by “influence” in terms of a work’s history of influence? To be sure it is not a matter only of explicit references in an author’s work to the work of another, whereby quotations and footnotes would serve as indications and criteria. This would probably obscure the view of clandestine traditions and influences which can develop from a scholar and his work. That is, one must always take account of the possibility that ideas, impulses and concepts

can be integrated from an author without the originator's so much as being mentioned. The influence which an author has also needs not be very specific or restricted to certain points. It can instead generally consist of the fact that others who are stimulated by an author's publications in turn confront a topic or a problem which that author was the first to handle or which he formulated in a new way. Finally, I wish to include as "influence" in this connection the strengthening or supportive effect which a work can have when others find it to deal with a problem with which they have also been concerned, sometimes in relative isolation, without previously having achieved the recognition of this problem as an "essential" one by the community of scholars. In such cases the influence could constitute a sort of solidarity and the resulting strengthening of the position which is then shared, at least more than otherwise among scholars outside of established "schools" of thought.

However, influence in this general sense is neither always one sided nor is it conceivable without a corresponding disposition on the part of the one who is influenced. But if a certain open mindedness, willingness, and flexibility must be assumed on the part of him who lets himself be influenced, stimulated or encouraged, then the influence on him may possibly in the extreme consist of his being encouraged to draw conclusions from reflections which he himself had (for a long time) engaged in or that he follows through with his ideas at all and does not drop them under pressure from his scientific environment.

All of this should be kept in mind when Lady Welby's influence is discussed in the following chapters. The nature of the respective influence must then be documented in detail. The verification, and this is characteristic for the influence of Lady Welby which is primarily clandestine and hidden, was mostly drawn from the correspondence with her contemporaries and only rarely from references, quotations or notes in publications.

The following examples will create a first impression. They will not be especially taken into account in the later chapters. Without naming Lady Welby, various authors have made intensive use of her differentiation between "three grades or levels of consciousness", that is between "planetary", "solar", and "cosmical consciousness", including the implications involved with them. The poet, essayist and philologist F. W. H. Myers, one of the founders of the "Society for Psychical Research",¹³⁴ terminologically introduces the difference between "planetary" and "cosmical" in his work *Human Personality* (1903)

and bases part of his argumentation on it (Myers 1903, vol. 1: 94 ff, 151, 155; vol. 2: 267, 273, 308; cf. Welby 1931: 105 f). The same is true of an essay by the physicist Sir Oliver Lodge (1903; cf. Welby 1931: 95). The philosopher Samuel Alexander even used Lady Welby's differentiation in the title of an essay: "Ptolemaic and Copernican Views of the Place of Mind in the Universe" (1909) and criticizes there the altogether geocentric frame of reference of philosophy and metaphysics of his time, drawing on Lady Welby's reflections (cf. Welby 1910a: 431; 1931: 325 f). The psychologist C. Lloyd Morgan also belongs to this circle. F.C. S. Schiller wrote about him to Lady Welby (Welby 1931: 216):

"I heard Professor Lloyd Morgan discourse at the Psychical Society, and he used, you will be interested to hear, some of your phraseology to indicate the various levels of psychic process: instinct, perception and conception = 'sense', 'meaning' and 'significance.' I sat next to him at dinner afterwards and taxed him with it, whereupon he owned up."

However, other authors referred in the same way to terms which were strictly speaking significant ones. Among them was e.g. P. Geddes, the British biologist, sociologist and city planner. During the time following the founding of the "Sociological Society", that is in the period of his most intensive cooperation with Lady Welby, he wrote to her:

"Will it reassure you a little that (. . .) I have been guilty of putting the sequence of 'sense, meaning, significance' into my penny popular guide to the *Outlook Tower*? in fact as my current explanation of the 'outlook' altogether?" (Welby 1931: 272 f)

In 1890 Geddes had begun to equip the Outlook Tower on Castle Hill in Edinburgh as "Civic Observatory and Laboratory" and finally to build it into that "what Charles Zueblin described as 'the world's first sociological laboratory' – actually a sociological museum, library, and meeting place" (Mumford 1968: 82). The fourth story of this building was reserved for the sociological treatment of language (cf. Geddes 1915: 325). For this purpose Geddes adopted Lady Welby's terms and incorporated them in his holistic view of social ideas, forces, functions, groups, and institutions.

In addition there were, however, also several cases of explicit reference to Lady Welby's significs, thus for instance a reference to the necessity of explanations of concepts and of semantic analyses. An example thereof is "La crisi della democrazia", a lecture in which Alessandro Levi (1912), following

Lady Welby's "Significs and Language", begins his exposition with an analysis of the frequently misused term "democrazia" (Levi 1912: 5 f).¹³⁵ It can be assumed that Levi became acquainted with publications of Lady Welby either by way of Mario Calderoni or Giovanni Vailati.

All of these examples together with further indications in Lady Welby's correspondence let the assumption appear justified that the aspects of the history of significs' influence to be presented in the following chapters constitute only the more obvious and impressive influence. In addition to these instances, Lady Welby's influence in the sense of a renewed and increased calling of attention of the most varied scientists and scholars of her time to the problem of meaning was much more effective than is assumed nowadays. The later developments in philosophy, psychology, logic, linguistics, and semiotics in this area seem to me to have overlaid and buried many a consideration and discussion from the time up to Lady Welby's death. We are still far removed from an adequate understanding of that phase of the history of science.

4.1 André Lalande and the Terminology Critical Movement in France

"... , utilissimum tamen mihi videtur ut sermonem philosophi trans regnorum fines conferant, et ad philosophica vocabula excutienda definienda, assimilanda socialiter se accingant." (A. Lalande in his letter of May 24, 1900, to F. Tönnies)

In the year 1896 there appeared in print in *The Monist* simultaneously with Lady Welby's "Sense, Meaning and Interpretation" in *Mind* an article by the German philosopher Rudolf Eucken on "Philosophical Terminology and Its History" (Eucken 1896). In it Eucken deals with the relationship between "technical term", "concept", and "word", and using various examples from the history of terms he points out the forms and causes of their change how it can take place independently of or depending on the changes of concepts (or ideas), of word usage, and of the meaning of words.¹³⁶ He places these questions concerning the history of terminology in relation to the general problem of language and its relation to thinking, and he takes positions on this point which largely agree with those of Lady Welby in the thoughts she formulates in her article of 1896 (cf. Eucken 1896: 511 ff). Lady Welby considered Eucken to be an important ally in representing her aims. She wrote him several years later (March 23, 1905):

“I have always felt so keen an interest in your articles in the ‘*Monist*’ that I have much regretted that I could not hear of other translations of your work. . . . As you have yourself drawn attention to the drawbacks of inherited terminology in philosophy I rejoice to know that you also are interested in a subject unhappily too much neglected especially in education.”

In order to stop the confusion and misunderstandings resulting from the history of terms which continues in each new publication, the following steps are to be taken according to Eucken: 1. Terminology must become an independent discipline within philosophy. 2. The integration of this discipline’s results must be undertaken under the supervision and guidance of an academy or a university. 3. An archive for terminology is to be founded. 4. Finally, an “abridged philosophical dictionary” should be written and published.

Two years later, that is in 1898, the French philosopher André Lalande (1867–1963)¹³⁷ published an article on “Le langage philosophique et l’unité de la philosophie” in which he laments the loss of unity of philosophy and gives two main reasons for its state: 1. The tendency of philosophers to hold the accomplishments of others in low esteem and only to prize the results of their own efforts. And 2.:

“Le second voile jeté sur l’existence de vérités acquises dans le domaine qui porte encore aujourd’hui, à tort ou à raison, l’étiquette commune: *Philosophie*, c’est l’anarchie du langage.” (Lalande 1898: 569)

However, Lalande argues that philosophical research must demonstrate a certain amount of intradisciplinary order and communicability if it is to lead to progress common to more than one individual. And to this end arbitrary conventions are necessary which as such can only be validly established by acts of a collective will, that is a society of scholars, an academy, a conference etc.

As a justification for the possibility and necessity of introducing such conventions, Lalande points out the fact that these ideas have been widely greeted abroad and perhaps already are nearing their realization. He sees this concurrence abroad in the thoughts and goals of Lady Welby and in Eucken’s *Monist* article. Lalande writes about Lady Welby (1898: 571):

“En Angleterre, M. [sic!] Welby a publié dans le *Mind* un curieux article sous ce titre: *Sense, Meaning and Interpretation*, dans lequel il [sic!] montre d’abord que les termes du langage philosophique sont employés dans les acceptions les plus diverses, et même que l’on n’est pas d’accord pour savoir ce que sont au juste l’*acception*, le *sens*, la *signification*, la *valeur* d’un mot. Il y aurait lieu de former

de toutes ces choses une science qu'on pourrait appeler 'Sensifique' et pour laquelle l'Angleterre serait un pays très favorable, en raison de la précision et de la clarté que les étrangers eux-mêmes reconnaissent à sa langue. Mais, comme l'auteur est d'esprit large et pratique, il [sic!] a fait suivre cet appel d'une offre de 50 livres sterling à tous les philosophes, nationaux ou étrangers, pour prix du meilleur mémoire sur ce sujet: . . ."

There follows a translation of the announcement of the Welby prize.

It is not clear whether Lalande was stimulated by the publications of Lady Welby and R. Eucken or at least strengthened in his resolve to write his own appeal for a criticism and unification of terminology, or whether the texts were merely welcome *ex post facto* justifications. I assume that the former is the case. There are at least the following confirmations for this. For one thing, F. Tönnies, who as will be shown was personally thoroughly familiar with the developments in France reported on here, writes in a German essay in 1900:

"Then Lady W. systematically developed her thoughts on 'Sense, Meaning, and Interpretation' in 2 articles of 'Mind' 1896, and *in reference to them* the French philosopher André Lalande raised his voice in the *Revue de Métaphysique et de Morale* 1897 [sic!] to contribute to the creation of a 'kingdom of order' in the philosophical studies." (F. Tönnies 1900b: 128, my emphasis)

For another thing, Lalande wrote in a letter to Lady Welby (20 mai 1903):

". . ., car je n'ai pas oublié votre article du *Mind* sur la question. Si mon enseignement me laissait un peu plus de loisir, un des sujets d'étude qui m'attireraient le plus serait certainement la Sémantique philosophique, ou comme vous dites (dans un sens un peu plus large, je crois) *the Significs*."

A "Sémantique philosophique" in this sense could, however, at that time hardly refer to Eucken, while it could appeal to Lady Welby and somewhat later to Vailati and Tönnies. This is above all true of Lalande, who never referred to Bréal or Darmesteter in connection with his project, which would have been more natural if he had only been concerned with a historically oriented semantics.

Finally, it can be pointed out that Lalande and his later colleagues showed an exceptional interest in winning Lady Welby for their project. Yet it is noteworthy that they either misunderstood Lady Welby's central *signific* idea or did not realize it at all. Lady Welby of course repeatedly lamented the lack of unity, the confusion and unclarity of the most varied terminologies. But for her, these circumstances indicated primarily the need for a solution to the problem of meaning and she always rejected attempts to remedy the lack of unity and

ambiguity of terminologies either by definitions alone or by the creation of unified languages before having settled this problem.

Lalande's program of 1898 and of 1900 contradicts her conception. He wants a clarification and final definition of terminology, of the disciplinary partition and of the methods of the "sciences philosophiques" ¹³⁸. To make this settlement binding for all philosophers he undertakes to found a "Société française de philosophie" which is then supposed to support the conventions with its authority. The philosophical vocabulary is supposed to be revised by defining the essential terms by a double method: on the one hand historic and on the other

". . . dogmatique, et par conséquent conventionnelle, à faire ratifier ou modifier ultérieurement par un congrès, et fixant de cette manière l'usage qui doit être fait de ces mots dans l'enseignement, dans la rédaction des ouvrages classiques, et par degrés, s'il se peut, dans toutes les publications philosophiques." (Lalande 1898: 586 f)

Before this program was realized step by step from 1900 on, it was enlarged by Lalande and his colleagues by another essential aspect. It was allied to efforts to establish a "langue auxiliaire internationale" which were carried out in France mainly by the philosopher Louis Couturat (1868–1914) ¹³⁹. In 1900 the "Délégation pour l'adoption d'une langue auxiliaire internationale" was founded, which first of all aimed to further the acceptance of the possibility and the necessity of such an international language. In the same year, the first international congress of philosophy took place in Paris, at which Lalande once again proposed his project (cf. Lalande 1900) and pursued corresponding decisions of the congress.

In this presentation he counts R. Eucken, Lady Welby, A. Bertrand ¹⁴⁰, R. Eisler ¹⁴⁰, G. Vailati, and F. Tönnies as part of the "mouvement terminologiste" (1900: 258). His program remains the same, but the framework of its realization has changed:

"Au point de vue idéal, il serait à souhaiter que cette unification des vocabulaires individuels fût en même temps la création d'une langue scientifique internationale." (Lalande 1900: 273)

To be sure, Lalande is still weighing the advantages and disadvantages of Latin, Esperanto, and English as potential international scientific languages, and he definitely favors English, yet his proposal for the realization of his program is

realistic and pragmatic. His program should be carried out in every country and by means of constant contacts between the national societies of philosophers, the resulting dictionaries should be made parallel and brought to agreement by the provision of agreed upon foreign language terminological equivalents.

On February 7 the founding of the "Société française de philosophie" was accomplished by the decision of the congress of philosophers. Among others, Lalande, X. Léon, and Louis Couturat were elected to the "Bureau" of the society.¹⁴¹ Starting in 1902 publication of the "Vocabulaire technique et critique de la philosophie" in the "Bulletin de la Société Française de Philosophie", which had been founded the year before, was begun and was not completed until 1923. In 1926 the "Vocabulaire" appeared for the first time completed in book form, and in 1976 it reached its twelfth edition. The entries under the letters A and B were written exclusively by Lalande and Couturat, but like all other entries they were discussed with numerous other philosophers. Apparently Couturat took pains to list a "racine internationale" if at all possible in addition to foreign equivalents for every term.

There were also contacts between Lady Welby and the French movement with regard to the related question of an international language, although they were mediated by F. Tönnies and P. Geddes. In his Welby Prize Essay, Tönnies had suggested and recommended Latin as an international language of science and English as an international language for trade and economics to remove difficulties in understanding. This suggestion above all met with the attention of Lalande and Couturat.¹⁴² Lalande invited Tönnies to contribute to his dictionary¹⁴³ and Tönnies participated in compiling it until 1922. Couturat, for his part, sought Tönnies' support for a declaration on the possibility and necessity of an international language which left the choice of a suitable language open. Here, too, Tönnies cooperated, among other things by persuasive efforts in favor of this declaration, even though he also maintained his own two suggestions in relation to this question. As of 1906, he transformed his suggestions into a prognosis without his own partisan support (cf. Tönnies 1906: XI).

After Tönnies apparently had spoken about Couturat to Lady Welby, Couturat, when he found out about it, asked him twice (1901 and 1902) to gain Lady Welby's support for the declaration. At that time attempts were made to gain support for the declaration only from recognized scholars and scientists

and from scientific organizations. In 1903 P. Geddes, who was among the English signers of the declaration together with B. Russell and James Ward, approached Lady Welby in the same matter.¹⁴⁵ This prompted her to have a closer look at various international auxiliary languages including Esperanto, G. Peano's "Latino sine flexione", and Ido. Lady Welby had denied the advantages and the necessity of an international language neither previously nor later. But she remained of the conviction that before such a language was developed and introduced it must be preceded by the signific study of knowledge mediated by signs and of communication.

The importance of Lady Welby's significs for the terminology critical movement in France finally found expression in several dictionary entries which Lady Welby partly helped to formulate. On May 25, 1903, she wrote to P. Geddes:

"He [Lalande] expresses keen sympathy with 'Significal' aims (I must get 'significal' corresponding to physical accepted) and means to put in Significs & c. I can't give him a French definition; but you are a first rate Frenchman; would you not kindly do it for me? I thought he was a friend of yours? or is it his friend M. Couturat? I forget."

Geddes then undertook the necessary translations and Lalande accepted the definition of significs for his "Vocabulaire", but he considered "signifique" as a French equivalent to be unsuitable on the grounds of French rules for word formation:

"Signifique, en français, serait donc un adjectif signifiant: 'qui donne du sens, qui produit un sens (ou signe)'.
Mais nous pourrions en tout cas user de l'expression: *Théorie des Significations*."
(Lalande to Lady Welby, 26 Juillet, 1903)

This, however, did not meet with Lady Welby's approval. (cf. Ch. 2.5)

Finally, many years later, Lalande gave the following interceding formulation in the remarks on the entry "SEMANTIQUE" following a reference to Locke's "Semeiotik":

"Lady WELBY a donné le nom de *Significs*, ou théorie des significations, à l'analyse des différents éléments qui constituent le sens d'un mot. Voir *What is Meaning?* Londres 1903; et son article *Significs* dans le *Dict.* de BALDWIN." (Lalande 1976: 965)

There is a cross reference to this entry under "SIGNIFICATION". Further references to significs and Lady Welby's publications are found in the entries on

“SÉMIOLOGIE” (1976: 967) and “SENS” (1976: 973, 975). The terms “import” (1976: 482f, 973), “purport”, and “valeur” (1976: 973) dealt with by Lalande probably also are taken from Lady Welby’s publications – even though they are not named.

Lalande’s dictionary is the most important one of its kind in the French language even today. However, Lalande was not able to attain the goals it was intended to pursue. And yet this was only to be expected from Lady Welby’s point of view.

4.2 From F. Tönnies to the Vienna Circle

“If I should survive you, I will endeavour to work for a just appreciation of your profound suggestions.” (F. Tönnies to Lady Welby, June 23, 1911)

When Lady Welby sent the prize of £50 which she had awarded to the German philosopher and sociologist Ferdinand Tönnies (1855–1936) together with her letter of September 5, 1898 which he had won with his essay “Philosophical Terminology” (Tönnies 1899/1900) there began a correspondence between the two of them which lasted nearly 14 years and led to a scientific cooperation and a close personal relationship (cf. Ch. 2.5).

Philosophers and sociologists have had a great deal of difficulty in their attempts to understand Tönnies’ work. “Philosophical Terminology”, which appeared with several appendices as a book in German in 1906 (Tönnies 1906) has usually been completely neglected. An important exception to this is Eduard Georg Jacoby, who contributed much to the study and appreciation of Tönnies’ writing and in the process paid heed at least partially to the prize essay (cf. Jacoby 1970: 14, 23; 1971: 43–51; Tönnies 1974: 217–247, 267–269). But Jacoby as well fails to deal in his publications with the sign theoretical approach of Tönnies and the long term relation of Tönnies to Lady Welby.¹⁴⁶ Unfortunately, this is not the place nor do we have the opportunity here to analyze the very complex and fruitful text on “Philosophical Terminology” in all its details and relations to the history of ideas and at the same time to work out the important relations to the rest of Tönnies’ work. I shall therefore restrict myself to the essential points in the present connection and leave the more thorough presentation for another broader study.

Tönnies explicitly points out in the preface to the German edition of his prize essay that he is not a “language researcher” nor a “linguistic philosopher”, but

that he wishes to relate his theorems to those of such scholars (Tönnies 1906: IX) – and here he names Wundt, B. Delbrück, and M. Bréal. But how did the prize essay then come about? First of all, it should be mentioned that Tönnies had a liking for linguistics when he began his studies and attended lectures by Berthold Delbrück¹⁴⁷ in 1872, whose friend he became many years later (cf. Tönnies 1922: 202). From the study of antiquity, he later found his way to philosophy. He studied Schopenhauer and Nietzsche intensively and was finally made aware of the significance of Hobbes by his friend and teacher Friedrich Paulsen (cf. Tönnies 1922: 204–207). He made a name for himself as a philosopher with his studies on Hobbes and his discoveries of early Hobbes editions, several manuscripts, and letters in Oxford and Paris. Out of the relation of his research on Hobbes with studies on national economics, natural law, the historic school of law, legal history, and comparative and ethnological jurisprudence there proceeded several of his fundamental thoughts on “Gemeinschaft und Gesellschaft” (Community and Society) which appeared in print in 1887 (most recent: Tönnies 1979) and which attempts as his first major sociological work the philosophical foundation of sociology (cf. Tönnies 1922: 211). Then “Philosophical Terminology” is essentially a sort of explanation of Tönnies’ sociological theory of knowledge as it had earlier been laid out schematically in “Gemeinschaft und Gesellschaft”. The former is definitely, as Tönnies himself put it (Tönnies 1906: XII) “so to speak a daughter of that work”.

“Gemeinschaft und Gesellschaft” proceeds among other things from Hobbes’ “idea of the artificial constructability of social institutions” (Jacoby 1970: 14), and in it Tönnies attempts to develop constructive and axiomatic philosophical theorems required for supporting this idea. The dialectic positing of the two polar extremes “Gemeinschaft” and “Gesellschaft” is thus undertaken at the level of an axiomatic, pure theory (cf. Jacoby 1970: 15). Tönnies differentiates four subdivisions of sociology: pure theory, applied sociology, empirical sociological research, and the relationship of the social sciences to social practice.¹⁴⁸ But for Tönnies, pure theory or pure science is only possible for things the scientist has constructed himself, that is for abstract objects, objects of thought, which are dealt with independently of life and nature (cf. Jacoby 1971: 43). This position remains just as central in “Philosophical Terminology” as it was in “Gemeinschaft und Gesellschaft” (Community and Society) and in Tönnies’ Hobbes monography. And there is another theme which is carried over and further developed from 1887 on: a theory of will whose main point consists of

the element of thinking. The second book of "Gemeinschaft und Gesellschaft" (cf. Tönnies 1979: 73–143) deals with "Wesenwille und Kürwille" (Natural Will and Arbitrary Will); "individual" and "social will" are the topic of part of "Philosophical Terminology".

In addition to connections within his work which Tönnies was able to create in his handling of the prize topic, he was probably instigated by his social and financial situation as an independent scholar, which was difficult at that time, to compete for the prize by writing an essay (cf. Tönnies 1922: 218) and by his great interest in the topic involved:

"One day I found a prize advertisement in a philosophical journal which aroused a lively interest in me; it came from England and concerned the confusion of the terminology in philosophy and psychology. The matter had often irritated me earlier; once I said in jest that it was the only purely philosophical problem which I truly still take to heart." (Tönnies 1922: 221, original in German)

Tönnies himself also provided some information on several circumstances surrounding the creation of his prize entry. In his letter of October 15, 1898 he wrote to Friedrich Paulsen:

"Did you see the advertisement one year ago in philosophical journals of an English prize – Welby Price [sic!] of 50£ for a study on philosophical and psychological terminology? I have won this prize – much to my surprise, since I definitely spent too little time on it, I really only started in the middle of November [1897] and it had to be submitted by the end of December. This little victory has contributed to encouraging my thoughts on philosophy again." (Tönnies/Paulsen 1961: 334; original in German)

In 1899/1900 Tönnies' text, which was originally written in German, was published in *Mind* in an English translation under the title "Philosophical Terminology". However, the title of the subsequent German publication as a book, "Philosophische Terminologie in psychologisch-soziologischer Ansicht" (A psycho-sociological View of Philosophical Terminology) (Tönnies 1906) expresses better the topic of this prize winning essay. The study is divided into a preface and Parts I–III. The preface contains the listing of the task posed and its interpretation by Tönnies which includes above all the justification for the necessity of a theory of signs for dealing with the problem. All important philosophers who have addressed themselves to the problem proceeded to clarify the nature and the origin of linguistic meaning on the basis of a theory of signs. As the text then shows, Tönnies modeled his work primarily on the

ideals of philosophers of the 17th and 18th centuries including Locke, Leibniz, Wolff, and others. The text is then organized in consecutively numbered paragraphs. Part I with the §§ 1–61 contains the highly compact, tersely written systematic construction of his theory of signs whose main core is comprised of his theory of will.¹⁴⁹ This entire part aims primarily at working out the essential differences between scientific, everyday, and natural sign construction and sign use. Part II, with the title “Causes of the state”, contains the paragraphs 62–85, and sheds some light on the causes of unclarity and confusion in philosophical, psychological and sociological terminology in light of the background of the theory of signs. The main part here is an analysis of the scientific development since Scholasticism. Part III, called “Prospects of remedies” carries out suggested solutions in §§ 86–96, that is the introduction of an international language of science and an international academy of the humanities. — Without a doubt, Part I is the most important for Tönnies; it belongs to the realm of pure theory. And Part III is, as it later becomes evident, the plan for an ideal scientific cooperation of the future, closely bound to Tönnies’ striving and interests and not at all conceived of as utopian (rather as eutopian at the most).

Part I begins immediately in § 1 with a definition of signs and thinking:

“We call an object (A) the *sign* of another object (B), when the perception or recollection A has the recollection B for its regular and immediate consequence. By object we mean here everything which can enter into a perception or recollection, things therefore as well as events. Perception is all apprehension through sense; recollection includes, besides the reproduction of perceptions, the reproduction of all other sensations in so far as they have an object, or at anyrate a content which can be regarded as object. Human recollection is also thought. Thought, as we understand it here, is itself for the main part recollection of signs, and by means of signs of other things which are denoted. In what follows the name ‘ideas’ is occasionally used to include both perceptions and recollections, but may also include *feelings*.” (1899/1900: 293)

Even the first class of signs introduced by Tönnies is derived right up to its designation from models from the 18th century.¹⁵⁰ In the same § 1 we find defined:

“Some signs are *natural signs*, *i.e.*, when the sequence to which they give rise is based upon the natural relation between sign (A) and object signified (B).” (p. 293)

Of the many and varied relations of this kind those derived from the ideal case of the identity of A and B are dealt with first, in which the sequence mentioned

is self evident. He differentiates here six subclasses. 1. This identity can "be present in the act of knowing of the perceiving subject" (p. 293): the perception or remembrance of an object has as a regular and immediate consequence the remembrance of itself. 2. Identity is not present in the act of cognition of the perceiving subject and still it is recognizable by means of a process of thought, thus it is in the case of the identity of organic 'outer' movements with 'internal' sensations and feelings which are expressed in them but can never themselves be perceived.¹⁵¹ From this there results the possibility of quasi intuitive other simultaneous sensation carried out in an act in vis-à-vis situations. Not until the course of an increasing separation of cognitive activities from the mass of experiences, the psychical facts, does it become clearer that the expressive movements become signs of the sensations which are actually identical with them. Finally, it is from this process that the erroneous attitude proceeds in which the sign is taken to be the thing itself or in which that which is perceived is considered to be a combination of the thing and the sign. Since natural thinking is metaphorical, that is, translates what is not perceivable into sensual images, the outer movement is comprehended as a sign of the internal, as if the soul were spatially present in the body and as if both (the internal and the external) were a perceptible whole. For Tönnies, language is also an expression of this natural thinking and is therefore considered to be a reduction of the events described here, which is also in this sense derived from the relation of identity.

3. "The *next* case which can be measured by Identity is the sensuously perceivable *Similarity* of one thing to another, which in its perfection is called *complete likeness*." (§ 4, p. 295)

Shadows and portraits are examples of such signs. 4. The part can become a sign of the whole because the memory goes from the part to the whole. And 5. the part is a natural sign of another part, especially in the presence of assumption of spatial proximity or time sequence of the parts. Thus for Tönnies it is true that:

"That is a sign which acts as a sign." (§ 6, p. 295)

For this kind of relation plays a part in associations of ideas, in unconscious conclusions, but also in identifications, conclusions, differentiations, etc. since they are all connected to "characteristics" (p. 296) which finally lead to reflection, expectation and certainty. Thus, it is also generally true that:

"The judgement is grounded upon signs." (ibidem)

In § 7 the natural signs are classified according to another scheme primarily to differentiate them more clearly from the subsequently introduced “artificial signs” (§ 12) and to create the connection to the theory of will. Thus, natural signs arise 1. in the course of nature which is independent of the human will or 2. they are ‘made’ and ‘formed’ by man. In the latter case, they are either 2. a) involuntary or 2. b) they are made “with the purpose of ‘denoting’ something” (p. 296). For the last named case there is only the additional differentiation between 2. ba) individual and 2. bb) social signs.

In this sense, all human expressive movements are or become “involuntary signs” of psychical states which are expressed by them. They are, however, “involuntary” only as signs, whereas they are at the same time necessary for the communication of sensations and feelings. The natural signs as a whole not only serve for purposes of that which Malinowski more than 20 years later called “phatic communion”, but also for understanding.

By “artificial signs” he means almost exclusively vocal signs, namely words. They develop themselves in transformations from natural signs which are in part hardly discernable, and they are as words, letters, or writing solely a product of the human will. Words have meanings, i.e. they are signs of a perceivable or conceivable object according to the will of a person (“private sign”) or several persons (“social sign”). (§ 13) Concerning understanding, the following is explained:

“Understanding is itself a kind of willing, it is the will of recognition, of acceptance, i.e., of appropriation, and thus understanding in common is like possession in common. Thus by understanding a social will issues from the individual will. But the less social validity a word has, the more *effort* it needs for the individual to make himself understood; . . .” (pp. 297f)

Since for Tönnies words are essentially and according to their law of development social signs, and since the social will expresses itself in them, it now becomes necessary to define in general terms the various kinds of social will for the further definition of sign classes. For this purpose the earlier differentiation between “Wesenswille” (Natural Will) (cf. Tönnies 1979: 73ff) and “Kürwille” (Arbitrary Will) (Tönnies 1979: 112ff) is taken up again. Thus it is differentiated between “social Will” “which has formed itself in a natural way” and “that which is made consciously” (p. 298). The everyday conception and use of language correspond to the former. To be sure, meaning is a sort of

equation in which every word can be explained by others, but these equations are given as obvious and are taken as natural and are not considered to be voluntary or willed. No one asks about their cause. Thus, from this view the connections between names and things appear to be necessary, which accounts for facts such as word magic. At the most, language is recognizable as something willed considering the differences between "languages" within the society. But for understanding, a common "idea-system" and a positive will to understand are necessary in addition to a common language, that is, a sort of active sympathy or an interest. If signs other than natural ones are used, the possibility of understanding is acquired only by means of a learning process. The spirit of a language is, finally, one of the forms in which Tönnies sees that which he calls "social will" (p. 301):

"By social will in general we mean the will which is valid for a number of men, *i.e.*, which determines their individual wills in the same sense, in so far as they themselves are thought of as subjects (originators or sustainers) of this will which is common to them and binds them together."

"By individual human will we mean here every existing combination of ideas (thoughts and feelings) which, working independently, acts in such a way as to facilitate and hasten, or hinder and check, other (similar) combinations of ideas (makes them probable or improbable)." (p. 301)

Since activities or conscious omissions are for Tönnies from a psychological view nothing other than "successions of ideas", the human will can be considered as the cause of these activities or omissions. In such causal combinations of ideas the feelings — above all as "affirmation or negation" — are relatively constant elements, and thoughts, on the other hand, are relatively variable. The possible relations between the elements are then made the foundation of further classification. First he determines:

"The will in which the feelings predominate we call natural, that in which thoughts predominate artificial." (p. 301)

The relation to the activities in which will 'expresses' itself or is 'realized' is in one case more felt in advance, in the other more thought in advance. The relation felt in advance is by nature indefinite and develops itself from general to particular relations. That which is thought in advance proceeds from particular determinations to more general ones, which are put together from the former. In "feeling will" man's task, what he should do, becomes evident to him. In "thinking will" he 'makes' his plan. Furthermore, these two forms of will are to be

distinguished as to whether the sensual (sensations, perceptions) or the intellectual element (ideas, thoughts) is preponderant in the relation to activity, or whether they are mixed. From this there result the following purely conceptually constructed forms:

WFs WFs_i WFi
 WTs WTs_i WTi

Applied to the field of signs this means:

“An object (A) becomes by an individual – *e.g.*, my – will, sign of an object (B) . . . when I perceive A – although it stands in no natural connexion with B – I will think of B.” (p. 302)

This can be true for the present or the future, once or again and again. The remembrance is then essentially connected to the perception (s) or to the idea (i). At the same time, the form of will which creates the association is to be distinguished.

“Social will” is explained analogously. For Tönnies the type of social will as WF is “custom”, as WT it is “law”,

“. . ., in the sense in which we think of it as proceeding from deliberations and conclusions of an individual or of an assembly (‘statute-law’).” (p. 304)

In language, “regular usage” corresponds to custom and both are equally founded by the usage of earlier generations and by present practice. In contrast to “custom” and “customary law”, “legislative law” is, as far as possible, rational. It deals with the definition of word meaning and lays down the results in definitions of concepts which are prescribed as standards of meaning.

“The legislator disposes freely of the material of language, but always holds it expedient to respect customary usage, by which indeed he often remains bound, even when he no longer feels himself to be so.” (p. 307)

In relation to language, grammarians and lexicographers complete with social authority are analogies to “legislation”, as are also influential authors who are accepted as models. Similarly, and often in direct contact with legislation, “science” uses and influences language:

“It is legislative for the meanings of the words, which it takes from customary language for its own ends and defines – *i.e.*, fixes the meanings as they are to be.” (p. 307)

As words for these meanings, science either uses “artificial words” or words of natural language. But science goes farther than legislation

“ . . . when it makes its own objects; *i.e.*, when independently of what is already presented and thought of, it constructs objects and assigns to them old or new names. Its terms then gain a particular significance.” (p. 307)

In the same sense that “customary usage of language” (WF) and “legislation in language” (WT) contrast each other, so do “popular belief” and “science”.

As a further form of social will, “‘compact’” or, applied to the meanings of signs, “convention” are finally introduced. Conventional signs

“ . . . may depart to any extent from the nature of natural signs and as a rule do so depart, more than signs of which the meaning is based upon the naturally growing social will.” (p. 314)

Here the ability of the human will to make something a sign in its elementary socially effective form, as in the case of private signs, written signs, etc., comes to the fore. Via the concept of convention, Tönnies then shows the possibility of a complete language in which all word meanings would have a conventional character, whether they referred directly to objects (pure artificial language) or – which Tönnies finds more probable – to many different empirical languages, *i.e.* if they were constructed using words from already existing languages.

Finally, before the summary of the first part, Tönnies takes up the traditional comparison between words and money¹⁵² and shows in what sense coins and paper money can be understood as signs.

The summary (§§ 56–61) begins with a classification of the various senses in which a word or another sign can be said to have meaning:

“1. Meaning according to the intention of the individual making use of the word or other sign (subjective meaning which is put into it).

2. But this meaning is essentially conditioned for the word, as for all socially *valid* signs, by the meaning which they *have* in regular usage (objective meaning). But the objective meaning is essentially different according as the social will which we regard as its originator develops this meaning by creating it together with the sign, or has assigned it for definite purposes to the sign. We call the former the natural, the latter the artificial meaning. The former is modified according to three forms of the will upon which it is based, and which we distinguish according to a principle which corresponds to the first genus (A) to the division of volitional actions into impulsive, habitual, and reflective; they were called, natural harmony, custom, belief, or in reference to language the impulse to form language, the usage of language, the genius of language.

57. But the forms of the social will of the other genus (B) were distinguished in an

analogous manner according as it: –

1. Proceeds at its earliest stage from the individual will (sensuous stage);
2. Is represented by a constant recognised (Träger) wielder;
3. As thinking is represented by several, even if not recognised, subjects (purely intellectual stage). Thus we distinguish convention, legislation, science, which in application to the meaning of *words* we may call – Agreement – Determination – Definition.” (pp. 326f)

Various methods of communication and the explanation of the meaning of words and other signs correspond to the kinds of meaning thus classified. Communication, particularly using words:

1. At the first level, communication and accordingly understanding is easy under certain primitive individual and natural conditions:

- a) “in proportion as there is intimate mutual affection, sympathy, or even mutual knowledge and familiarity” (p. 327);
- b) “in proportion as the vocal signs approximate to the natural signs (expressive and imitative sounds)” (p. 327);
- c) “in proportion as they are supported by other signs, especially by *gesture language* (demonstrative sounds), or again as the merely associative sounds are supported by these and by the two kinds already mentioned” (p. 327).

In written communication the aids a) and b) are not present. However, understanding can be facilitated by sentence constructions which indicate the desired intonation more clearly and by illustrations.

2. At the second level, “customary usage”, a set of fixed meanings is present such that “word-idea” and “object-idea” are regularly merged. Ambiguity and variation still pertain for many expressions, above all for those for ‘complex ideas’. The use of this freedom requires for the precision of understanding that one have recourse to the first level or that a ‘translation’ of more indefinite expressions into more usual ones with relatively fixed meaning be made. The opposing contrast between written and spoken language also belongs to this level. The former remains above all as “signs of signs” an uncertain means of communication of individual meanings, but knowledge of language as fixed in writing leads to a more conscious following of language norms and thereby contributes to understanding.

3. At the third level, forms which are largely fixed are used in communication,

“which are consecrated by age and authorities, and are therefore handed on as valuable inheritances and familiar to every partaker” (p. 328).

If at this level connections to the two previous levels are produced as in rites, a lack of comprehensibility is no hinderance, since the words are then reduced to the associations of their sound meanings. Poetic language belongs here too, but it is difficult to understand because of its freer use of language. But:

“True poetry is the purest form of the genius of language itself.” (p. 328)

At this level, written communication has access to “short comprehensive formulae” and “symbolic actions”, whose meaning is easily understood and which conserve their meaning more easily. Thence their role in handing down knowledge, but also their considerable influence on spoken language.

The following three levels correspond to the first three on the one hand, and on the other are a continuation of them. In general, they presuppose a high culture and a language which has developed to widely varied usage, including a written language. They make freer use of language as an instrument; words are consciously formed as means of communication. Language becomes prosaic and has as its patterns definite social styles, forms and methods. On the other hand, we find here the foundation of a developed individualism and egoism in language usage and formation. According to Tönnies, the following conditions hold for understanding here: knowledge of the special language and of the idea — in cases only after a sort of ‘initiation’; knowledge of the personality of the speaker or author; confidence in the fact that the author actually wishes to communicate something real and is not just mouthing words or deceiving.

At these levels especially — above all in written texts — explanations and interpretations in the form of translations into more easily understandable language are necessary. The methods of interpretation are here: 1. etymology; 2. finding out the best, i.e. the most sound and regular speech usage;

3. “the fundamental intuitions, opinions, comparisons, images, etc., by which we can derive special meanings from general, higher form simpler, nonliteral from literal.” (p. 330)

To the extent that the words used in the interpretation coming from everyday language (levels 1–3) show ambiguity or are figurative, shift in their usage, or are of indefinite origin, a clear and definite interpretation is difficult and open to controversy and misunderstanding.

Finally, Tönnies explains the sense in which he has defined “science” as a form of social will, the sense in which “conceptual names receive their meaning, or let us say their currency” (p. 331):

“For this sense is in its normal form completely *conditional* by the methods of handing on and interpreting such meanings.” (p. 331)

For only in the case of “science” do teachings exclusively constitute the essence of social will so that this social will arises by means of teachings, is conserved and propagated by it. Social will is primarily represented by the teacher as an individual and his pupils consent of their own free will to the acceptance of the concepts he creates and to the validity of their signs. In this connection, the signs are nothing but signs, “*i.e. means* for naming, without any ‘inner value’.” (p. 332)

This view means that the creation and coining of concepts are the achievements of individual geniuses who thereby attain the status of legislators, so to speak, particularly in relation to their school of followers. The pupils’ and others’ free consent is in this connection founded more in doubt than in belief – although the latter often plays an important role – and it makes concepts conventionally valid means of knowledge.

Part II first (§§ 62–68) deals with general reasons for unclarity and confusion in psychological and philosophical terminology. The reasons given there are essentially identical to those which were already cited in the 17th and 18th centuries. The historical causes which are subsequently discussed (§§ 69–71) are for Tönnies for one thing “the downfall of the European language of scholars, of neo-Latin” (p. 474). In his view, this led to a general loss of common scientific terminology and a clear differentiation between technical expressions of scholars and the unsteady language of everyday usage. The other reason is:

“*the decline of the scholastic tradition* and the diminished position of philosophy in the instruction of scholars – at least in Germany.” (p. 476)

Next, hindrances are investigated which result not from the differences between terms but from the differences in thought (§§ 72–78), and as additional causes five hinderances for a unified terminology are more closely considered which arose above all from a changing relationship between the natural sciences on the one hand and the humanities on the other (§§ 82–84).

Part III should be given special attention because of the developments following the prize winning essay by Tönnies. Tönnies indicated the direction from which effective relief in relation to the problems of terminology is to be expected by his diagnosis of the current state and his treatment of its causes:

1. By the progress of thinking itself, namely in particular by its increasingly international character. For:

“The claim of reason to have *universal* validity is essential to it.” (p. 52)

2. The modern means of communication encourage constant contact between the scholars and thereby also the awareness of the hindrance of different terminologies and of the necessity of a common language.

Trusting in such developments, Tönnies then presents his own plan for the construction of a unified and international terminology which plainly attempts to take up ideas from the 17th and 18th centuries, such as those of Leibniz, Wolff, and Lambert:

“A system of concepts is conceivable, which would present in their natural order all possible ideas in so far as they can have formal value in philosophical judgments, which would establish their relations to one another, their dependence, kinship, contrast, but would develop all from simple elements which are accepted as belonging to the common consciousness of humanity. These elements, as well as the whole system, should be expressed in an actual language, but in one as far as possible universal (such as Latin); and at the same time there should be assigned to them certain linear diagrams, so that complex thoughts could be compounded out of them as geometrical figures – plane, spherical and spatial. These lines and figures would not indeed be substituted for the universal term – for we continue to think of the term as denoted in language – but would illustrate in an easily comprehensible manner the relations of the terms to one another; other mathematical symbols would also be applicable.” (pp. 54f) 153

To realize such an idea, he proposes founding an “international academy” which would draw its recognition and authority solely on the basis of its achievements. For the creation of such a system of the “mental sciences”, consultation, cooperation, and organization are necessary, and they are only attainable in the framework of such an institution with the required basis of support. Nations should be able to become free members. At the same time it should – in accordance with Tönnies’ conception of “science” as a form of social will – be a place of pure research and of teaching solely for the purpose of knowledge. Tönnies proposes “neo-Latin” as a unified international language for the academy, while English is to serve as international language of trade and commerce (p. 56).

Tönnies, who – as I shall show – incorporated this sociologically founded theory of signs in his general sociology later, was with this prize winning essay the only sociologist for a long time who forged ahead to a theory of signs of such sophistication. Lady Welby, however, did not become acquainted with the

contents of his text until it was available in an English translation (1899/1900). However, he received praise and recognition not only from her but also from G. F. Stout (letter of April 14, 1899; No. Cb 54. 56), from Lalande and Couturat (cf. Ch. 4.1), from R. Eucken (letter of October 11, 1906; No. Cb 54. 56); and as early as 1900 the Japanese Imafuku Shinobu asked through Stout for permission to translate the prize winning essay into Japanese. In 1902 it was published in Japan (cf. Shinobu 1902).¹⁵⁴ In the course of 1900, Tönnies became acquainted with Lady Welby's own writing due to her efforts (Welby to Tönnies, May 16, 1900 and May 30, 1900) which he had previously heard of only from Harald Höffding, who had shown him reviews of her publications in American journals (cf. Tönnies to Welby, May 26, 1900). At the same time, Lady Welby's activities toward calling a conference on Tönnies' proposal to found an academy of the humanities began (cf. Ch. 2.5). And Tönnies was immediately prepared to participate in such a conference under any circumstances (letter to Lady Welby, June 26, 1900) and to enlist Höffding and Eucken for the project.

On the urging of a German friend, the brain researcher Oskar Vogt, Tönnies wrote a summary of the main theses of his essay (Tönnies 1900b) for Vogt's journal. There he gives a quite extensive account of Lady Welby's "Significs" (Tönnies 1900b: 126ff) and positively cites two of her earlier publications (Welby 1891c; 1897a). Furthermore, he here for the first time describes the historic connection between Lady Welby's work and Eucken on the one hand and the terminology critical movement in France and his essay on the other hand.¹⁵⁵ Before the publication of this article, he wrote to Lady Welby about it (July 29, 1900):

"I am sending proof of a short article, which is to appear in a psychological Journal, edited by a friend of mine. You will see, that I have done honour to your merit, and have translated some passages from your writings."

When she sent him "a tentative description of the 'Aim of Significs' " in July, 1900, (letter to Tönnies, July 16, 1900) the text which F. C. S. Schiller later used for propaganda purposes in Oxford, the already described discussion began between them on the more suitable name for the new discipline she had founded (cf. Ch. 2.5) and at the same time a close cooperation in this area which interested them both so much. Tönnies promptly called her attention to quite a recent problem which Lady Welby had not yet considered:

“Second I should also call attention to the horrible abuse of language – often resembling habitual lying as much, as one egg resembles to another – which is spreading more and more over all departments of life by the baneful and hideous practice of *advertisement*, the corruption and death of all ‘plain language’.” (letter of August 3, 1900)

At the end of 1900, Lady Welby wrote “Notes on the ‘Welby Prize Essay’” which then appeared in *Mind* together with Tönnies’ answer in 1901 (Welby 1901a; Tönnies 1901). In these “Notes” she expresses her satisfaction with the prize winning essay together with her agreement with its central ideas and proposals. At the same time, she takes the opportunity to present her own ideas and several differences between her signific approach and Tönnies’ views. Whereas Tönnies demanded that every scholar or scientist should at the beginning of his studies be introduced to the use of language and concepts which is characteristic of scientific work, she extends this demand to

“all men, since all are listeners if not readers, and all have to act upon what is said or written” (Welby 1901a: 188).

Contrary to the rather extracommunicative way of thinking on which the essay is based, she places once again her communicative one by presenting anew the relationship between words and their context, which Tönnies neglected, and summing up she writes:

“. . . surely it would be wise to say that a certain word (with perhaps some few exceptions) has but a certain *core of* meaning, from which indeed its variations in value must start. This of course is the condition of dictionary definition, which however itself generally leaves something to be desired. And above all it seems almost invariably forgotten that while we do, if we think of these things at all, make some allowance for the power of its context over the meaning of a word, we rarely if ever make allowance for the power of a leading word in sentence, a paragraph, a chapter, on its context: although this corresponds to the influence of a ‘shibboleth’ or partycry on a group of persons who are banded together in support of some ‘cause’.” (Welby 1901a: 191)

She also critically views the expressive forms of conscious individual and social will described by Tönnies, which for her are more conceptual definitions of a state which should exist rather than of a state which actually exists (1901a: 191ff). She rejects Tönnies’ analogy between money and language as being insufficiently verified just as she refuses, for the reasons shown above, to accept the introduction of “neo-Latin” as promising to bring relief. On the other hand, Tönnies’ goal of founding an academy meets with her full approval, seeing

as how it corresponds to a proposal she herself had made several years earlier (cf. Welby 1897a: 82f). However she does suggest calling the envisaged institution "International Council of Reference" (1901a: 203) in order to avoid the associations which go hand in hand with modern academies.

With the exception of the criticism of his analogy between money and language and that of his involvement for neo-Latin, Tönnies accepts all of Lady Welby's objections as justified and as essential contributions to his theory of signs. And he adds:

"I confess that I had not realised, ere I became acquainted with V. W's fervent aspirations, what a wide area here opens itself to *educational* improvement." (Tönnies 1901: 205)

Not only Tönnies' defense of his money-language analogy and of neo-Latin, but also his discussions with other critics prove that he agreed with no one merely out of politeness or convenience. Thus his acceptance of Lady Welby's objections and his positive evaluation of signification can be seen as a sign of his genuine conviction. The events of the following years are further proof of this.

From the summer of 1901 on, Tönnies stayed with Lady Welby in Harrow and at her vacation spot in Scotland at various occasions. During these visits above all, he became familiar with Lady Welby's signification ideas, which interested him for practical reasons as well as scientific ones. Thus he wrote her on June 15, 1902:

"I am taking more than a personal interest in your work. There are some leading traits in it which I am apt to ascribe a lasting value and importance. I shall attempt, in proper time, to apply some of your ideas to the education of my children."

Several years later (Tönnies to Welby, April 17, 1908) he asked her advice on educational questions relating to the teaching of dead languages, religious education, and sexual instruction.

At the end of 1901, Tönnies was asked to criticize the first draft of *What is Meaning?* I have already given his answer (cf. Ch. 2.5). In April 1902 he stayed with Lady Welby again in Harrow and discussed the manuscript of *What is Meaning?* with her again. He later reported on this book to his friend F. Paulsen (July 22, 1902; Tönnies/Paulsen 1961: 364):

"Lady Welby is (sometimes) a bit too talkative but otherwise a splendid and truly learned lady of indescribable diligence; her friends say of her that because of the quantities of excerpts and diaries which she has amassed as her working apparatus

she is 'as bad as a German'¹⁵⁶. She now wants to publish her book on 'Sense, meaning and significance'¹⁵⁶ entitled 'What is Meaning'¹⁵⁶; I had to check the manuscript. I can't wait to see whether it will be a success. There is probably some chaff in it, but, in my opinion, it also contains quite a bit of fruitful seed.'" (Original in German)

The role played by Tönnies in propagating *What is Meaning?* has already been mentioned. He took on this role although he was definitely critical of this book: he felt that the views contained in his essay were recognized too little or not at all in it, and that the book had not answered the question of what meaning is clearly enough (cf. Tönnies to Höffding, July 30, 1903).

And still Tönnies was stimulated to further work in this area not only by the success of his essay but above all also by his study of Lady Welby's signifi- cifics. First he wrote two manuscripts, in 1899 which were not published during his lifetime on "Die Tatsache des Wollens" (The Fact of Will) and "Das Wollen in der Sprache" (The Will in Language) (cf. Tönnies 1982; Zander 1982)¹⁵⁷. In the latter, as in another unpublished and undated manuscript, "Der Tatbestand Gewissen" (The Facts of Conscience), he investigates word meaning by means of etymology and the change in spoken language (cf. Jacoby 1971: 262; Tönnies 1974: 238; Zander 1982: 20). In 1904 Tönnies reports in a German article (Tönnies 1904) on the founding of the sociological society in London using material he obtained from Lady Welby and emphasizes in it among other things the role of Lady Welby in founding the society. A year later he then published an article on the first meeting of the sociological society in 1904 (Tönnies 1905). In this article there is hardly another contribution to the discussion which he praises as highly as that of Lady Welby, in which she used the expression "mother-sense" for the first time. In 1906, on Lady Welby's invitation, Tönnies himself participated for the first time in the "Sociological Congress" in London where he met Frederik van Eeden among others. Finally, the German version of Tönnies' prize essay appeared in print at the end of the year as a book (Tönnies 1906). It contains three "Additamente" (additions) to the essay. The first is a shortened reprint of Tönnies' essay of 1900 (Tönnies 1900b). The second is the German version of Tönnies reply to Lady Welby's "Notes on the 'Welby Prize Essay'" (Tönnies 1901). And the third (Tönnies 1906: 104f) is a very positive review of *What is Meaning?* whose content is similar to Tönnies' first commentary on the draft of the book (cf. Ch. 2.5).

When Tönnies wrote Lady Welby (September 12, 1907):

“The cause of Significs, and other interests connected with it, employ my lasting attention.”

in 1907 it was not mere words. For also in his small book of 1909 on custom “. . ., chiefly concerning the meaning and significance of our words *Gewohnheit und Sitte*, . . .” (Tönnies to Welby, July 28, 1909) there are to be found in various passages echoes of significant ideas. For instance Tönnies there puts women into a relation to intuition and “mother-sense” which is similar to that which Lady Welby had previously postulated (cf. Tönnies 1909: 40f) and on page 51 he also uses Lady Welby’s terms “sense (“Sinn”), “meaning” (“Bedeutung”), and “significance” (“signifikante”) in his analysis of the meaning of a custom. — In later years as well the theory of signs remained an essential part of his systematic sociology for Tönnies (cf. Tönnies 1926: 440f; 1931: 177–186), whereby he placed social signs in the class of social values.

Looking back over Lady Welby’s scientific work, Tönnies wrote in a letter of March 2, 1913 to Sir Charles Welby:

“The meaning and significance of words as well as of things are the greatest subjects of meditation and inquiry, and her genius has discovered some important points of view with respect to the solution of eternal problems. I for one shall always remain mindful of the lasting impression which her noble zeal for the highest aims has worked upon me.”

Thus the relation between Tönnies and Lady Welby was by no means without consequences for Tönnies’ work — I have hopefully been able to show this — nor was the influence which Tönnies’ work subsequently had as slight as the view of Tönnies, his work, and his times which prevailed so far would have us believe today. For one thing it was Tönnies’ idea of an international academy which the early significant F. van Eeden, L.E.J. Brouwer, Henri Borel, H.P.J. Bloemers, J.I. de Haan, and G. Mannoury adopted and intended to realize with the founding of the “Internationaal Instituut voor Wijsbegeerte” (International Institute for Philosophy) in Amsterdam in the year 1917 (cf. Mannoury 1949: 18f; 1969: 179). For another I feel able to show that Tönnies, by means of the German version of his prize winning essay and by means of personal conversations and letters at least prepared the way for several basic ideas of the Vienna Circle and the later unity of science movement, if he did not indeed influence them in their main outline. I have in mind primarily the idea which was always

connected with the Vienna Circle of a unified language of science, together with the idea of the unity of science and that of the encyclopedia; but I also mean on a secondary level the plan for a "Visual Thesaurus" which was to be part of the encyclopedia. My thesis is that Tönnies prepared the way for these ideas by his influence on Otto Neurath (1882–1945) and also to a lesser degree by the influence of his Welby Prize essay on Rudolf Carnap (1891–1970).

Considering the situation in the history of science in which Logical Empiricism developed from 1922 on, that is, starting with Moritz Schlick's appointment to the Mach professorial chair in Vienna, one can find that the diagnosis given by the members of the subsequent Vienna Circle as to the state of philosophy at that time and the general conclusions drawn from this state were by no means new or novel. Not only Lalande and his colleagues but also Tönnies in his prize winning essay had diagnosed around 1900 that the Kantian transcendental philosophy as the foundation of the individual sciences had been unseated by the enormous progress in these sciences and that the progress of the various individual sciences in knowledge was confronted by a chaos of philosophical dogmas. Both of them, like the circle surrounding Schlick more than 20 years later, had drawn the consequence that philosophy must now also be carried on according to the principals of the scientific method thanks to which the various individual sciences – Tönnies speaks explicitly of the examples of mathematics and physics (cf. Tönnies 1899/1900: 468ff) – had had such success. It must furthermore be noted that the practical and theoretical consequences which held for the circle surrounding Lalande and for Tönnies contained three elements due to their goal of a scientific philosophy: unification of the terminologies after a preceding terminological critique (and for Tönnies also a sign theoretical foundation), unification of the "sciences philosophiques" (for Tönnies the "mental sciences") according to the model of mathematics and the natural sciences, and international scientific language, at least as an auxiliary language (and for Tönnies in addition a graphic 'Begriffsschrift' as an international scientific sign language with reference to the "characteristica universalis"). Finally, Tönnies added the plan of an academy whose task was to be the compiling of a sort of encyclopedia of the "mental sciences" which was to be written using a unified terminology, an international scientific language, and a graphic 'Begriffsschrift'.

It is generally known that primarily under the influence of Otto Neurath the principal of the unity of science came to be one of the main axioms of the general philosophical conception within the Vienna Circle (cf. Carnap 1934: 249; 1963: 52; Hegselmann 1979: 38). The program of the unity of science included from the time of its first formulation in the year 1929 (cf. Hahn/Neurath/Carnap 1929: 15ff) an emphasis on collective work and that which can be intersubjectively comprehended. From the latter point, they derived the search “for a neutral system of formulas, a system of symbols which is free of the sediment of historic languages; thence also the search for a comprehensive system of concepts.” (Hahn/Neurath/Carnap 1929: 15) The text cited is generally assumed to have been written by Neurath. It was in fact Neurath who stepped forward as the main proponent of a unified language of science and demanded the development of a physicalistic attitude and the use of a physicalistic language chosen by him for explicitly practical reasons (cf. Carnap 1963: 50f). But in this connection it should be made clear what I find to have been constantly overlooked: the choice of a physicalistic language involves only a choice of what is talked about in this language and of a form, in which this is talked about.

“The sentences of the physicalistic language or thing-language speak of material things and ascribe observable properties to them, e.g. ‘this thing is black and heavy’.” (Carnap 1963: 50)

But the signs or words which are to be used in talking about something are not thereby chosen or already existant. Rather they must first be chosen or created. Neurath wanted to find and define the words to be used by means of terminological studies in which the everyday language would be purged of expressions which appeared unsuitable from a physicalistic point of view. The resulting product was then supposed to be a “Universal Jargon” (cf. Neurath 1981c: 785; 1941: 128).

Now my thesis does not go so far as to maintain that the forms for realizing the ideas of a unified science, a unified language, and an encyclopedia which Neurath and the other members of the Vienna Circle finally adopted are traceable back to Tönnies. It is my opinion that Tönnies only provided the general ideas, part of their justification, and the proof of their general necessity and possibility. This is also true for the idea of an encyclopedia, of which it is likewise known that Neurath introduced it within the Vienna Circle and in-

tensively contributed to its realization. Neurath is said to have been involved with such plans as early as 1920 (cf. Neurath 1981d: 806f; Morris 1955: ix). I also find it important in relation to this project that Neurath was striving for a unification of the terms and symbols used in the encyclopedia (cf. Neurath 1981d: 808) for which – in direct reference to Lalande's "Vocabulaire" – German, French and English equivalents were to be developed (1981d: 809; 1981c: 783) and that he planned to add a ten volume "Visual Thesaurus" to the text volumes of the encyclopedia in which the methods and results of various disciplines were to be presented using the international picture language ISOTYPE (International System of Typographic Picture Education) he had developed (cf. Morris 1955: x; Neurath 1981d: 806). In Neurath's description of ISOTYPE (cf. above all Neurath 1936) ideas like those of Tönnies in his prize winning essay in connection with a 'Begriffsschrift' (cf. Neurath 1936: 90f) and like those of Leibniz's "atlas universalis" (cf. Neurath 1936: 109–111) play an important role.

Neurath's reference to Lalande's "Vocabulaire" and also Neurath's relation to and attitude toward international (auxiliary) languages in general are evident in his writing, even if they have hardly been taken into account to date. In addition to the already cited explicit reference to Lalande, we find not only Lalande but also C. K. Ogden, the founder of BASIC ENGLISH (British American Scientific International Commercial English) (cf. Ogden 1930) since 1938 at the latest as members of the 38 person strong "International Committee of the International Congresses for the Unity of Science" (cf. Neurath 1981f: 874).¹⁵⁸ And this is the case although in contrast to the other members of this committee neither Lalande nor Ogden had presented the public with publications showing their mental proximity to Logical Empiricism in any way other than their involvement in efforts to unify terminologies and their support for an international (auxiliary) language.

But what can be said of the relation between Neurath and Tönnies? Nowhere in the literature on Neurath or on the Vienna Circle in general have I found Tönnies' name even mentioned. Neurath as well himself only mentions Tönnies in passing as the author of "Gemeinschaft und Gesellschaft". There is only one single passage in his publications where he very vaguely hints at his debt to Tönnies. Interestingly enough, this is in the article "Universal Jargon and Terminology" (Neurath 1941: 132).¹⁵⁹ It reads:

“I learned much from Mach’s writings, from Poincaré, Duhem, Enriques, Avenarius, later on from Jevons, Abel Rey, James, Karl Pearson and Bertrand Russell. I think through Ferdinand Tönnies (Welby Prize essay on ‘Philosophical Terminology’) I heard of ‘significs’ for the first time.”

It can be proved that the order in which the names are listed in this quotation is not that in which Neurath came into contact with the writings of these authors. Instead, Tönnies should have been mentioned first. Yet the order is characteristic of Neurath. For according to my knowledge of his biography, his course of study, and his writing, many of his historical justifications for his ideas contributed to the Vienna Circle were retrospectively construed by a legitimizing reference to the great line of exalted forerunners of Logical Empiricism.¹⁶⁰ The broad correspondence between Neurath and Tönnies between 1903 and 1922 yields in many aspects a more exact picture of Neurath’s path of thought.¹⁶¹ The correspondence — before long to be published by A. Eschbach and me — shows that Neurath was personally acquainted with Tönnies, for one thing, during his student days (until 1906) and that he was furthermore advised and supported in a friendly manner by recommendations, personal intercessions and the supplying of literature. Tönnies, for another thing, always sent him his newest publications, and Neurath, too, asked his opinion of his more important works. In a very personal letter to Tönnies (June 25, 1906) Neurath wrote:

“Next to my father there have actually been only three men who have had a significant influence on me, and one of these three is you. How can I thank you? Your moral influence also was of great importance for me, to use that expression . . .

My father had many a personal feature in common with you, even though he was less inclined to bitterness, and I believe, I told you right away in Salzburg, that no one has talked to me the way you do since my father’s death.”

This is what Tönnies meant to Neurath. But it is characteristic, in the above mentioned sense, that Neurath later in his writing only mentioned the influence of Gregorius Itelson, a Russian logician whom he met during his student days in Berlin. However, Neurath is said to have spoken with pleasure and respect of Tönnies even in later years.¹⁶² Just when Neurath received and read Tönnies’ prize winning essay is not known. But it is documented by his letter of January 29, 1922 that he received and read it. In this letter he mentions having reread several writings by Tönnies and then continues:

“Your book on concept formation passed through my hands and eyes.”

But apparently Neurath had already studied the prize winning essay many years earlier or had spoken with Tönnies about it. For example, in a letter of November 5 [1903?] Neurath wrote:

“Everything is now beginning to gain in thought value etc. when it is put into relation with social, historical and such aspects – this is probably good. My dreams of a general methodology, a comprehensive, systematic formula –they will perhaps, even probably remain dreams, but this ideal of my youth will probably always preserve an interest for the *entirety* of human knowledge, of human culture, etc.”

The ideas in Tönnies’ “Philosophical Terminology” probably fell on fertile ground in Neurath’s case. It is confirmed by an interesting formulation in Neurath’s letter of December 30, 1904, that even before 1906, that is before the German version of Tönnies’ prize winning essay from the year 1906, Neurath was very familiar with it due to discussions with Tönnies:

“I have not forgotten your remarks from that time and I would join your ‘Platonic Academy’ with true affinity. Still one should not dream until one has accomplished one’s task and the order of the day is now my doctorate.”

I feel that my thesis is strengthened in its plausibility – it can claim no more in light of the indications and proofs given – primarily by the fact that Neurath reread Tönnies’ prize winning essay at the beginning of 1922 and can therefore hardly have forgotten it when he first drew up his plans for an encyclopedia (around 1920) and when he entered the circle surrounding M. Schlick via his father-in-law Mr. Hahn. Of course, other influences than that proceeding from Tönnies could have had an effect. After all, Neurath studied the foundations of the exact sciences as early as 1907 and read not only Poincaré and Russell but also Mach, Leibniz, and Lambert on the subject. He could have received considerable stimulation primarily from the last three for the ideas which I see above all in connection with Tönnies. I maintain on the contrary that the key influence of Tönnies on Neurath was probably stronger and more lasting precisely because of its personal dimension; anyway it was earlier in time.

In addition, there was the added influence of Tönnies’ prize winning essay on Rudolf Carnap which could have contributed to the fact that Carnap so quickly accepted Neurath’s call for a unified language, the unity of science, and the encyclopedia compared to other members of the Vienna Circle. In Carnap’s letter of November 28, 1924 to Tönnies, that is, before he was in contact with the circle surrounding Schlick, he wrote:

“I have read your book on philosophical terminology with great interest and diverse rewards. I would like to express my thanks for it to you. I would like to add a request for information on literature, as I am presently busy with compiling a philosophical and psychological terminology in the auxiliary language Esperanto.”

He further desires to know where or how he can see or obtain the “Dictionary” by Baldwin (cf. Ch. 4.4) mentioned by Tönnies and Lalande’s “Vocabulaire”. Carnap never published such a terminology in Esperanto. But he was always interested in linguistics, himself spoke Esperanto, and demonstrated great interest in problems of the construction of languages both in symbolic logic and for purposes of international communication (cf. Carnap 1963: 67ff). These interests created a bond between him and C. K. Ogden from 1934 on (cf. Carnap 1963: 33ff; 1944). A glance at the first pages of “Physikalische Begriffsbildung” (Physical Concept Formation) (Carnap 1926) shows that Carnap not only had read Tönnies’ Welby Prize Essay but had profited by “rewards” from it – as he himself wrote – that is, his next publication after having read “Philosophical Terminology” in the German version of 1906. What Carnap writes there on pp. 3f entitled “What is concept formation?” (“Was ist Begriffsbildung?”) is based on Tönnies even in its examples and important formulations. That this is with the greatest probability the case, I find to result from the fact that he uses the expressions “Gesetz” (law), “‘ungeschriebene Gesetze’” (unwritten law), “Sitte” (custom), and “kodifiziertes Recht” (codified law), which are unusual in this context, especially coming from a mathematician and physicist. The passage in Carnap’s article where its dependence on Tönnies’ thoughts and formulations is most clear (1926: 4) reads:

“The formation of a concept consists of establishing a law on the use of a sign (e.g. of a word) in the representation of facts. In everyday life and in the first stages of science there is, to be sure, a kind of concept formation without there being such laws on the use of signs (words) explicitly established. But such laws are nonetheless implicitly obeyed or at least it is demanded that they be obeyed. At the moment one speaks of a concept, it is always a matter of unified, that is, law like use of a sign. The relationship of unformulated concept formation to that which is conscious and formulated in a well developed science corresponds somewhat to the relation of ‘unwritten laws’ of custom to codified law.”

In the same way, the expressions used by Carnap in an article which followed shortly, namely “Eigentliche und uneigentliche Begriffe” (Proper and Figurative Concepts) (Carnap 1927) can also be traced back to Tönnies’ prize winning essay (cf. Tönnies 1906: 17f, 23, 32f). Carnap merely switches their meanings around,

i.e. he calls “proper concept” (“eigentlichen Begriff”) what Tönnies calls a “figurative concept” (“uneigentlichen Begriff”).

But if Carnap knew Tönnies' essay so well and adopted thoughts and formulations from it without direct references – in fact, even when he already belonged to the Vienna Circle (1927) – then it is to be assumed that he was prepared enough to encounter Neurath's ideas openly and with a certain understanding.

To be sure, the Vienna Circle was and remained very different from significs in its main assumptions and methods, yet there was also a number of common interests. This was expressed in the thirties in a form of loose cooperation between representatives of this circle, above all Neurath, and the representatives of the signific movement in the Netherlands (cf. for example Mannoury 1949: 8f). Thus the circle of relations and cooperation was completed a secondtime.

4.3 George Frederick Stout

“I don't think the world – the thinking world – yet understands at all what there is in him; one is always coming upon fresh revelations of his many-sided mind. And with it all, like you, he is splendidly ready to give full value to the ideas of an elementary ignoramus like me!” (Lady Welby about Stout, letter from June 2, 1905 to Peirce)

From 1894 to 1912 G. F. Stout (1860–1944), a student of James Ward and Henry Sidgwick and at that time probably one of the most influential psychologists in Great Britain, was Lady Welby's most important supporter and at the same time her most persistent critic. None of Lady Welby's more important publications between 1896 and 1911 was not influenced by his criticism of its contents and his editorial advice (cf. Ch. 2.5 and 2.6; Welby 1903: x; 1911b: ix). As a whole, the success of significs during Lady Welby's lifetime is probably in large measure the result of the support Stout gave it, whereby the fact that Stout was the editor of *Mind* since 1891 played a role that must not be underestimated.

Still, the two of them went different ways with respect to their views on the theory of signs and language, these ways being all in all compatible. Stout had as early as 1891 addressed himself to the topic of language in an essay (cf. Stout 1891). This he did primarily under the influence of the Herbartian ethnographic psychologists Waitz, Lazarus, Steinthal, and the linguist Paul. He included this text without alterations in the second volume of his *Analytic Psychology* (Stout 1896, Vol. II: 190–233) and in a shortened version in *A Manual of Psychology*

which from its first edition in the year 1898 onward was the textbook of psychology that was most used in English universities for nearly 50 years (cf. Loveday 1914: 570; Passmore 1952: xxxi). However, it can be shown that Lady Welby did not adopt anything substantial from Stout's psychology of language. The influences of Stout on her work must have occurred in other areas which, however, I was not able to identify definitely either in her correspondence or in her writings, aside from his editorial comments.

It is not so regarding the influence of Lady Welby on the development of some of Stout's ideas. True, Lady Welby is not quoted anywhere in Stout's writings, but in the preface to *Analytic Psychology* Stout does after all write:

"Professor Mackenzie kindly read through my proofs, and made many suggestions which have been extremely useful to me. Lady Welby also helped me in a similar way." (Stout 1896, vol. I: xi)

Just what he meant can be taken from the correspondence between Stout and Lady Welby (cf. also Welby 1931: 32–34). From autumn 1895 to the beginning of 1896 Lady Welby read at Stout's bidding the galley proofs of *Analytic Psychology* and carried on a discussion of his theory of pleasure-pain in letters. In precisely this field Stout received stimulation from her. It would, however, be too wide a digression to go into detail here.

Impressed by Stout's extraordinary capabilities and by the compatibility of his views with her own, Lady Welby immediately took efforts to enlist Stout for work on signifiacs or "Sensifics" as she at that time still called her field of endeavor (letter of Dec. 9, 1895 to Stout):

"I long to enlist your powers of analysis & exposition for the recognition of Sensifics in Psychology."

And Stout reservedly answered her (June 26, 1896):

"I may take up the subject myself when I have time."

He found time quite soon. In July 1896, Stout went from Cambridge to Aberdeen, where he accepted the Anderson Lectureship in Comparative Psychology (cf. Passmore 1952: xxix). From there he applied himself for one thing to the advertising of the Welby prize essay and for another wrote *A Manual of Psychology*. During this time he wrote her after reading Lady Welby's *Grains of Sense* (1897a), which he thought highly of, that he was presently working on

“. . . ‘meaning’ in Psychology. The acquisition of meaning I treat as a fundamental process more primitive than association & reproduction. I do not know how far I have taken hints from you. But I think that you approve what I say.” (letter of July 25, 1897)

On April 10, 1899, he finally sent her the first volume of *A Manual of Psychology* with the commentary:

“There is a good dealing about Meaning in it, which I hope you will appreciate.”

As a matter of fact, Stout introduces there in the chapter on “Primary Laws of Mental Process” the distinction between “primary meaning” and “acquired meaning”, two terms which in subsequent editions of this work are renamed “primarily acquired meaning” and “reproduced meaning”.

In 1896 in “Sense, Meaning and Interpretation”, Lady Welby had criticized the psychology of the time for paying no or too little attention to the process of interpretation. She then continues:

“Here then I should venture to suggest that significance and interpretation should receive in future more definite ‘recognition,’ and that we need the triad, – Presentation, Attention, Interpretation . . . According to the law of attention that we pass at once from the sign to the ‘thing signified,’ we have acquired an invincible habit of passing instantly from the muscular sensations of the eye to the representations which they call up. That is, of *interpreting* sensation. The child learns to interpret as he learns to attend and to infer. Why is this supremely important mental activity – the immediate result of attention – the only one left unanalysed?” (Welby 1896: 187)

It is precisely here that Stout takes up the point when he defines:

“The meaning which is essentially involved in all continued attention to the same total object may be designated meaning as *primarily acquired*, to distinguish it from that which depends on association and reproduction.” (Stout 1924: 183)

In this connection “meaning” is the cumulative disposition or after-effect of a sequence of specific items of sense perception of an object.

In the case of “reproduced meaning” there is at least a “revival of meaning” namely of the sort that e.g. the sense perception of the first notes of a previously heard melody reproduces by association the “acquired meaning”, namely the entire melody. All more specific manners of reproduction presuppose the “revival of meaning”, which is the minimum requirement in the field of reproduction for the explanation of intelligent learning by experience.

It is beyond the shadow of a doubt that Lady Welby considered these reflections of Stout's to be an essential contribution to the solution of significant questions. On May 17, 1899, she wrote Stout:

"I cannot but feel that a real step in advance has been taken in your analysis of Primary 'meaning' and the acquirement of 'meaning'."

At the same time in this letter she chided him that he should make the meaning of his terms clearer, for that which Stout had called "meaning" or "significance" (Stout 1924: 183) was, in her terminology, "signification":

"I still look forward to your warning the student reader that by 'it means' you mean (i.e. intend to say) 'it signifies' rather than means; and are dealing with signification rather than significance? I know you consider that these are both important distinctions."

Even in 1903 Lady Welby still called Stout's contribution "the most significant step towards the recognition of 'meaning' as a definite subject for study (and that on which all others depend)" (Welby 1903: 11).¹⁶³ She may have found her justification for this judgment in the fact that with Stout it was after all one of the most significant English psychologists who had addressed himself to the problem of meaning from a psychological point of view and who had in so doing followed her thesis that this matter had to do with processes which are to be considered fundamental from a psychological as well as from a philosophical or logical point of view.

In later years, Stout did not produce any comparable contributions to significant topics. Yet he remained in close touch with Lady Welby's efforts until around 1913, when he finally gave up his plan for editing a book *Essays on Significs*.

4.4 J. M. Baldwin and His *Dictionary of Philosophy and Psychology*

"Unfortunately the Dictionary was not in time to compete for the Welby prize!"
(Baldwin to Lady Welby, May 18, 1900)

Like Lalande's "Vocabulaire" and Tönnies' prize winning essay, Baldwin's *Dictionary of Philosophy and Psychology in Three Volumes* (Baldwin, ed. 1901–1905) also belongs to the circle of efforts toward a unification of terminologies developed around the turn of the century. The construction principles of this *Dictionary*, above all the inclusion of equivalent terms in German, French, and Italian, became the model for Lalande's "Vocabulaire". However, the similar concepts and goals of the two lexicons presumably arose independently of one

another, even though the motivation for planning and carrying out both the projects were not only identical, but even had the same roots.

In the following, I would like to show, for one thing, that Baldwin's *Dictionary* plan possibly like Lalande's idea for his "Vocabulaire" was stimulated by Lady Welby's writing; for another, I would like to show that Baldwin definitely considered his *Dictionary* to be a contribution comparable to and compatible with Tönnies' prize essay, which corresponded to the task set for the Welby prize essay.

James Mark Baldwin (1861–1934), American psychologist and educator, ¹⁶⁴ first met Lady Welby at the International Congress of Experimental Psychology in 1892 in London. During the congress, Lady Welby sent him a formal invitation to visit her in Grantham and later an invitation to attend a conference organized by Prof. Sully for representative psychologists and philosophers planned for the fall of the same year, at which they were to handle problems of semantics (cf. letter to Baldwin of August 3, 1892). At the same time, she sent him the pamphlet she had prepared for the congress in London (Welby 1892c). Baldwin did not visit her. In 1894, Lady Welby turned to him again and sent him the introduction and summary of the first draft of "Sense, Meaning and Interpretation" (cf. Ch. 2.5). Baldwin understood this text as did Lalande later, as if Lady Welby were dealing with and considered possible the remedy of ambiguity in general in scientific terminologies. For in his answer he wrote among other things (June 5, 1894):

"We very much need an unambiguous nomenclature."

In her following letter (July 3, 1894) Lady Welby implicitly criticized Baldwin's reading. She included her most recent terminology critical pamphlet (Welby 1893a) in her letter and explained to him her view of the plasticity of language which was to be regained. But Baldwin either did not understand this explication or had a different opinion, for his subsequent *Dictionary* definitely aimed to create an "unambiguous nomenclature".

For the time between July 1894 and May 1900 there are no indications whatsoever of a continuation of the correspondence. As can be deduced from the later letters, the contact between the two of them must have continued also during this time. In the spring of 1900 Baldwin spent some time in Oxford, where he worked primarily on his *Dictionary*, in close collaboration with Stout among others, who was teaching in Oxford since 1899. As the following excerpt

from a letter from Lady Welby to F. Tönnies (May 16, 1900) proves, there were discussions with Baldwin during this time. Baldwin apparently also was familiar with Tönnies' prize essay:

"Prof. Baldwin who is, as of course you know, assisting to edit a new Philosophical 'Dictionary' at Oxford tells me he is hoping to see your suggestion of an international Academy partly or in some sense realised before very long." 165

I have already referred to the connection of the academy project with Lady Welby's significant goals and to her efforts in the years 1900 to 1902 to bring about an international conference on the subject, which Baldwin was also supposed to attend (cf. Ch. 2.5). Baldwin's hope for the quick realization of this project appears to me to be founded in his view that his *Dictionary* represented at least in part that which Tönnies expected to be the result of the work of such an academy. Three reasons that this is probably so can be cited:

1. Since Baldwin's *Dictionary* plan was at a critical point around 1900 because of the limited finances available, he turned to Lady Welby (letter of May 18, 1900) to obtain from her or through her intercession the necessary financial support. In this letter he wrote among other things:

"As one interested in the sort of thing the Dictionary is aiming to accomplish possibly you can set me in the way of getting £100 for it. Unfortunately the Dictionary was not in time to compete for the Welby prize!"

It remains unknown whether and if so from whom Baldwin received the desired sum.

2. The lexicon entry on "Significs" in Baldwin's *Dictionary* was drawn up according to the authors' initials there by Lady Welby, Stout, and Baldwin. It contains the following passage which, as the formulations used show, with all probability was written by Baldwin:

"And it [Significs] provides a convenient general term under which to work perhaps for an international consensus, and for a natural check upon wilful waste or misuse of the existing resources of language, by bringing to bear upon it a certain deterrent of social and academic 'constraint' (cf. the Editor's Preface, viii)."

Now if it can be shown that this passage was indeed written by Baldwin and if it can at the same time be documented that Baldwin wanted with his *Dictionary* to work toward an international consensus and toward the creation of a "social and academic 'constraint'" (in the sense of the above quotation), then we will thereby have shown that Baldwin took his *Dictionary* to be a contribution to that which he considered to be one of the tasks of significs.

3. Baldwin's preface to his *Dictionary* (Baldwin 1901) contains the sought for evidence. There Baldwin sketches in a few words the twofold task of his *Dictionary*, since more extensive treatment would require a "dissertation on the philosophy of language" or an "outline of a would-be science of Semantics" (1901: vii). This task consists of: a) understanding the meanings which the existing terms have and providing them with clear definitions; b) interpreting the developments in thought from which the defined meanings have proceeded and, in the process, discovering what is really essential within the common development of the thought and the term. As part of this procedure, different usages of the same terms should either be justified or clarified and resolved by "concise and authoritative definitions". Baldwin explains how he imagines the efficacy of such definitions in the following passage, which is of prime importance in this context:

"Authoritative, it should be said: for despite the fact that authority may not keep usage true, nevertheless it is often authority which makes usage false; and it is the part of authority, once definitions and discriminations are reached, to establish and maintain them. Hence, in this work, authority is invoked; not merely the use of authority as representing the highest ability in the matters taken up, but also bare authority as a force, — what would be called by Professor Durkheim *the social force of 'constraint.'* This has been argued recently by Professor Tönnies, in his discussions of the theory of terminology and its reform, and acted upon by Lady Welby in her efforts to convene conferences of eminent men. Indeed, the idea of the former writer, to the effect that an International Academy for Scientific Terminology might have an important function, is in so far quite correct. *We, in this work, are not an Academy, of course, but we are an international committee.*" (Baldwin 1901: viif; emphasis by H. W. Sch.)

Thus it can be stated that Baldwin's idea of editing such a *Dictionary* was possibly stimulated by Lady Welby's terminology critical works and that he considered his *Dictionary* to be a contribution to significs since about 1900. This is so even though Lady Welby herself always rejected "authoritative definitions" in Baldwin's sense of the term because of fundamental language theoretical and communication theoretical considerations.

4.5 Some Comments and 'New' Documents on the Correspondence between C. S. Peirce and Lady Welby

"Meanwhile I have had, as perhaps you know, a good deal of correspondence with that most interesting and original of thinkers, Mr C. S. Peirce. I am hoping that his Semiotic and my Significs will ultimately be found to be related very much as he suggests that they should be." (Lady Welby to P. Carus, March 17, 1909 166)

Since the published correspondence (Peirce/Welby 1977) between Lady Welby and C. S. Peirce (1839–1914) edited by Hardwick has been available for several years now and can be presupposed as widely known, I want to limit myself here to some comments on the relationship between the two authors and add a few documents which Hardwick did not consider.

The correspondence begins with a letter from Lady Welby of May 24, 1903 and ends with a letter from Lady Welby's daughter-in-law – and not, as Hardwick says, from Lady Welby's daughter (Hardwick 1977a: x) – from the year 1912. However, Lady Welby and Peirce already knew about one another several years earlier. The fact that Lady Welby sent a copy of *What is Meaning?* to Peirce for reviewing and that she placed great value on his opinion of it seems to me not at all to result solely – as Hardwick maintains (Hardwick 1977b: xvf) – from the fact that she was not interested in Peirce's work until after reading Peirce's contributions to Baldwin's *Dictionary*, because she saw there similarities to her own work. Peirce's dictionary articles were for her merely his newest work, which upon getting to know them fascinated her. She herself wrote in her first letter, which Hardwick perhaps was referring to, before she came to speak of Peirce's dictionary article:

"but I have constantly come upon points in your writings which have for me a keen interest from my special point of view." (May 24, 1903)

Lady Welby was already familiar with publications by Peirce since 1893 at the latest, and she had received more personal information about Peirce since then from Paul Carus, editor of *The Open Court* and *The Monist* who at the same time was Peirce's opponent. When Lady Welby thought she had found an obvious typographical error in *The Monist*, Carus answered her (August 2, 1893):

"You would not write 'Oliver and Lodge' nor would I either dare to use such an expression. But my friends Messrs. Charles and S. Peirce have their own original methods. By the bye, Peirce is a very ingenious and personally highly interesting thinker, a genius of great power."

And Lady Welby answered, referring to her acquaintance with Peirce's writing:

"I am very much amused at what you say about Mr. Peirce, whose ability is well-recognised here, especially on the side of Logic." (August 17, 1893)

For his part, Peirce's attention was called to Lady Welby and her writing in 1898 at the latest, when Paul Carus sent him as well as other American scholars⁷⁵ her most recent terminology critical pamphlet (Welby 1898b) together with some short information on her person. Hardwick included this letter from Carus to Peirce in his edition of the correspondence between Welby and Peirce (cf. Peirce/Welby 1977: 1). Carus justified in detail to Lady Welby his decision to send the pamphlet to Peirce and at the same time gave her considerable information on Peirce:

"Charles S. Peirce, of Milford, Penn., who is probably known to you through his articles in *The Monist*, which are onslaughts on the monistic position held by me; I have selected him because he is a man of unusual ability, and one of the greatest logicians in the world, perhaps equal to the German Schroeder and the late English Boole. The sole drawback with him is that he is unmanageable in his private relations, and has thus been frustrated in his career; instead of holding a chair at the university, which should have been the place for him he is sitting on a little farm in Pennsylvania, dissatisfied with all the world, and sometimes even in straightened circumstances, although he receives very high prices for his contributions." (October 8, 1898)

Despite the general preliminary information about one another, neither Peirce nor Lady Welby probably knew about the other's sign theoretical endeavors. Peirce gathered as much from *What is Meaning?* for the first time, and Lady Welby did so from Peirce's subsequent letters. As soon as the real common interests and in part common views became evident for both of them, their knowledge of one another and the exchange of ideas in letters took on a special dimension which made it easy to ignore the fact that there were also contradictory views and on Lady Welby's part certain difficulties in comprehension. There arose a considerable feeling of congeniality and a feeling of solidarity which united the two outsiders (which they were in different respects each in his own way). This becomes most evident in Peirce's letters, above all in a draft of a letter from the end of December 1908:

"But I am satisfied that in the present state of the subject, there is but one General science of the nature of Signs. If we were to separate it into two, — then, according to my idea that a 'science,' as scientific men use the word, implies a social group of devotees, we should be in imminent danger of erecting two members each!

Whereas, if you and I stick together, we are, at least, two of us. . . . We shall have to try to seduce one of the linguists to our fundamental study. Max Müller was, in a feeble way, perhaps one of our group. I hope in your Britannica article you will adhere to the stern method of treatment proper to an Encyclopaedia, and show the reader that distinct positive discovery is what we are laboring upon." (C.P., 8.378) 167

If one can speak of an influence of Peirce on Lady Welby, who nowhere in her published writing mentions or quotes him or of an influence of Lady Welby on Peirce, who – aside from his review of *What is Meaning?* (Peirce 1903) – mentions her only in the Lowell Lectures of 1903 (C.P., 8.176), then it can only be with reference to the mutual stimulating and supportive influence proceeding from the knowledge that they were no longer working and struggling alone for the recognition of a general theory of signs. Beneficial in this sense were the fundamental common features in their views in three areas above all, regardless of the differences in details which existed even there:

1. Lady Welby reacted to the lack of uniformity and confusion she found quite early for one thing with persistent and strong criticism of terminology and for another with her communication ethical demands. For his part, Peirce proposed his "Ethics of Terminology" (C.P., 2.219–2.226), which was definitely based on a different justification from Lady Welby's, as a way to improvement of this state of terminologies. Lady Welby welcomed this way (Peirce/Welby 1977:14, 16) just as Peirce recognized her demands as justified to the extent that they referred to the terms of science. However, he considered Lady Welby's goal of bringing about an agreement between everyday language and the latest results of science to be too radical a project (cf. Peirce 1903). Their differences in this matter primarily led him to classify her as a "rationalistic radical" and himself as a "conservative on rationalistic & experiential grounds" (Peirce/Welby 1977: 19).
2. From the beginning, Peirce realized that there is a certain agreement between Lady Welby's sign theoretical concepts "sense", "meaning", and "significance", that is, her "three orders of signification" or "three modes of significance" (Peirce 1903) ¹⁶⁸, and parts of his theory of signs. The actual extent of this agreement, however, apparently did not become completely clear to him until the end of 1908 and the beginning of 1909. At least he did not go into more detail on these conceptual agreements until that time (cf. Peirce/Welby 1977: 80, 85, 108ff, 112f). From then on, signification is for him that part of "Semeiotic"

which investigates the relation of signs to their "Interpretants". Lady Welby's "Meaning" and his "Dynamical Interpretant" both are in agreement in that they both represent the influence of the sign on the mind of the interpreter; they differ in that "Meaning" is the influence of a sign on the interpreter intended by the speaker/writer, whereas "Dynamical Interpretant" consists of the direct influence which is in fact exerted by a sign on an interpreter. According to his interpretation of Lady Welby's "Significance", Peirce's "Final Interpretant" is identical with the former:

"namely, the effect the Sign *would* produce upon any mind upon which circumstances should permit it to work out its full effect." (Peirce/Welby 1977: 110)

His "Immediate Interpretant" is for Peirce "very nearly, if not quite the same" (ibidem) as Lady Welby's "Sense":

"for I understand the former to be the total unanalyzed effect that the Sign is calculated to produce, or naturally might be expected to produce; and I have been accustomed to identify this with the effect the sign first produces or may produce upon a mind, without any reflection upon it." (ibidem)

Even if Peirce with this last definition only grasps part of Lady Welby's "sense" concept and does not take account of the organismic aspect of "sense" which is essential for her concept, he still probably describes exactly with his analysis those similarities of both their conceptual schemes which are also important for Lady Welby. He saw and worked out the differences just as plainly. For their theories of signs differ right from their conception. Whereas Lady Welby gains her concepts "through a prodigious sensitiveness of Perception" (Peirce in Peirce/Welby 1977: 111) by proceeding from communication processes and the informative intentions and interpretations they entail, Peirce's approach is more general and tends to be more extracommunicative:

". . . my three grades of Interpretant were worked out by reasoning from the definition of a Sign what sort of thing *ought* to be noticeable and *then* searching for its appearance." (Peirce/Welby 1977: 111)

He thereby avoids the difficulty which Lady Welby has, for example, with natural signs and symptoms which are not uttered and therefore can also have no "meaning" in her sense of the term.

3. Both Peirce and Lady Welby aimed for a general theory of signs which is in no way restricted to linguistic signs. Whereas this goal brought Lady Welby

criticism from Tönnies, C.K. Ogden, and W. Macdonald, she was explicitly encouraged to pursue this goal by Peirce in that he agreed with the very broad extension of her “expression” concept (Peirce/Welby 1977: 112) as it formed the basis for her *Encyclopaedia Britannica* article (Welby 1911a). And he pointed out to her the danger that must result from the restriction to language which was to be observed in her work, a restriction furthermore to one single language, namely English (Peirce/Welby 1977: 118f).¹⁶⁹

In addition to the effect mentioned which the correspondence had for both of them, Peirce’s influence on English philosophers via Lady Welby as intermediary must not be forgotten. Hardwick (1977b: xxixff) has already mentioned the most important connections following the discoveries of Thayer (1968: 304–313). As a matter of fact, Lady Welby became an intermediary between Peirce on the one hand and B. Russell, J. Cook Wilson, G.F. Stout, F.C.S. Schiller, and C.K. Ogden on the other. She sent copies of Peirce’s letter of October 12, 1904 – that is, not, as Hardwick (1977b: xxix) thought, the letter of December 14, 1908 – to the first three of them, in which Peirce had generally described his “Ideoscopy” and his theory of signs. Peirce had written this letter to be used in the second edition of *What is Meaning?* which was then in planning (cf. Peirce/Welby 1977: 35), but since nothing came of this plan, Lady Welby suggested that he submit it as an article to *Mind*. For just this reason, she sent a copy of it to Stout (cf. Peirce/Welby 1977: 42). She sent Russell a copy of the letter and then sent Peirce Russell’s answer to help bring about an exchange of ideas between the two, who had come to be opponents with respect to the evaluation of the value of Peirce’s algebra of dyadic relations. Cook Wilson, finally, was chosen as the addressee of a further copy of the letter because Lady Welby had seen that Peirce’s “Firstness, Secondness, Thirdness” corresponded to his “oneness, twoness, threeness”. In a similar manner, Lady Welby served as a go-between in the argument between Schiller and Peirce, which has been described by Peirce himself in 1905 (cf. Peirce/Welby 1977: 55ff) and recently also by F.J. Down Scott (1973), by influencing above all Schiller’s position during a discussion carried on by letters between the two.

It was of particular importance, finally, that C.K. Ogden, during the period of his collaboration with Lady Welby (cf. Ch. 4.9), was given access to letters from Peirce, from which Ogden published excerpts in 1923 in *The Meaning of Meaning*. Thayer (1968: 304–313), Hardwick (1977b: xxxi 1979), and Deledalle (1981: 87f) have proposed the thesis that F. P. Ramsey, who obviously showed

great interest in Peirce's theory of signs and in whose work there are traces of influence by Peirce, also introduced Wittgenstein to Peirce's thinking. This would in any event make clearly pragmatic aspects in Wittgenstein's later work more understandable, even if it would not completely explain them, aspects which Rorty (1961) compared already a few years ago with corresponding views of Peirce. It can be seen from Ramsey's review of *The Meaning of Meaning* (cf. Ramsey 1924: 109) that Ramsey thought highly of Peirce's theory of signs and that he was familiar with at least that part of it which was included in the letter excerpts published by Ogden. Two more indications, however, should be added to those of Thayer and Hardwick.

As can be seen from a letter of March 1923 from Wittgenstein to Ogden, Ogden had sent him a copy of *The Meaning of Meaning* that month. Wittgenstein wrote him about it:

"I have however read in it and I think I ought to confess frankly that I believe you have not quite *caught the problems* which – for instance – I was at in my book (whether or not I have given the correct solution)." (Wittgenstein 1973: 69)

Thus it is entirely possible that Wittgenstein, through reading Ogden's book himself came upon the Peirce letters it contains and by this means found access to Peirce's pragmatism. The direct manner in which Ramsey wrote about Russell's evaluation of *The Meaning of Meaning* nearly a year later – in 1924, but still before his stay in Vienna – suggests that Wittgenstein and Ramsey had already engaged in an exchange of ideas about this book sometime earlier, or at least that Ramsey knew of Wittgenstein's familiarity with the book. For Ramsey wrote Wittgenstein on February 20, 1924 (Wittgenstein 1973: 84):

"He [Russell] has 2 children now and is very devoted to them. *I liked him very much*. He does not really think *The Meaning of Meaning* important, but he wants to help Ogden by encouraging the sale of it. He wrote a review of it, from which the quotation you saw was taken, in a political weekly."

Be that as it may, it remains certain in any event that British philosophers became familiar with Peirce's work directly by way of Lady Welby on the one hand and by way of Lady Welby and then Ogden on the other. Just how effective this introduction was in detail remains open.

As has already been mentioned (cf. Ch. 2.1), I do not consider Hardwick's edition of the correspondence between Peirce and Lady Welby to be complete. In the Welby Collection (York University Archives, Downsview, Ontario, Cana-

da) there are to be found four more letters from Lady Welby to Peirce and a transcription of a letter from Peirce to J.W. Slaughter which, to supplement Hardwick's edition, will be commented on and described here and then be printed in full. The originals of the four letters from Lady Welby to Peirce in question are apparently not included in the material of the Philosophy Department, Harvard University. It is nonetheless doubly justified to publish them here according to the version of Lady Welby's drafts or her transcriptions, respectively. For one thing, it can in the case of each and every letter be shown that it or — in case of a draft — at least a letter with such contents was in fact sent to Peirce and, in the majority of the cases, reached him. For another, Hardwick also published such letters, and rightly so, (cf. Peirce/Welby 1977: 16, 50ff, 61f) to make the development of the correspondence more understandable.

The first letter or postcard text from June 22, 1903, exists in typewritten form in a sort of shorthand and bears at the left-hand top in Lady Welby's handwriting the inscription "D.C.S. Peirce".¹⁷⁰ The contents of this letter refer to Peirce's previous first letter to Lady Welby of June 7, 1903. In this letter, Peirce (cf. Peirce/Welby 1977: 3) addressed Lady Welby as "My dear Sir", for which reason Lady Welby here points out that she is a woman and then (probably) informs him of her complete name. As a matter of fact, Peirce in his next letter uses the more appropriate address "My dear Lady Victoria Welby" (Peirce/Welby 1977: 4).¹⁷¹ In addition, Lady Welby's letter refers to Peirce's mentioning in his previous letter that he had given the name of "pragmatism" to the doctrine proposed in his articles of 1877 and 1878, whose followers in Oxford included Schiller and Sturt among others. Further evidence that a letter of such content was sent to Peirce is given by a letter from Lady Welby to V.V. Branford of November 23, 1903, where she writes about Peirce:

"I am rather amused at the 'feminine' since he [Peirce] himself wrote to me as 'Dear Sir' until I confessed!"

Thus this letter text is in my judgment a draft or an incompletely formulated transcription of a letter which was with certainty in fact written with this or with comparable contents, sent to Peirce, and of which he took note.

The letter of June 2, 1905, exists in a typewritten transcription or copy. Only the lines above the date have been added in Lady Welby's handwriting. I have already mentioned and supplied evidence for the fact that Lady Welby quite soon made copies of all her typewritten letters to Peirce which she filed

away (cf. fn. 9). From its contents, this letter is unmistakably an answer to Peirce's letter of May 14, 1905, in which Peirce described the development of his difficult relationship to F.C.S. Schiller, mentioning his "comic *Mind*" and reporting that an initial correspondence between himself and Schiller had come about (Peirce/Welby 1977: 54–57). There is no proof that Lady Welby's letter to Peirce was actually sent and read by him. But an indication that this was so is the following: it plainly can be seen from the correspondence between Lady Welby and Schiller that she did her best to persuade Schiller to come to an understanding with Peirce. But the conciliatory letter from Schiller to Peirce was written on June 5, 1905 (cf. Down Scott 1973: 379ff), that is, three days after the letter of Lady Welby to Peirce dealt with here.

The contents of the third letter, published for the first time below, from Lady Welby to Peirce (June 16, 1905) can be taken as a further indication leading in this direction. This letter – it is probably a transcription – is further proof of Lady Welby's efforts to mediate between Peirce and Schiller.¹⁷²

The fourth letter printed below (October 27, 1909), the transcription of a letter, typewritten like all the others, is in terms of its contents an answer to Peirce's letter of October 11, 1909. Before this letter from Peirce reached Lady Welby, she wrote an answer (October 19, 1909) to Mrs. Peirce (Peirce/Welby 1977: 135) to her letter of September 27, 1909. Now, if the fourth letter considered here was actually sent – possibly without ever reaching Peirce – then it results that this letter together with her letter of May 11, 1910 (Peirce/Welby 1977: 136) and the postcard mentioned by Peirce (April 17, 1911; Peirce/Welby 1977: 136) represented her three attempts to regain contact with Peirce. And the postcard would then in fact, as Peirce quotes her (April 17, 1911), be Lady Welby's "third attempt" (Peirce/Welby 1977: 137). The letter in question here would by this account actually have been sent – perhaps without ever reaching Peirce.

The fifth letter printed below exists in the form of a typewritten transcription of a letter from Peirce to J.W. Slaughter of September 2, 1909. It is Peirce's answer to a second letter from Slaughter (August 20, 1909; Peirce/Welby 1977: 176f) in which the latter invited Peirce again¹⁷³ to write a contribution to the volume *Essays on Significs* edited by Slaughter and Stout (cf. Ch. 2.6). The letter printed here makes very clear Peirce's extremely difficult position at the time and his special relationship to Lady Welby. Lady Welby made short reference to this letter in her next letter to Peirce (October 8,

1909; Peirce/Welby 1977: 132), and Peirce's answer to her (October 11, 1909) takes up once again the depressed tenor of his letter to Slaughter. In fact the entire correspondence from the spring of 1909 to its end was dominated by the question if and when Peirce would be able to write a contribution to *Essays on Significs*. As we all know, he never did write one. The book mentioned in Peirce's letter to Slaughter, which he was then working on, was later mentioned by Peirce in a letter to Lady Welby (October 11, 1909; Peirce/Welby 1977: 133f). It was to bear the title *Essays on Meaning*.

The letters printed below are not only a supplement to Hardwick's edition of the correspondence, but they also give an impression in highlights of the special nature of this correspondence and the relationship between Peirce and Lady Welby.

D.C.S. Peirce

June 22nd 1903 My dear Sir In acknowledging your kind letter [I] fear that I must confess, what I had stupidly forgotten, that you would not know; i.e. that I am only a woman, known as & c. This detail is of course irrelevant where serious work is in question; hence my mode of signature. I shall look forward to the publication of the Harvard Lectures and also to the Note you are good enough to propose making in the 'Nation' on the subject of my book. I have heard a good deal about Pragmatism (in his sense) from Mr Schiller. But he is not quite satisfied with the title. Most faithfully yours [V. Welby]

If you saw the Comic M[ind] [where?] if happened notice my (mimetic!) lines on Realism & Idealism? The pseudonym not mine but Mr. Sch's 174

My dear Mr Peirce

June 2nd 1905

Prof Stout (with his family) has just been here for the inside of a week and after he left I simply collapsed from the 'wave' of heat and become useless for anything.

Else of course I should have written to Mr Schiller at once, conveying the substance of your kind words and you would have heard before this, I hope, that he understands & appreciates them. I have often scolded him for being so difficult to deal with in some ways; but the fact is he can't help it! And he means so well with it all!

I told Prof Stout however what you said and I think he will act upon it; he is a great pourer of oil on the waters and is a many-sided man. I don't think the world -- the thinking world -- yet understands at all what there is in him; one is always coming upon fresh revelations of his many-sided mind. And with it all, like you, he is splendidly ready to give full value to the ideas of an elementary ignoramus like me!

He was more encouraging than ever as to the usefulness of my work and way of putting things. Among other things I showed him the syllabus of ten possible Significant Lectures which I had drawn up in answer to a challenge, as one does, half in joke. So he asked for a copy and said, when I lamented that there were no lecturers to take up that sort of line, 'I'll get you a lecturer!' But this please in strict confidence; it is only as illustrative of his ready and understanding sympathy.

Now I havn't even begun to tell you how much I felt your goodness in writing to me so freely about all this difficulty about Mr Schiller. I do hope I may be of some little use. Good people are scarce and must somehow work together!

I had a real hope that in spite of this sad ill-health which had driven Prof James home again so prematurely, I might have seen him here, as he promised to come if he was able to stay even one week in London. I am troubled at losing an opportunity for which I have long hoped. But life is always like this.

I mustn't write any more as I have a special appointment with Mr F. Galton and must be starting. But I will write again soon. I hope from what you say that anyhow values are rising in your valley! [V. Welby]

(Dr. C.S. Peirce)

June 16th. 1905

This is just to report that I have had a very nice letter from Mr. Schiller (he wrote on the 5th. but various hindrances made it impossible to write before today) who says that the idea of his taking offence at anything you said never entered his head. I had some hopes of seeing Prof. James before his return to America but was sorry to find that after all he had to cancel some of his plans and go straight home.

Mr. Schiller will be staying here the beginning of July.

It looks as if Washington was, rather than the Hague, to be the Future Peace Centre of the world! With all good wishes . . . [V. Welby]

(Mr. C.S. Peirce)

October 27th. 1909

It was more than good of you to write that long letter in spite of your difficulties with house and health. I earnestly hope you will have strength to carry through your programme of work; for that book ought to be written. I am wondering whether there would be any use in my sending you my typed copy of your long *explanatory* letter in March 1909. I have carefully copied all your diagrams. If you care to cable the one word SEND (addressed merely Welby, Harrow, England) it shall go at once and may save you some trouble . . . I have no time for more to-day but write to catch post and will send you Papers & c. by next post. [V. Welby]

(From Dr. C.S. Peirce to Dr. J.W. Slaughter)

Sept. 2nd. 1909

My dear Sir,

I was just about to write to you at the first moment when I should be able to handle a pen, when I was put to shame by receiving yours of August 20th. When

your former letter of May 10th. came I was ill and had been so for a good while, and was perfectly overwhelmed with the most urgent calls upon my attention while my wife is in a condition of health that causes me continual alarm of the most poignant kind. As the only possible chance of saving her, I had to make extensive repairs to the house which called for constant thought to raise the necessary money, and to make the plans and contracts and every day I wished to write to you. But calls would come upon me before I was out of bed and my work for each day only ceased when I fell asleep over it. Moreover, I was greatly perplexed what to write. I could not bring myself to let any opportunity of paying honour and praise to Lady Welby pass by me unavailed of. That would have inflicted a wound upon my feelings from which I should never recover. Yet in order to get the minimum sum for my repairs I had been obliged to get an advance from a publisher on an unwritten book on a stipulation that I would write nothing else for publication but that until it was done. True, I was confident of getting leave to write what you desired; but I had been able in months to do so very little on that book that I hadn't the face to ask him for it. The situation in that respect is still worse now. Indeed, it is so in every respect.

Nevertheless I have determined that for Lady Welby's sake I will write briefly and without argument what I conceive to be the real nature of her aspiration, beginning with considering what a sign is and what its signification as opposed to its denotation really is, and what is the nature of the process of performing a logical analysis of it. Possibly I may add some thoughts on the question of how new needful terms of logic had best be framed in the present condition of the subject. I believe that my process for performing logical analyses will be found very valuable when it is well illustrated and explained.

It seemed necessary in this letter to enter into personal concerns of mine of no interest to you in order to show you that it was not want of appreciation on my part my not answering your letter which has ever since been lying open the most prominent object before my eyes when I sat at my table. I must beg you now to pardon the haste with which I close this scrawl and believe me with greatest sympathy with your purpose

C.S. Peirce.

4.6 Bertrand Russell

"I should much like someday to write on sign and meaning and kindred topics; indeed the essential principles upon which the possibility of signs and symbols depends have occupied much of my thought." (B. Russell to Lady Welby (Welby 1931: 159f)) 175

It is probably correct when Hardwick (1977b: xxx) maintains that Bertrand Russell (1872–1970) was not very impressed by Peirce's letter, which was sent

to him by Lady Welby. Russell was, after all, generally not easy to impress. Still, Russell's own occupation with the problem of meaning – despite the particularities of his specific questions – cannot be seen completely apart from the work and influence of Lady Welby and the circle of colleagues and correspondents supporting her. Russell (1959: 13f) himself later pointed out such connections, which makes it all the more promising to pursue them:

“There was another problem which began to interest me at about the same time – that is to say, about 1917. This was the problem of the relation of language to facts. This problem has two departments: the first concerned with vocabulary; the second, with syntax. The problem had been dealt with by various people before I became interested in it. Lady Welby wrote a book about it and F.C.S. Schiller was always urging its importance.”

The year 1917 given by Russell as the beginning of his interest in this problem is with certainty too late a date. For the outset probably goes back to *The Principles of Mathematics* (1903), or at the latest to “On Denoting” (1905). In the interval, namely in February 1904, Russell's correspondence with Lady Welby began.

At the end of 1903, Lady Welby read *The Principles of Mathematics* (Russell 1903), which held an extraordinary fascination for her and in which she discerned a significant contribution to several questions of significs (cf. Welby 1931: 127). In it the “Principle of Order” was of central importance for Lady Welby. For “What is order?” as Russell asked was for her the twin question to “What is Meaning?” (cf. Welby to Peirce, November 20, 1904; Peirce/Welby 1977: 39).¹⁷⁶ She explains this to Russell in her first letter to him (February 1, 1904) as follows:

“Nowhere else but in your book have I yet found any definite step taken towards the fulfilment of what seemed a futile hope, – that through the general identification of Mathematics and Logic and both with the principle of Order, the translation of pure Mathematics into the language of Philosophy would become possible, to the great gain of mankind.

. . . But I may point out that much mischief in serious writing has resulted in English from the loose use of the term ‘meaning’ (which is really intent or intention, conscious purpose) in the sense of signification. Now meaning in its true sense (our intention, e.g. in using symbols) involves some action *in order to* convey idea, desire, sense, and so on. Thus the notion of Meaning seems almost part of that Order, while of course sense, signification, significance are all dependent on the assumption of order.”

In his answer (February 3, 1904; Welby 1931: 128), Russell revealed a certain sympathy for her critique of language and for the goals of signification and added:

“Since I wrote my book I have come to think the questions connected with Meaning even more important than I then thought them: . . .”

From this Lady Welby apparently concluded that she could gain a new comrade who would competently pursue her signification goals in the fields of mathematics and logic and would thereby help signification to make a breakthrough in this context. For she wrote him (March 24, 1904):

“I am therefore going to make a bold appeal to you to write yourself, from the mathematical point of view, on the question of Expression: on the relations of Sign and sense, of Sign and signification, of Sign and meaning, of Sign and signification; bringing out the distinctions which are so disastrously ignored, and giving us a new view of the unity within which they exist.

No one could do it as you could!”¹¹⁷

Russell did not comply with this request in the way Lady Welby would have wished. And yet Lady Welby’s letters probably even then made it clearer to him that not only within logic – for example in Frege’s works – but also in other fields, problems of meaning and of a sign theoretical nature in general were increasingly winning the attention of various scholars. Thus, for example, *What is Meaning?* was pointed out to him by Goldsworthy Lowes Dickinson¹⁷⁸ even before he learned more about it through letters from Lady Welby and personal discussions at her home in Harrow (since early 1905). Russell, however, reacted to Dickinson’s tip in a manner that was characteristic of him and in so doing he described the current state of his contact with Lady Welby in three sentences (July 20, 1904; Russell 1967: 188):

“I have never read Lady Welby’s writings, but she sent me some remarks on my book, from which I judged that she is interested in a good many questions that interest me. I doubt very much, all the same, how much she understood my book. I know too little of her to know whether I should understand her or not.”

This soon changed. For the correspondence and discussions with Lady Welby, which were continued until 1910, soon after Russell’s publication of “On Denoting” (1905) became a more intense and problem oriented exchange of thoughts. This discussion, carried out at the end of 1905, is of particular significance in today’s context, since it made the difference of both their positions clearly evident.

In "On Denoting", Russell defines, among other things, "a man", "everything", "something", "nothing", and "the present King of France" as examples of "denoting phrases" (1905: 479f). According to Russell, such phrases denote solely on the grounds of their form. He distinguishes three types of cases of denotation: a) "A phrase may be denoting, and yet not denote anything" ("the present King of France"); b) "A phrase may denote one definite object" (a modern example: the present Queen of England); e) "A phrase may denote ambiguously; e.g., 'a man' denotes not many men, but an ambiguous man." (1905: 479)

Russell makes a point of showing that the problem of denotation is also of prime importance for a theory of knowledge; and in this context he introduces the difference first established by W. James (1890, vol. I: 221ff) between "acquaintance" and "knowledge about" – without naming James, however – i.e. "the distinction between the things we have presentations of [e.g., 'the objects of perception'], and the things we only reach by means of denoting phrases [e.g., 'other people's minds']" (ibidem). Thus he can summarily characterize the process of knowing something as follows:

"All thinking has to start from acquaintance; but it succeeds in thinking about many things with which we have no acquaintance." (1905: 480)

The problem which he now wants to solve with his theory of denotation is that of symbolic knowledge ("cognitio symbolica") – as I have called it referring to Ungeheuer. His theory, namely, is supposed to play a role in obtaining results by means of cognitive processes mediated by signs which are not chimaeras. For Russell says toward the end of his article:

"The whole realm of non-entities, such as 'the round square,' 'the even prime other than 2,' 'Apollo,' 'Hamlet,' etc., can now be satisfactorily dealt with." (1905: 491)

His theory is supposed to accomplish this by constituting the basis for deriving "knowledge about" from "acquaintance with something else". However, in the first part of his principle of the theory of denotation he pays a high price for this:

". . . denoting phrases never have any meaning, but . . . every proposition in whose verbal expression they occur has a meaning." (1905: 480)

Ungeheuer (in press, pp. 6f) has shown that with "On Denoting", Russell has developed in modern form – right down to the standard examples – Spinoza's

corresponding basic idea.¹⁷⁹ But the approach of Spinoza and Russell – says Ungeheuer – is radically opposed to that which was proposed by Suarez and Leibniz as well as by Meinong and Frege.

Since I have shown (cf. Ch. 3.1–3.3) that Lady Welby’s signification is to be included in the tradition of the “*cognitio symbolica*”, in which Leibniz, Frege, and others also stand, it can be expected that Lady Welby had considerable objections to Russell’s theory. This is just what happened in her correspondence with Russell toward the end of 1905.¹⁸⁰

First of all, Lady Welby (November 14, 1905) contended that in addition to “acquaintance” and “knowledge about” there was a third category to be considered, namely “awareness”, which for her is associated with “mother-sense” (that is, a sort of intuition). Following this point, which she did not explicate further in the ensuing discussion, she adds:

“My difficulty in your statement about the theory of denoting on p. 480 would be that Everything and Nothing (and other such words) can be used by themselves. ‘What did you give to Smith?’ ‘Nothing’. ‘And what to Jones?’ ‘Everything’. The answerer here emphatically *intends* (means) to convey a fact. This would apply in the same way to ‘a man’. ‘What did you see?’ ‘A man’.

I do not here raise the question whether we should not gain by always using ‘meaning’ in its immediate or central sense of intention: in which in speaking of the ‘present King of France’ as bald, we intend to convey what is sheer mistake or sheer nonsense. That is, it is not meaningless (or purposeless) *but senseless*.”

Russell, on the other hand, contended (November 25, 1905) that words like “everything”, “nothing”, or “a man” are, when used alone, mere abbreviations for propositions. Furthermore he intended, when he spoke of “meaning” in logical discussions, not

“*intention*, but something logical; I do not know quite how to explain what it is that I intend, & I think perhaps I could excise the word *meaning* with advantage, as I do not intend what you intend when you use the word, & your use seems more correct than mine.”

However, Lady Welby persisted that meaning is attributed by the speaker also to words used alone. For in her opinion, a word obviously need not designate an actual fact in order to be able to mean something when it is used (in order to have meaning).¹⁸¹ In her next reprieve she finally went decisively – it seems to me – further, by embedding propositions in a speech or argumentation context (November 29, 1905):

"I not only learn from students of primitive life and language but realise as part of my own deeper experience that while words like 'nothing' are now as you say abbreviations from propositions, the case was originally and now is still in some minds, reversed. Once a word was the only sentence (as before a sound the only word!) now the sentence – or proposition – is virtually the word. That is why the context becomes, in judging of the value of a word, so important. But the leading word, even of a whole chapter (like one of yours) has still a tremendous and not always recognised influence on the effect of its various contexts."

Russell's final reply conspicuously fails to go into the problem of the context. Instead, he restricts himself to making it clear that he is dealing only with the problem of the relation of language to facts, that is, the relationship between signs and a particular class of objects or referents (December 15, 1905):

"With regard to 'significs', I doubt if I differ in opinion from you, but I think the problem I am studying is not quite the same as yours. I am less concerned with what people do mean than with what things there are that might be meant or would be interesting to be meant."

Nothing is known about a continuation of this or similar discussions between Russell and Lady Welby. Instead, as of 1912 at the latest, F.C.S. Schiller entered the discussion in Lady Welby's stead and drew it to a climax in 1920 in the symposium on "The Meaning of 'Meaning'" (in: *Mind*, 29, 1920).

4.7 F.C.S. Schiller and "The Meaning of 'Meaning'"

"The Lady Victoria W—
 Invented a method to spell by;
 She taught us *Semantics*,
 And other such antics,
 Significance truly to tell by." (Schiller 1901a: 107f)

At the end of May or the beginning of June 1900 Lady Welby met Ferdinand Canning Scott Schiller (1864–1937) during a visit in Oxford. He was one of the most famous European pragmatists. Schiller had been a fellow of the Corpus Christi College in Oxford since 1897 and was then in the process of gaining a profile as a contentious opponent of the predominant Oxford philosophy.¹⁸² In July, 1900, Schiller commenced his correspondence with Lady Welby, which was to last until 1911 and which became an important document of their collaboration as well as their candid and frank mutual criticism. Schiller, who until 1900 or later had applied himself just as little as other English philosophers

of the day to the problem of meaning, eagerly adopted the basic ideas of Lady Welby's significs and came by means of them to views on meaning and communication which were very different from those of other pragmatists, including W. James, whose friend and fervent defender he was. His views then became the basis of his long lasting and harsh criticism of formal logic as represented by Bradley and Bosanquet within Oxford philosophy or by B. Russell in another frame of reference.

This turn of events was foreshadowed as early as July, 1900, when he suggested this definition of significs to Lady Welby (letter of July 7, 1900):

"it is study of the forms of expression from the point of view of/for the sake of their logical rather than of their aesthetical value".

As a basis for their discussions on the preparation of a "conceptual determination of the subject" (Schiller to Lady Welby, July 11, 1900) which Schiller considered to be necessary, Lady Welby wrote for him a paper on "The Aims of Significs", which Schiller then intended to use "for propagandist purposes" (*ibidem*). Schiller was and remained sceptical during this discussion about Lady Welby's conviction that all speakers, by means of a fundamentally altered education, could be placed in a position to and be motivated not only to heed language as an instrument of communication but also to constantly improve it. Thus he wrote her on July 29, 1900:

"In other words, when you have subducted the errors and obscurities which are due (1) to people's using the words when they have 0 to say (2) to conceal their thoughts (3) to conceal the confusion of their thoughts (4) to conceal their ignorance of a language and incapacity to handle it (5) their will to be ambiguous and desire to confuse what should be distinguished, because it suits them (6) their delights in playing with words, abusing the forms of language and misunderstanding each other of malice prepense, there remains only a perfectly manageable mass of defects: Only what is due to the inevitable growth of knowledge and aspiration. And the thinkers, who are the makers and moulders of language, are always grappling with and capable of coping with this and gradually remedying it, each in his own department."

Lady Welby countered this with her view which was fundamental to a reform of the educational system (July 31, 1900):

"I think I have earned some right to say that I believe the greatest distinctively human passion is (of course in the widest sense) *to be understood*. But in order to be understood you must understand. And I am convinced that in most cases the

obstacle is not voluntary 'laziness'. The failure to understand or to make oneself understood is often most conspicuous in the most strenuous; and in controversy betrays itself in an almost pitiful labour to explain (1) oneself and (2) one's supposed opponent."

This difference of opinion between the two was basically the result of their differing philosophical positions. For Schiller's position on the general perfectability of language was definitely derived from a basic assumption which he formulated as follows in 1902:

"It is a *methodological necessity* to assume that the world is *wholly plastic*, i.e., to *act as though* we believed this, and will yield us what we want, if we persevere in wanting it." (Schiller 1902a: 61)

However, he denied that most people have the desire to improve language. He suggested to Lady Welby that in order to influence the majority of speakers nonetheless to improve language, the strategy consistent with his philosophy be followed:

"Instead of plying men with reasons why they rationally should change their views, we should have to ply them with reasons why they should *want* to change them. Once they grasp/see those and withdraw the volitional support of their errors, these will collapse at once." (Schiller to Lady Welby, August 5, 1900)

Yet it did not take long until Schiller himself underwent and noted the experience which Lady Welby had repeatedly reported in her dealings with language: language as it exists hinders the communicability of new ideas:

"I am afraid you will be rather pleased to hear that I got 'stuck' lately for a new word to express a new idea, & that recently (in writing an essay) I was led to notice, thanks to you how tremendously difficult it was to describe the true working of our minds, owing to the intellectualist nature of our terminology." (Schiller to Lady Welby, September 26, 1900)

It can be taken as a sign of the continually growing interest of Schiller in Lady Welby's signification that at the end of October, 1900, following Schiller's and Stout's propaganda in Oxford, Lady Welby was invited to talks about signification with several fellows and tutors in Oxford (cf. Ch. 2.5). From now on, Schiller was officially one of her followers in Oxford.

The fact that Schiller informed her in April, 1901, of his "Mind! project" (Schiller April 13, 1901) also sheds some light on the relationship between Lady Welby and Schiller. He not only described her in a short verse (Schiller 1901a:

107f), like he did all his friends, but also encouraged her to contribute a paper.¹⁸³ This publication of Schiller's, which today is hardly accessible, was intended by him as a spoof on the philosophical journal *Mind*, but also as a means of persiflage of the great philosophers of the past and his philosophical opponents. Lady Welby wrote for it a dispute between an idealist and a realist in verse (Welby 1901b). Since all contributions were to be anonymous or under pseudonyms, Schiller assigned her the meaningful pseudonym "Véra Welldon".

From March till December, 1901, Schiller participated in personal discussions with Lady Welby and by means of comments on the discussion in letters in the preparations for the manuscript of *What is Meaning?*. Schiller's contribution to the discussion in his letter of June 22, 1901, to Lady Welby shows the extent to which the two of them agreed at that time and also that Schiller continued to consider their shared conception of language and communication essentially as the point of departure for a critique of formal logic:

"Altogether the problem of the communication of meaning seems theoretically insoluble:

- (1) No enunciation can ever be true except in its immediate context; repeated under other circumstances it may become something quite different and the worst of lies. There is no 'eternal' truth independent of the purpose with which it is from time to time asserted – except in the silly sense in which eternity (= the expurgation of the time-reference which has to be restored before the truth can be *used*) is product of abstraction.
- (2) Meaning depends on the psychological history of those who mean and apprehend meaning. So it varies infinitely: the same words never mean the same to different people.
- (3) As you have so well shown, words are always very inadequate and refractory vehicles of meaning and often thwart the purpose of those who try to use them by conveying (additional) meaning *of their own*."

Even if Schiller was not satisfied with the way Lady Welby presented her thoughts in *What is Meaning?*, he greeted the book's contents and mentioned it to W. James.

His reaction to Lady Welby's essay "Primal Sense and Significs" (in this volume) was similar. He accepted the basic ideas it contained and commented critically on the form of presentation and questions of the strategy of communicating such thoughts. Since the discussion of this essay is able not only to clarify Schiller's position but also Lady Welby's status as a woman among scholars who were all men, it is surely worth while reading Schiller's letter and

Lady Welby's response in full (in this volume) as a supplement to her essay on "Primal Sense".

Since mid 1909, Schiller was working on his book *Formal Logic* (1912). Thus it comes as no surprise that in his comments on Lady Welby's draft of the introduction to *Significs and Language* he criticizes that Lady Welby had not elaborated further and psychologically and logically founded her concept of meaning (Schiller to Lady Welby, April 14, 1911). For this would have been of great value for Schiller — also for his own work. Schiller wrote her:

"I have read your Introduction, as I always do whatever you write, with much interest and sympathy. It seems to me, however, that you try to begin too far on with the practical application of the theory of Meaning to Education, and that the foundation must first be laid (pardon the metaphor!) in psychology and logic. Now at present, there is not in print any *description* of Meaning as a fundamental psychological process or attitude, nor yet any recognition of its logical significance. The chapter on the *communication of Meaning* is an unwritten one both in our logics and in our psychologies. The *testing of Meaning* has only just been discovered, and the name for this discovery is *Pragmatism*. So whatever can [you] expect of benighted and bemuddled philosophic minds?"

But in so doing, Schiller misunderstood the goals of Lady Welby's significs, for in Lady Welby's view a treatment of the problem of meaning from the standpoint of psychology or of logic should be undertaken by representatives of these disciplines on the basis of more general signific groundwork. As for logic, Schiller was here called upon as an expert.

The correspondence between Schiller and Lady Welby probably came to an end shortly after the publication of *Significs and Language* in the summer of 1911. The reason was probably that Schiller was annoyed by Lady Welby's using pragmatists as an example in her book for careless and misleading use of language which she did by quoting a corresponding criticism of Russell of the use of the expression "true" in their texts (cf. Welby 1911b: 99f; Schiller to Lady Welby, June 30, 1911).

Of course Lady Welby over the course of the years critically read Schiller's work (cf. Welby 1931: 43f, 121f, 205ff, 249), yet in all the special questions involved, hardly any influence on Schiller was exercised. Whereas Schiller for his part contributed with all probability to clarifying many a problem raised by Lady Welby, little can be determined with certainty of her influence on him. Schiller himself conceded only that his reinterpretation of the aristotelian

concept of ἐνέργεια ἀκινήσις (cf. Schiller 1902b) was stimulated by Lady Welby's reflections. The original publication of "Axioms as Postulates" (Schiller 1902a: 106) also contains a reference to Lady Welby's thinking. But no reference is made to Lady Welby's signifiacs in Schiller's numerous papers in which he, from 1907 on, supports quite clearly Lady Welby's conception of meaning and communication and denies formal logic on these grounds the justification to judge the truth or falseness of a statement's meaning or of a logical conclusion as it has traditionally been wont to do. If I nonetheless claim that Schiller adopted the conception of meaning and communication from Lady Welby, the following justifications for this position can be given:

1. When Schiller first began to enthusiastically argue his case for signifiacs he had nowhere in his writing dealt in detail with the question, what meaning is. Not until 1907 in *Studies in Humanism* did he really turn to the topic of meaning (cf. Schiller 1907: 71–113).
2. True, Schiller related the conception of meaning with his pragmatic philosophy in that he declared that meaning depends on the ends or goal and, since the ends is included in the context, depends also on the context, but his conception is still different from Peirce's and also from W. James'. Schiller's conception of meaning can therefore not simply be considered to have been adopted from other pragmatic theories.
3. Not only did Lady Welby attempt, long before Schiller, to clarify the concept of meaning and to point out the dependence of meaning of an uttered word or sentence from the context in which it stands from the speaker's point of view. What is more, as early as 1896 she criticized logic by proving that it neglects the context of an utterance (Welby 1896: 34) and that in addition to other concepts that of meaning is also completely nebulous and is part of an enormous terminological confusion (Welby 1896: 34–37).
4. Schiller's explications of meaning completely agree with Lady Welby's ideas in all essential aspects. This is not only true of Schiller's publications during Lady Welby's lifetime, but also for the later ones, indeed, it is particularly plain in his contributions to the symposium "The Meaning of 'Meaning'" (cf. Schiller 1920; 1921a; 1921b).

Insofar as Schiller adopted Lady Welby's position and criticized formal logic on its grounds, he actually continued Lady Welby's discussion with Russell of the year 1905 and thereby urged Russell to clarify the concept of meaning in logic. Only by this means did the cited symposium come about in 1920. ¹⁸⁴

In the chapter "The Relation of Logic and Psychology" (Schiller 1907: 71–113) Schiller argues as follows: Meaning is a psychical fact. But the intellectualis-

tic logicians, by abstractly ignoring the concrete nature of meaning as a psychological process, have confused the entire matter and obscured the problem of understanding. The point of departure of a logical evaluation must always be that which the person making a judgment actually means. And in the process it must be taken into account that he made the judgment with his whole personality and that his whole personality contributed to the intended sense. Furthermore, it is a matter of the problem of communicating the meaning, that is, of understanding. It must therefore also be ascertained, how the person making a judgment was understood. The related difficulty, which is again and again overlooked rests in the fact that in practice, meaning must be communicated in “‘propositions’ ” and mediated by linguistic symbols. And Schiller continues:

“But such propositions must always be ambiguous. They *may* mean whatever they can be used to mean. They are blank forms to be filled up with concrete meanings according to requirements. They afford, therefore, no security that the meaning which they are *taken* as conveying is identical with that which they were *intended* to convey. Until we have assured ourselves of this, it is vain to discuss ‘the meaning’ of the assertion, or to attempt its logical evaluation. Consequently the logical treatment of meaning is *meaningless*, until these psychological preliminaries have been settled.” (Schiller 1907: 86f)

We find a similar position in a book of Schiller’s which is hardly known at all nowadays, but which is all the more worth reading in that it develops in great detail his criticism of formal logic from a communication point of view:

“What alone may claim to be something of a novelty is the diagnosis of the malady which has paralysed Logic from the beginning, and rendered it so unsatisfactory a subject of instruction, and so impotent to guide the course of human thinking. *It is NOT possible to abstract from the actual use of the logical material and to consider ‘forms of thought’ in themselves, without incurring thereby a total loss, not only of truth but also of meaning.*” (Schiller 1912: ix)

Finally, in 1920, at the Oxford Philosophic Congress, a symposium on the topic “The Meaning of ‘Meaning’ ” took place in which Schiller, B. Russell, and H. H. Joachim participated and on which further critical statements were published in *Mind* in 1921 by Schiller (1921a; 1921b), C. A. Strong (1921), and, above all, Alfred Sidgwick (1921), who further expanded and supported Schiller’s position. In his contribution to the symposium, Schiller first starts, like Lady Welby, with a clarification of the expressions which can be relegated to the semantic field

of “meaning”, and then concentrates on the expression “meaning” itself, differentiating three conceptions of “meaning” which all are suggested by linguistic formulations in English: a) “an intrinsic property inherent in objects [including words]”; b) “a relation”; c) “a contribution to reality made by the subject” (Schiller 1920: 386). In rejecting the first conception, he, like Lady Welby, rejects the everyday view of “plain meaning”, and in choosing the third conception, he adopts her conception. Thus, he describes “meaning” as

“essentially an *activity* or *attitude* taken up towards objects by a subject and energetically projected into them like an *a* particle, until they, too, grow active and begin to radiate with ‘meaning’” (1921: 389).

True, it is striking that Schiller does not adopt Lady Welby’s differentiation between “meaning”, “sense”, and “significance”, but this is not crucial for my contention that Lady Welby influenced Schiller. I am referring only to the conception of meaning, and the similarity here reaches right down to the formulations. Thus, for example, Lady Welby also used the figure of speech “radiate with meaning” on different occasions (cf. e.g. Welby 1903: 119f; 1931: 143, 286, 340).

Finally, let me cite one last piece of evidence for my thesis. In connection with her differentiation between “sense”, “meaning”, and “significance”, Lady Welby repeatedly spoke of “values” or “expression values”. This was also adopted by Schiller when he wrote (1920: 397):

“It is the intimate connexion between *meaning* and *value*. To attribute meaning and to attribute value seem to be closely akin and almost the same thing. Both are personal attitudes and activities, which in practice seem inseparable, though, theoretically, meaning may perhaps be said to be prior to value and a condition thereof. Both are all-pervasive, *i.e.*, both form atmospheres through which all ‘objects’ are observed. Both are ‘subjective’ in origin, *i.e.*, are attitudes expressive of total personality. Both are individual, *i.e.*, the meanings and values a man recognizes are primarily those which appeal to him, and may be peculiar to him.”

Schiller did not succeed in reaching his goal with his criticism of formal logic, just like Lady Welby did not succeed in institutionalizing her signifiacs. And yet due to the fact that Schiller not only took up Lady Welby’s criticism of formal logic, but again and again presented it untiringly and polemically he did manage – as Russell also admitted (Russell 1959: 13f) – to motivate at least English logicians to deal with a neglected but central problem of their discipline.

4.8 Giovanni Vailati

“. . . and I cannot forget that you have been among the very first of European thinkers to encourage me in my most difficult enterprise, the need of which you had already felt.” (Lady Welby to G. Vailati, Dec. 28, 1907) 185

The Italian pragmatists have sunk into oblivion to a similar degree as Schiller did, even though the reasons for this are probably more varied. Aside from the fact that they published primarily in Italian and for this reason alone did not find a very large audience abroad, the splintered nature of the group of Italian pragmatists certainly was a major factor. Giovanni Papini, who was influenced mainly by James, and Giuseppe Pezzolini, a follower of Schiller, were the leaders of the “pragmatismo ‘magico’ ”; Giovanni Vailati and Mario Calderoni on the other hand were under the influence of Peirce and Dewey and represented a logical, analytical, and scientific development of pragmatism (cf. Thayer 1968: 324ff). G. Vailati (1863–1909) was first G. Peano’s assistant at the University of Turin, then from 1895 on assistant to V. Volterra, the professor for “*mecanica razionale*”. From 1899 to 1905 he taught mathematics in secondary schools, and from 1905 until his death he worked on a commission for school reform.¹⁸⁶ Calderoni (1870–1914), who worked closely together with Vailati, was a jurist and political scientist. He corresponded with Peirce for a while.

Vailati’s works span a wide thematic field, reaching from the formal techniques of logic and mathematics to the history of science, the logical analysis of language, and the pragmatic analysis of the teleological character of conceptualizations. However, due to the differences in the approaches Vailati pursued in analyzing language, it is doubtful whether one can designate Vailati’s semantic analysis as “pragmatic” as Thayer (1968: 335) does, or whether his work in this field does not rather defy the common labels, as Facchi (1952: 48) feels. In the following I am not concerned with answering this question, on which matter I would probably concur with Facchi, but rather with sketching the relations and common aspects between Vailati and Lady Welby. To be sure, Thayer (1968: 334, 338) called attention to the relation between the two of them, but the extent of their exchange of ideas as well as the striking agreement in some of their views escaped him. I do not believe that the facts known to me would justify speaking of a great influence of Lady Welby on Vailati or vice versa. Yet some impulses of Lady Welby’s can be documented which were meaningful for Vailati and which were used and pursued in a manner that is characteristic of him.

In 1898 Vailati began corresponding (cf. Vailati 1971: 133–150) with Lady Welby after having read her book *Grains of Sense* (Welby 1897a), and he sent her two lectures which indicated to her his interest in the semantic clarification of terms. Lady Welby thereupon promised him a reprint of “Sense, Meaning and Interpretation” (Welby 1896; letter to Vailati of June 8, 1898). Vailati’s reaction to it, as well as his two references to Lady Welby’s works in a speech of December 1898 (cf. Vailati 1911b: 209, 224) make it clear that even then he recognized certain common interests. Vailati wrote her (June 16, 1898):

“I will be very glad to receive a copy of your article on ‘Sense, meaning and interpretation,’ being myself engaged in analogous researches, whose results I propose to resume next year in a little Essay ‘on the function (rôle) of the word-questions (querelles des mots) in the development of physical sciences and especially of mechanics.’” 187

He continued to report to her on his work in logic, especially on the function and logical value of the syllogism, and he closed by asking her for bibliographic tips on his main topics: “history of mathematical and physical sciences, analysis of the scientific methods of discovery and ascertainment, mathematical logic” (ibidem). On “Sense, Meaning and Interpretation” Vailati wrote one month later (July 12, 1898), among other things, the following lines, which at the same time explicate his position on the clarification of meaning:

“I beg to be excused for my retard in answering to your kind letter, and thanking you for sending me your interesting articles on ‘Sense, meaning and interpretation’. I have read them with much attention and they have been to me a source of more valuable informations and important suggestions than any other writing that I remind to have ever read in *Mind* or other ‘Philosophical’ Periodicals, on the same subject.

The question as to the ‘meaning’ of the words seems to me to be a particular case of the more general question as to the meaning (or import) of propositions, in so far as, to decide what we mean to assert when we apply a name to a given object is a question of the same kind as the more general one: to decide what we mean to assert when we enunciate a proposition or verbal formula whatever.

The common view of ‘definition’ according to which words only can, and must, be *defined*, seems to me to leave out of consideration a most important class of ‘definitions’: *the definitions of phrases* composed of words that considered by themselves would have no meaning at all. Can we, for example, determine the meaning of *prepositions*, like *in, of, out, from* etc (especially when used in metaphysical sense, as is nearly always the case in metaphysical discussions) without *defining* or determining the meaning of the propositions in which they enter to

connect other words? Can we attribute any meaning to words like *to be, to act, to produce to represent, to manifest* etc. except than by attributing some meaning to propositions in which we use them in connection with other words who, in their turn, have perhaps not any meaning except in so far as we *call their* meaning the meaning of the phrases in which they enter? If such phrases are defined and their meaning univocally determined, we can suffer no danger from the ambiguity or even the meaninglessness of the words composing them; while on the contrary to no useful purposes would serve our definitions of words if, by them, we were not enabled to rightly interpret the meaning of the propositions in which such words are combined."

It is obvious that Lady Welby could not agree with this view of Vailati's on the value of definitions. Her handwritten notes on Vailati's letter also make it clear, where their differences lay. Whereas Vailati in the second paragraph of his letter printed here still uses "meaning" in Lady Welby's sense (i.e. intention), he uses "meaning" in the third paragraph in the sense of "sense" or "lexical meaning". Furthermore, "to be, to act . . ." are "phrases" for Lady Welby. And like Lady Welby replied to Russell in 1905, that propositions are today used like words, so she remarks on Vailati's sentence "If such phrases are defined" that "They *become* words . . ." This is only logical from Lady Welby's communicative point of view. For phrases, once they have been defined, can then be used in communication like words, but they are then, just like words, dependent on their context with respect to their meaning in that they fulfill a function defined by the speaker. Thus, Vailati was – and this is supported by his subsequent publications – on the way to recognizing the influence of the context, but he was still largely bound to traditional semantics (e.g. that of Bréal).

Lady Welby had her assistant, Miss Meyer, send Vailati the desired list of literature in the same year (August 24, 1898)¹⁸⁸, but the correspondence therewith came to an end for the time being. Not until 1903 did Lady Welby resume the correspondence (February 28, 1903) by reminding Vailati of his former interest in signifiics and offering to send him a copy of *What is Meaning?*. Apparently Vailati read her book immediately, for as early as March 18, 1903, he wrote to her about it:

"I have read it with much interest and with almost general agreement, especially so far as it concerns what seem to me the most vital points of your contention. Among these I do reckon:

1) Your insisting on the need for a critique of imagery, for a testing of analogies and metaphors (especially when 'unconsciously' or 'semi-unconsciously' used, as

it is always the case in the *current* and *vulgar* ones).

2) Your warning against the tendency of pedantry and school-learning to discourage the development of linguistic resources, by the inhibitions of that spontaneous variations that are the necessary condition of organic growth.

3) Your valuation of the practical and speculative importance of raising language from the irrational and instinctive to the rational and volitional plane: in which it is considered as a means or a contrivance for the performance of determined functions (representative, inferential, communicational etc) and for the attainments of given ends. – I would subordinately object to the word '*Significs*' that it could, as it seems to me, with some advantage, be substituted by *Semiotics* which has already been appropriated to the very same meaning by no less authority than that of Locke (Essay IV, 21 in fine)."

I have already mentioned that Lady Welby did not want to replace "Significs" by "Semiotics", and why (cf. Ch. 2.5), and Vailati and Calderoni finally agreed with her when they came for a visit at Harrow in the summer of 1903. Lady Welby told various correspondents of the enthusiasm with which the two of them greeted her significs during their discussions in Harrow. Lady Welby wrote her daughter Nina Cust about it (Welby 1931: 126):

"After unsparing criticism of the obscurity and confusion of thinkers like Kant and Hegel, Schopenhauer and the modern materialists, pantheists, hedonists, monists, idealists, etc., they said 'But your Significs brings Plato and Aristotle into line with all that is most modern in knowledge and that promises most for the future. Even the work of Locke and J.S. Mill' (of whom they are great admirers) 'has fallen short of what Significs will do in time. It is a work like that of Nicholas of Cusa preparing for a Copernicus. It gives us, in exchange for a small, a great – for a poor, a rich – world of light. It must react upon all religion and theology, on practical as well as moral life, setting them free from the distorting pressure which deforms and sterilises. It is at the heart of things – the first glimmer of the answer and the guidance for which we are looking.'"

The correspondence which developed from this event, which was of such importance for Lady Welby, continued until July, 1908, and is a sign of the great interest which each of them felt for the latest work of the other. Lady Welby, who did not understand Italian, had 11 articles by Vailati, two by Calderoni, and one by Papini completely translated during this time. Although Lady Welby occasionally was critical of the fact that Vailati, in some of his works, dealt with semantics rather than with the broader field of significs (cf. Welby to Vailati, February 8, 1908), she still considered the majority of his works to be

contributions to significs, although Vailati never addressed himself to her sign theoretical and linguistic ideas. Thus she wrote him on May 28, 1905:

“You may imagine how great a satisfaction to me it is to find the subject which I call ‘Significs’ so ably taken up as it is by you as of course I should be unable to develop it on the logical side as you so admirably do.”

But what led Lady Welby to this assumption? For one thing, there were several common interests, and for another there were similar views on the necessity and direction of a reform of the educational system. Whereas the former can vaguely be described as a clarification of the causes of lack of uniformity, ambiguity, and confusion of terminologies, the latter are definitely more pronounced in publications (cf. e.g. Vailati 1911d; on this, Welby 1931: 214) and in Vailati’s practical activities in the mentioned reform commission, for which Vailati (28 Août ‘06) expressly requested suggestions from her:

“Si vous aviez des idées ou des informations à me communiquer sur ces sujets, vous m’obligeriez beaucoup.”

A further common aspect which they shared existed in the field of their methods. Vailati used a comparative method which consisted of a) confronting different disciplines with one another in order to arrive at a mutual clarification of conceptions and terms; b) gaining valuable new results by applying the procedures of one discipline to another (cf. Facchi 1952: 42ff) and pointing out the underlying unity of the two. He used this method, for example, in “La grammatica dell’algebra” (1908; Vailati 1911a: 871–889), and he also found this method to be present in mathematics and in pragmatism, where it led to the following results in his estimation (Vailati 1906b: 483):

“It is thus that both constituencies have come, each for itself and in its own way, to recognize the unreality of a great part of the distinctions which have been handed down from scholastic logic to the modern ‘theories of knowledge,’ and to subject others of these distinctions to critical analyses from which they have emerged in a sense transfigured, restored, enriched with new and more important significances.”

In this method, Lady Welby apparently recognized her procedure of translation when she wrote him (February 27, 1907), referring to the passage from Vailati’s essay quoted above:

“. . ., you are describing part of the work which I would sum up under the term Significs.”

Vailati's article "I tropi della logica" (Vailati 1908; 1911c) was, however, actually stimulated by Lady Welby's ideas (in *What is Meaning?*) and represents a direct acceptance of her thesis that traditional figures of speech misguide language users to images which are irreconcilable with the scientific state of knowledge and that these tropes must therefore be replaced by "true" tropes or analogies. It can be seen from her letters to Höffding (March 28, 1905) and Peirce (February 23, 1906) that Lady Welby also realized this. She wrote Peirce (Peirce/Welby 1977: 58):

"I wonder if you would care to see an article by Professor G. Vailati, now of Florence on the Metaphors of Logic?
He takes my ground and points out that the images of 'support' 'dependence' etc have a more dangerous effect on the ordinary mind than is usually realized."

Right at the beginning of his article, Vailati maintains that the advantages and disadvantages of 'physical' metaphors for the description, presentation, and classification of mental attitudes constitute a field of research as yet not investigated. He wants to take the publication of *What is Meaning?*, which calls attention to the significance of this topic, as the occasion for some observations of his own.

He then proceeds to differentiate three types of images which are used to give expression to the fact that a given affirmation can be deduced from another one:

1. "Those in which recourse is had to the conception of 'upholding' or 'supporting,' as, for instance, when it is said that given conclusions are 'based' upon, or 'founded' upon, given premises, or that they 'depend' upon (or are 'attached' to) them. It is thus that we speak of the 'foundations' of geometry, the 'basis' of morals, etc."
2. "The metaphors of 'ascending' or 'descending,' as when we speak of consequences which 'descend' from or may be 'traced up' to certain principles, or when we compare the 'course' or running of an argument to that of a river, and speak of propositions which 'derive' from, 'flow' from, 'spring' from, 'emanate' from, the premises from which they are 'drawn.'"
3. "The metaphors referring to the relation of 'containing' or 'including.' These may be subdivided into two groups, according as the conclusion is regarded as 'contained' in the premises, or the latter as 'contained' in the conclusion. In the first case the premises are conceived as 'implying' (*implicare*), in the second as 'explaining' (*explicare*), the conclusion which is deduced from them." (Vailati 1908: 310)

He then studies each type of linguistic imagery with respect to the thereby suggested notions of the deduction process and these, in turn, as to their scientific tenability and provability. He comes to the result that every one of the tropes considered suggests false or too one-sided notions and that they therefore also fail to aptly describe deductions. But just as Lady Welby supposed that one cannot do without tropes in such descriptions, Vailati also finds himself obliged to find a new metaphor or analogy for each case of the three types. They are selected by means of the same criteria as in Lady Welby's case, namely their agreement with the most recent scientific insights. Vailati's results for the first type of trope is, for example, as follows: These figures of speech suggest that their advantage, which we deduce from them with respect to the certainty of our opinions that one proposition is deducible from another, resides solely in the fact that the first proposition would gain by means of the process of deduction a portion of the greater certainty of the proposition from which it was deduced. In reality, however, the opposite is not less frequent and not less important. For the truth or certainty of conclusions are well suited to increase the certainty of their premises. And Vailati concludes his treatment of this type of trope with the conclusion:

"The relation between premisses and conclusion of a piece of deductive reasoning would not, therefore, be correctly described by saying that the latter is 'supported' by the former, unless the common image of one object 'supported by another' be substituted by the more general and more scientifically precise one of bodies which are 'attracting each other,' and which, when in contact, do support each other by reciprocal pressure. Of a pebble resting on a rock it is equally correct to say that the whole earth does support it as to say that the whole earth is supported by it." (Vailati 1908: 312)

Lady Welby's influence on Vailati was, to be sure, slight, probably even slighter than she herself would have assumed, but Vailati did after all contribute to the creation of a stream of thought which was related to significs and which finally merged with developments within the Vienna Circle, which, in turn, had a certain connection with the signific movement in the Netherlands.¹⁸⁹

4.9 C. K. Ogden's 'Apprenticeship' with Lady Welby

"You see it is now or never with me; and as you are going to set to work seriously you ought at least to take full advantage of my long pioneer work." (Lady Welby to Ogden, Dec. 27, 1910)

It has been suspected for a long time that there was a connection between Ogden and Lady Welby. Attempts have been made above all to seek a connection between Ogden's and Richards' book *The Meaning of Meaning* and Lady Welby's writing. However, evidence of contact between Ogden and Lady Welby seems to have been rediscovered for the first time by Thayer (1968: 305ff) and then by Hardwick (1977b: xxxi). In *The Meaning of Meaning*, namely, Ogden went to great pains in his rare references to Lady Welby (cf. Ogden/Richards 1952: ix, 160, 192, 279, 281, 287f) to obscure his earlier collaboration with her and to distance himself from signification, which he had previously greeted with joy. It is true that Ogden and Richards refer to Lady Welby as a pioneer in the serious treatment of the problem of meaning, and they also mention her main works, but in the chapter dealing with the conception of meaning as the intention of the sign user (1952: 191ff), they give indications that they may not even have understood Lady Welby's signification (cf. 1952: 192). They treat the works of Stout and Schiller (1952: ix, 135, 160ff, 179, 191ff) the same way. Their treatment of their conceptions of meaning, which are more than just similar to Lady Welby's, also demonstrates little effort to understand. Instead, only short quotes taken out of context are presented in order to summarily dismiss their supposedly understood contents.¹⁹⁰ This may very well not be the result of individual judgments, which could perhaps be justified, of the authors being criticized, but appears rather to be a characteristic of the largely superficial argumentation of the entire book.¹⁹¹ Whereas contemporaries of the authors such as Russell¹⁹² and Ramsey (1924) were definitely in a position to recognize such shortcomings of the book, its significance has in later years been largely overestimated. This is not to say that the value of *The Meaning of Meaning* for the further development of research should be diminished here. For it did indeed contribute to the fact that questions involving the theory of signs attained growing attention in a number of different disciplines, although this occurred without the ideas of Ogden and Richards having paved the way for further research.

Any attempt to determine when and where Ogden first dealt with questions involving the theory of signs must follow the path outlined by the first sentence of the preface to the first edition of *The Meaning of Meaning*:

"The following pages, some of which were written as long ago as 1910, have appeared for the most part in periodical form during 1920–22, and arise out of an attempt to deal directly with difficulties raised by the influence of Language upon Thought." (Ogden/Richards 1952: v)

In 1910, Charles Kay Ogden (1889–1957) was a student in Cambridge (Magdalene College). In the same year he took his First Class Classical Tripos. In a letter dated November 15, 1910, he turned to Lady Welby with the following request:

"Dear Lady Welby,
I am collecting materials for a paper I hope to read to a Society (of which I enclose a 'card' by way of excuse and introduction) some time in the future on 'Significs'. I should be able to draw attention to the confusion produced in the discussions we have (at least once a week!) by the lack of the *linguistic conscience*' you speak of, and the unwillingness to attempt its acquisition."

Ogden was a member of "The Heretics" and had, as he further wrote, not only read *What is Meaning?*, but had also heard of the book *Essays on Significs* planned by Stout. From Lady Welby he wanted information on the major progress in her research since 1903 for one thing and, for another, access to literature on her speciality, which was in part difficult to obtain. Ogden closed his letter with the sentence:

"I hope you will excuse my impertinence in thus troubling, my only excuse being that I might be of some service in interesting intelligent people in 'Significs' in the future, and the impossibility of one person's coming across much in so large a field of co-operation."

Since, during the last years of her lifetime, Lady Welby was especially concerned with finding someone to represent significs and work for its institutionalization, the tenor of Ogden's letter fit her expectations exactly. She immediately invited Ogden to visit her and a few days later sent him reprints of more recent publications she had written, adding that (November 23, 1910):

"You have helped to give me courage now to carry my long and arduous labours to a practical conclusion.
. . . Let me repeat my wish and hope that you will be able to induce some of your friends to come down some day for a little talk, & c." 193

Ogden planned first of all a speech in Oxford and then a speech for “The Heretics” for February on “The Progress of Significs”. In both cases he intended not only to discuss the practical application of signific research results to the weekly discussions of the “Heretics”, but at the same time also a sort of propaganda for significs as a discipline. Right from the start it was part of Ogden’s strategy to limit himself to the “more strictly linguistic side” of significs, because he expected the most positive reactions there, and only to hint at “the wider bearing of the question” (Ogden to Lady Welby, November 25, 1910).

Ogden’s speech at the end of November or the beginning of December in Oxford had the following structure (Ogden to Lady Welby, December 13, 1910):

- “1. Introduction – importance of subject in general – objects, etc.
2. Historical survey – Protagoras 194 – Locke – Tooke 195 – Welby – Sidgwick, etc.
3. Future publication – Stout – Welby – Encyclopaedia 196, etc.
4. General consideration of causes of backwardness [of language] (*Religion*, etc.)
5. Causes of confusion in *DISCUSSION* – Education – Metaphor – *Definition* – Rules for treatment of words pro tem, etc.
6. Suggested Remedies – (1) Education of ‘Significian’
(2) Univeral Language, etc.
7. Summary”

The audience’s reaction to the speech, which was attended by about 15 people, was not particularly positive, which was probably typical of Oxford philosophy of that time. According to Ogden, the listeners’ main objection was (*ibidem*):

“. . . Metaphysical Knowledge is all that can clear verbal ambiguities; – knowledge of *things* & Dialectic method not ‘Significs’ of which there is no ‘need’ & so on!!”

This speech of Ogden’s contains four thematic fields, which were to form the backbone of Ogden’s entire further treatment of questions of meaning: 1. The historical study of sign theoretical approaches (cf. Ogden/Richards 1952: 31–44, 160–184); 2. the negative influence of religion on the development of language; 3. definitions as a means of clarifying and pinning down meaning (cf. Ogden/Richards 1952: 109–138); 4. universal languages as a means of improved international understanding (cf. for example Ogden 1930). Ogden’s treatment of the first two of these topics inevitably led to disputes with Lady Welby.

In spite of the fact that his experience in Oxford was not exactly encouraging, Ogden was determined to carry on with his propaganda campaign for significs. He planned to write articles for journals with different orientations and at the

same time he wanted to find a place for a chapter on significs in one of the " 'Handbook' series" which were popular at the time. The topics he envisaged were:

"The practical bearing in discussion – *of Significs*. The Influence of Religion – of Education – on Significs. Locke's, Lady Welby's work for *Significs*. Significs and *Definition*. . .

The great thing is to popularise the *word* [Significs] and then let the books (commonsense in experience) speak for themselves. This I *can* do." (ibidem)

With respect to the evaluation of the classical Greek philosophers, Ogden at that time and, to the same extent, later was of the opinion that:

". . . it seems to me they got themselves into a worse tangle of words than even we have done, & for far less reason! . . .

This was obvious even to themselves – Protagoras for instance in the earliest times made protests against the confusions caused by the use of all kinds of careless expressions (Plato Theaetetes 168 e etc)

It is only the influence of these disastrous people who support a 'Classical education', & thereby hinder all progress in Significs, which has caused the prevalent opinion to the contrary as far as I can see." (Ogden to Lady Welby, December 26, 1910)

In this matter, Ogden obviously shared Schiller's point of view (cf. Schiller to Lady Welby, June 22, 1901; Schiller 1908), although less differentiated than the latter. Lady Welby, on the other hand, held especially the Greek philosophers and their language in high esteem, assuming that it was much more flexible and adapted to the state of knowledge in those days than was the case for the English of her times. She therefore did not relent until Ogden finally supported his claim by naming so-called authorities (Riehl, Schiller, and H. Spencer) and by examples. The result was then, however, more differentiated than Ogden's first sweeping judgment.

A second point of contention was Ogden's judgment of the role of religion in conserving unfit linguistic images and Ogden's related defense of the "Heretics" standpoint. This must have seemed to her like a reincarnation of J. Huxley's campaign against a view of religion and the church which was for her long since outdated, for which reason the obsolescence of the "heretic" standpoint resulted in her opinion (cf. Lady Welby to Ogden, May 5, 1911).

At Lady Welby's persistent urging, Ogden finally came for the first time to Harrow for several days at the beginning of January, 1911, to look through her

voluminous collection of material, her correspondence with prominent philosophers, and some of the literature which he could not obtain in Cambridge. After his return to Cambridge he wrote to her about his stay in Harrow (January 9, 1911):

“Now that I am safely back with all the treasures you have entrusted to me, I want to thank you again for all your kindness during the pleasant days I spent with you. I have never had such a feast of ideas and only hope I may be able to make the best use of what you so freely bestow.”

During this visit, Ogden must have received the Peirce letters which he then copied in Cambridge and which he later published in excerpts in *The Meaning of Meaning*. The letters in question were Peirce’s letters of Oct. 12, 1904, December 23, 1908, January 31, 1909 (on “Existential Graphs”), and March 14, 1909. In addition, she gave him Dewey’s “Studies of Logical Theory” and “Logic and Significance”. This first visit of Ogden in Harrow had two major results: a) quite an intense study of Peirce’s theory of signs and, above all, of his “Existential Graphs”; b) the nature and extent of Lady Welby’s literature called his attention to significant Italian (Vailati, Calderoni, etc.) and German or Austrian authors (Tönnies, Mauthner, Meinong, Martinak, etc.) and thereby to the necessity of learning Italian and German.

He wrote her about Peirce’s letters (January 12, 1911):

“I think Dr Peirce’s letters wonderful, and shall do my best to understand his Existential Graphs! I wish he would bring ‘Significs’ into the title of his new work ¹⁹⁷ which I hope is nearing completion.”

During his second visit in Harrow at the end of March, 1911, when he once again borrowed books and manuscripts from her, including Peirce’s “A Syllabus of Certain Topics of Logic” (Boston 1903), his interest in Peirce’s ideas was again predominant. He wrote about it to Lady Welby (March 30, 1911):

“I am much impressed by Dr Peirce and am proposing to try to master his general position. At present I want get some idea of his Existential Graphs, for he seems to consider them of great importance for Significs, & I am inclined to pay some attention to his advice, after reading his ‘Classification of Signs’, in the letter I borrowed last term. . . .

I enjoyed my week-end with you immensely and if you know all that I managed to read you would be sure I made the best use of my opportunities! It was most auspicious that the E.B. article ¹⁹⁸ should arrive while I was with you.”

It is not known how long Ogden ended up studying Peirce's writing and letters, but in May and in September, 1911, he inquired as to the progress of Peirce's planned book *Essays on Meaning* (cf. Peirce/Welby 1977: 133f). However, Ogden mentioned Peirce's "Existential Graphs" – and this should come as no surprise – for the last time in his letter of April 12, 1911. Anyway Lady Welby informed Peirce (May 2, 1911) that in C.K. Ogden she had found him an earnest student who carefully studied everything she was able to show him about "Existential Graphs" (cf. Peirce Welby 1977: 138f). As early as March, 1911, Ogden started learning German and Italian and only six months later he told Lady Welby of his plan to study Meinong, Martinak, and Mauthner. Works by these authors were dealt with 12 years later in *The Meaning of Meaning* (cf. Ogden/Richards 1952: ix, 35, 44, 50, 194, 232, 276).

On February 19, 1911, in Cambridge Ogden made his speech for "The Heretics" on "The Progress of Significs". A summary of the speech was apparently published in a journal in April, 1911. Further texts which Ogden subsequently worked on but which were not yet published at that time were: "Ambiguities of Economic Terminology"; "Significs of Definition", a study of the comparison of money and language – a topic which Tönnies had also dealt with (Tönnies 1899/1900: 324ff) and of which Lady Welby had always been very sceptical – and, finally, "The Magic of Words" (cf. Ogden/Richards 1952: 24–47, xii; but also Greenstreet 1907).

In Lady Welby's dispute with Macdonald, her assistant at the time, on the contents and structure of the introduction to *Significs and Language* Ogden took sides with Macdonald: the introduction should begin with a definition of significs which, like the rest of the text, was to concentrate solely on the study of language. For he found a general reference to "Significance" not to be "good propaganda" (cf. Ogden's letters of March 21 and April 22, 1911). Ogden's advice on this matter was guided primarily by considerations as to the most effective way of presenting significs to the public and thus contributing to its breakthrough as an independent discipline. However, such considerations were foreign to Lady Welby and this is probably not the least of reasons why she did not achieve as much success as other less original contemporaries did with their publications. On the other hand, she was not ready to limit the appeal of significs which extended far beyond linguistic phenomena for tactical reasons alone. For she feared that to do so would influence the further development of significs in a one-sided manner (cf. Lady Welby to Ogden, March 24, 1911).

As of October, 1911, Ogden began to concentrate on his studies again, which left him but little time for dealing with signifiics. At the end of 1911, Ogden ended his year of 'apprenticeship' with Lady Welby, during which he had received from her so many stimulating ideas and so much assistance and during which he with all probability developed the fundamental ideas and goals characteristic of his later scientific and pedagogic work. His last message to Lady Welby was a postcard dated December 24, 1911, from Berlin, in which he laconically informed her that he could not accept her invitation to come to Harrow and that he would be the editor of *The Cambridge Magazine* as of January, 1912.

Ogden, who had also founded this journal, remained its editor until 1922. During 1912 and 1913, he visited various schools and universities abroad to study methods of language teaching. In 1923, together with Richards, he published *The Meaning of Meaning*, and in 1927 he organized "The Orthological Institute". Within the framework of research of this institute, he developed "Basic English", which, consisting of only 850 words, was supposed to be an "International Auxiliary Language" for all those who spoke no English (cf. Ogden 1930: 9). However, "Basic English" did not establish itself, despite the interest of the English government in it. The question whether the idea for "Basic English" was also stimulated by Lady Welby's writing (cf. e.g. Welby 1897a: 18ff, 32ff, 48–54, 87ff) shall go unanswered here. In any event, "Dr. Philip Raven" in H.G. Wells' *The Shape of Things to Come* (Wells 1933: 322ff) has handed down this opinion. ¹⁹⁹

4.10 Lady Welby and Signifiics in the Novels of H.G. Wells: Some Remarks

"The new Science [of Signifiics] was practically unendowed, it attracted few workers, and it was lost sight of during the decades of disaster. It was revived only in the early twenty-first century." (H. G. Wells 1933: 324)

H. G. Wells (1866–1946) and Lady Welby wrote each other letters sporadically between 1897 and 1910, and Wells probably visited her once or twice. Lady Welby took up contact with him because she thought highly of some of Wells' views in his early publications and she hoped to persuade him to handle in a book the pedagogic problem raised by signifiics. Wells proved not to be very interested and not even the perseverance with which she sent him her works – including *Grains of Sense*, *What is Meaning?*, and unpublished essays – appeared to particularly impress him, judging from his reaction to them in let-

ters.²⁰⁰ However, in at least three novels by Wells one finds the echo of his acquaintance with Lady Welby and his knowledge of significs.

In 1904, Wells published "A Modern Utopia. A Sociological Holiday" as a novel in sequels in *The Fortnightly Review*, and he there presented not so much his expectations for mankind as his desires (cf. Wells 1934: 554). There, in § 4 he pursues the question:

"But what sort of language would one have the world speak, if we were told the miracle of Babel was presently to be reversed?" (Wells 1904: 747)

And after some introductory reflections the story-teller says to his companion:

"Now you as a botanist would, I suppose, incline to something as they say, 'scientific.' You wince under that most offensive epithet – and I am able to give you my intelligent sympathy – though 'pseudo-scientific' and 'quasi-scientific' are worse by far the skin. You would begin to talk of scientific languages, of Esperanto, La Langue Bleue, New Latin, Volapuk, and Lord Lytton, of the philosophical language of Archbishop Whateley, Lady Welby's work upon Significs and the like." (Wells 1904: 747)

The narrator then confronts the conception of a scientific language with no ambiguities, precise as mathematical formulas, and its conceivable consequences, with his own conception:

"The language of Utopia will no doubt be one and indivisible, all mankind will, in the measure of their individual differences in quality, be brought into the same phase, into a common resonance of thought, but the language they will speak will still be a living tongue, an animated system of imperfections, which every individual man will infinitesimally modify." (Wells 1904: 749)

Lady Welby protested against such a misconception of significs in a letter to the editor of *The Fortnightly Review* (Welby 1904b) and presented there once again her idea of a thoroughly plastic language such as she and Wells both had conceptualized as a goal to be strived for.

Later Wells no longer made such an error with respect to the evaluation of significs. After "A Modern Utopia" he apparently familiarized himself better with Lady Welby's significs, and he then wrote her in a letter from the year 1910 among other things:

"I've thought of you a lot & *The New Machiavelli* which I've recently finished has a [lot ?] of Significs in it."

The New Machiavelli was published in 1911, and Wells called this novel “one of my worst and one of my most revealing” (Wells 1934: 661). For reasons which I shall not go into here, it caused a great scandal which even today is understandable only to a few initiated people. However, Lady Welby or significs are not mentioned anywhere in the novel. So what could Wells have meant by his remark to Lady Welby?

“Book III. The Heart of Politics” in the first chapter describes the development of “ideas of statecraft” of Remington, the narrating figure of the novel, who was bestowed by Wells in various respects with autobiographical aspects. Towards the end of the chapter, Remington formulates the convictions at which he has finally arrived. The core of these convictions, which are previously summarized by the formula “love and fine thinking”, seem to me to be that part of Wells’ novel which he himself probably considered significant:

“I wanted thought like an edge of steel and desire like a flame. The real work before mankind now, I realised once and for all, is the enlargement of human expression, the release and intensification of human thought, the vividder utilisation of experience and the invigoration of research – and whatever one does in human affairs has or lacks value as it helps or hinders that.” (Wells 1911, vol. II: 53f)

In the following chapter Remington looks for allies who will help him to realize his goals by means of politics. Like Lady Welby, he hopes for truly wide reaching changes by means of changes in the system of education:

“The line of human improvement and the expansion of human life lies in the direction of education and finer initiatives.” (Wells 1911, vol. II: 56)

Further passages through which Lady Welby’s thoughts possibly shimmer are contained in Remington’s speech to the “Pentagram Circle”, which Wells himself called “a remote sketch of the Coefficients” (Wells 1934: 662). Among others, men like Sidney Webb and B. Russell belonged to this “talking and dining club” (Wells 1934: 650). In his long speech, Remington relates his convictions (see above) with considerations of eugenics which are later (Wells 1911, vol. II: 131f) discussed in more detail. Some of these ideas are directly reminiscent of the discussions within “The Sociological Society” on Galton’s “Eugenics” in 1904 and 1905, in which Lady Welby also participated (cf. Ch. 2.6).

Twenty-one years after Lady Welby’s death, Wells once again dealt with the topics language and universal language in his novel *The Shape of Things to Come: The Ultimate Revolution* (Wells 1933). There Wells presents his “matured

theory of revolution and world government” (Wells 1934: 640). Here Wells solves the difficulties of writing an anticipatory history by an ingenious procedure: Dr. Philip Raven, an outstanding official of the League of Nations, has been dreaming for some time of a book, a history of the world, written in the twenty-second century. And upon waking, he remembers the main passages of the book and writes them down. When Raven dies, his friend Wells takes on the task of editing Raven’s manuscript – which comprises the major part of *The Shape of Things to Come* – and to fill in gaps in the manuscript with commentaries and transitional paragraphs.

In the chapter “The Modern State in Control of Life”, § 7 deals with “Language and Mental Growth” (Wells 1933: 322–325). In § 7 Raven’s manuscript is taken up again with a report on one of the unexpected accomplishments of the twenty-first century, namely the rapid dissemination of “Basic English as the lingua franca of the world” on the one hand, and “the even more rapid modification, expansion and spread of English in its wake” (Wells 1933: 322). The victory of English with simplified spelling and standardization in pronunciation over other widespread languages is thereby based on the use of Basic English. Raven continues:

“Basic English was the invention of an ingenious scholar of Cambridge in England, C. K. Ogden (1889–1990), who devoted a long and industrious life to the simplification of expression and particularly to this particular simplification.” (Wells 1933: 322)

There follows a comparison of Ogden’s accomplishments with those of James Joyce in the area of inventing a new sort of English, and Raven adds:

“This convenience spread like wildfire after the First Conference of Basra. It was made the official medium of communication throughout the world by the Air and Sea Control, and by 2020 there was hardly anyone in the world who could not talk and understand it.” (Wells 1933: 323)

Ogden prefaced his book *Basic English* by exactly these two passages from *The Shape of Things to Come* from the fourth edition (1933) on. To this he added a quotation from the preceding paragraph. These passages were placed under the title *The Future of Basic*, before his own introductory text. He adopted other versions of these quotations in further books on Basic English or in books such as Neurath’s *International Picture Language* (Neurath 1936) which he published in the series “Psyche Miniatures” and which he found to be in a direct

or indirect relation to Basic English. However, Ogden failed to indicate the further linguistic development which Wells envisaged and the connection in which he placed Ogden's work on Basic English.

In Raven's manuscript we find directly after the quotation adopted by Ogden:

"It is from phonetically spelt Basic English as a new starting-point that the language we write and speak today developed, chiefly by the gradual resumption of verbs and idioms from the mother tongue and by the assimilation of foreign terms and phrases. We speak a language of nearly two million words nowadays, a synthetic language in fact, into which roots, words and idioms from every speech in the world have been poured." (Wells 1933: 323)

A "Dictionary Bureau" takes on the function of the "international court of voluntary appeal on all questions of expression" (Welby 1897a: 82) described and called for by Lady Welby as early as 1897. And language finally attains a hitherto unknown "delicacy and precision of expression" (Wells 1933: 323), which goes hand in hand with an accelerated development of the individual brain and finally with the rise of a collective brain, "the Encyclopaedia, the Fundamental Knowledge System" (Wells 1933: 325).

Thus Wells once again took up the main outlines of a future development of a world language which he had already sketched in "A Modern Utopia". This world language arose from the merging of the English language with elements from other languages. But this time he added to this idea the component of the development of the individual brain to the creation of a collective brain.

In the second half of § 7, Raven finally reports on the scientific events which were brought about by all these changes in linguistic and intellectual fields. The connections which are elaborated here show Wells to be an attentive observer of the path of significs and Ogden's continuation of it. However it cannot be said whether Wells' vision of the future of significs will actually come true until mankind reaches and consciously experiences the twenty-first century:

"An interesting and valuable group of investigators, whose work still goes on, appeared first in a rudimentary form in the nineteenth century. The leader of this group was a certain Lady Welby (1837–1912), who was frankly considered by most of her contemporaries as an unintelligible bore. She corresponded copiously with all who would attend to her, harping perpetually on the idea that language could be made more exactly expressive, that there should be a 'Science of Significs'. C. K. Ogden and a fellow Fellow of Magdalene College, I. A. Richards (1893–

1977), were among the few who took her seriously. These two produced a book, *The Meaning of Meaning*, in 1923 which counts as one of the earliest attempts to improve the language mechanism. Basic English was a by-product of these enquiries. The new Science was practically unendowed, it attracted few workers, and it was lost sight of during the decades of disaster. It was revived only in the early twenty-first century." (Wells 1933: 324).

5. Notes

1) For a review of the history of the signific movement in the Netherlands cf. Mannoury (1949: 6–20; 1969, reprinted in Welby 1983) and Schmitz (1983). In the present study I shall leave out the beginnings of the Dutch movement with Frederik van Eeden and Jacob Israël de Haan as well as their contacts and correspondence with Lady Welby. Instead I shall present a separate detailed historical study of the first three decades of significs in the Netherlands in the near future. This procedure I find justified by the wealth of material pertaining to this topic and by the special characteristic of the developments in the Netherlands, where signific thought has had considerable influence on mathematical, legal, linguistic and psychological theories.

2) Thus there exists in the Netherlands even today a small circle of scholars who, grouped around the journal *Methodology and Science*, are engaged in efforts to continue the work of the "International Society for Significs" (on this subject cf. *Methodology and Science* 1973). In addition, all major Dutch dictionaries and encyclopedias contain entries on "Significa", even the most recent ones.

3) Eschbach's introduction to Lady Welby's *What is Meaning?* (1983) has already shown that this expectation is not too high.

4) According to a personal communication from Prof. Paul Chipchase (Cambridge) valuable material from Lady Welby's scientific remains probably was burned when Denton Manor, the seat of the Welby family in Grantham, Lincolnshire, was used to house hospital personnel, evacuees, etc. during World War II. The old manor house was later destroyed and replaced by a smaller one. In addition the scientific remains must have been stored for a certain length of time after 1931 in a damp place, which possibly ruined some material (communication from Prof. H. Bowsfield, York University).

5) Hardwick's representation is, however, very incorrect. For Ogden did not cite Peirce's letter of December 14, 1908, but the one of Dec. 23, 1908. Furthermore, the list of letters between Peirce and Lady Welby given by Hardwick, fragments of which were published by Nina Cust (Welby 1931) is not complete. Missing are one letter from Lady Welby to Peirce (June 29, 1904) and two letters from Peirce to Lady Welby (Dec. 16, 1904, and Dec. 23, 1908). On the other hand, Peirce's letter of Oct. 12, 1904, was not published by N. Cust contrary to Hardwick's list.

6) It only remains somewhat unclear whether Lady Welby's letter of March, 1904, (cf. Peirce/Welby 1977: 16) is dated "March 20th 1904" as in Hardwick's edition, or "March 26th. 1904)" as it appears on the copy of her letter to be found in the Welby Collection (York University).

7) This is also the result of investigations undertaken up to now by Prof. Paul Chipchase, Cambridge (personal communication). – The professional part of her scientific remains, discovered up to now, is however, also far from complete.

8) "The Lady Welby Library is available, under safeguards provided in the Rules for the use of the University General Library, for Students of any Nation, and its use is not limited to Members of the University." (University of London n.d.a: 1) Some of the missing books are, for example, those written by Frederik van Eeden, *The Principles of Mathematics* by B. Russell (1903) and *First and Last Things* by H.G. Wells (1908); it was proved that she owned all these books.

The thematic classification of the "List of Books in the Lady Welby Library" is very informative (University of London n.d.a). Among the 984 books in this library, 341 are classified under "Religion", 145 under "Philosophy", 96 under "Psychology", 149 under "Mathematics" and various natural sciences, 44 under "Education" and 81 under "Philology", with the rest being classified under nine other subjects.

9) Lady Welby had the habit of making copies of practically all her own letters; a fact which is confirmed in her letters found in the original. Thus she apologized, for example, to Peirce for a slip of the pen in one of her letters to him (cf. her letter to Peirce dated January 21, 1909; Peirce/Welby 1977: 90). What Hardwick calls "draft versions" were probably copies as well. The difficulty to distinguish drafts from copies probably arises from the fact that the transcripts sometimes differ. Some of these – done by Lady Welby herself or her secretary Miss Nellie Carter – seem to be literal and typed copies whereas others were written in a sort of typed shorthand with the vowels of some words often being left out. Since Lady Welby wrote her letters as far as possible by hand, there weren't any duplicates of these available, which could have been used afterwards to differentiate between the copies and the drafts. In my opinion most of the typed versions of her letters are copies, and this seems to have been the opinion of N. Cust as well, who would have been familiar with her mother's habits and who based the correspondence she published on typed versions written in longhand as well as in shorthand. Moreover, my opinion is based on the fact that in addition to the typed and complete versions of her letters there are also hand written ones, which however contain more catchwords than full sentences. The latter are in my opinion real drafts of letters. Proceeding with this opinion, I had no difficulties in following the various steps of the contents of a correspondence. Such difficulties would have been expected if any one of the typed versions had resembled the typical or usual form of a draft. So as not to keep silent about the outward differences between the versions, already mentioned, I will point these out when quotations are taken from versions of Lady Welby's letters written in shorthand. Aiming at an improved legibility of the quotations I will reproduce them in longhand and correct them in the case of obvious mistakes.

10) Sir Charles Welby as well as his son Sir Oliver had generously lent out parts of the collection to institutions and individual persons during the previous years. It is unknown how much of the collection was thus lost or presented as a gift. One occasion is known where a gift was made: Frederik van Eeden's letters to Lady Welby were presented to the Frederik van Eeden-Museum in Amsterdam and probably before that to van Eeden's son.

11) Frederik van Eeden's letters to Lady Welby were sent to van Eeden's son or to the Frederik van Eeden-Genootschap by Mrs. Henry Cust on "December 9, 1932".

12) When quotations are taken from documents found in F. Tönnies' scientific remains, I will furnish the letters written to Tönnies with an additional number Cb 54.56 and those written by him with the number Cb 54.51, in order to indicate the origins of these documents.

13) Mrs. W.K. Clifford has made similar observations.

14) N. Cust's publication of Lady Welby's correspondence made the same impression on the reviewers of both books (cf. Anonymous 1929: 30; Oakeley 1932: 524, 527).

15) In this connection as well as with the first three decades of Lady Welby's life cf. Cust (1928: 13-26).

16) Concerning Lady Emmeline Stuart-Wortley cf. Cust (1928: 14-18), S. Lee (ed., 1898: 109f) and Boase (1965: 813f).

17) In a letter (May 30, 1911) to the *The Daily Mail*, which was not published according to my knowledge, Lady Welby describes how her canoe capsized on the river Chagres in the Isthmus of Panama in 1850 and how she was saved from the caymans and from drowning by a goldminer.

18) After I wrote this I found some evidence which would probably prove my opinion in *What is Meaning?* (Welby 1903: 319):

"I even look forward to an epoch of 'group personality': when two or three shall be grouped together for the highest work, each supplying the lack of the others and thus overcoming the one-sided and constructive tendency of the single individual, and producing a fresh form of genius."

19) Certain parts of this letter copy are written in a sort of typed shorthand.

20) Bolland's letters had consequences of which he probably knew nothing more than ten years after he wrote them. As the followers of the signific movement in the Netherlands were discussing in 1918 as to who they should invite to be a member of the planned "International Academy for Practical Philosophy and Sociology", the mathematician G. Manoury suggested the name of Prof. Bolland. This suggestion was rejected, among other reasons, because of Bolland's letters to Lady Welby, who had related their contents to F. van Eeden.

21) This is also N. Cust's opinion (1928: 19) although the many anecdotes she mentions from these two years concern only the probably agreeable and pleasant side of life at the court of Queen Victoria, where the young Maid of Honour enjoyed painting, drawing and playing the piano during her free time.

22) An undated letter from Lady Augusta Bruce (later Lady Augusta Stanley) is essential in fixing the date of this illness. In spring 1861 Lady Augusta Bruce became the

Queen's Bed-Chamber Woman and gave up this position after her marriage on Dec. 23, 1863. This letter belongs to this period, for she writes about events at the Court and ends it in the way Court personnel usually do. Although only an illness with awful consequences is talked of in this letter, Lady Welby wrote in her own handwriting on the first page of the letter: "on my threatened deafness".

23) An article on the value of so-called "artificial tympanic membranes" exists in the Lady Welby Library in London. In this article a "constant strain to listen" is mentioned as a result of deafness, "causing nervous prostration, headache and giddiness by the very effort" (Purves 1888: 3), in which connection Lady Welby noted on the margin of the text: "My case: only strenuously resisted". – She wrote to F. van Eeden (Nov. 22, 1908): "I gave up music because I became deaf, and had not, like Beethoven, the power to rise above this."

24) Cf. her letter to F. Tönnies dated September 5, 1898.

25) Lady Welby placed much importance on the correct use of her title. A fact which forced her to correct various correspondents, Peirce included, and explain the connections to them.

26) Lady Welby had at least one more son who was born in 1864. This is revealed in a letter from Lady Augusta Stanley (July 25, 1864) to Sir William Welby. I was unable to find out when he died.

27) Hardwick (1971: 601; 1977b: xviii) does not seem to know *Links and Clues*. For, he believed that Lady Welby became conscious of the necessity for a "new science of meaning" only after supposedly disappointing reactions to this book were registered. However, this book must have been well received; a fact which is confirmed by the reviews and reactions of her correspondents as well as by the publication of a second and extended edition, which is not mentioned by Hardwick.

28) This quotation as well as the following are taken from the second edition of *Links and Clues*.

29) What is called "evangelical orthodoxy", "evangelicalism" or "evangelical movement" has just as little to do with Lady Welby's intentions or methods as the "Oxford Movement", another religious movement dating back to the first half of the last century. In this connection I refer to the same source (namely: Somervell 1929) as Hardwick (1977b: xviii), who is of the opinion that Lady Welby had favoured "the various evangelical religious movements". The fact that she corresponded with representatives of evangelicalism is insufficient to support Hardwick's assumption, but it reveals much more – just as her correspondence with an "Antichristian Theist" (Welby 1883a: 290ff) does – how far she went in her efforts to arrive at a new understanding of religion and the church.

30) Cf. concerning these theologians the *Encyclopaedia Britannica* (1964, vol. 14: 84; 1964, vol. 23: 524).

31) This quotation is taken from a section which was not as yet included in the first edition.

32) With regard to the position of a wife vis à vis her husband one should compare the observations made by F. van Eeden during his visits to England. Cf. van Eeden's letter to Lady Welby dated Aug. 4, 1895 (Eeden/Welby 1954: 11f).

33) Most of these privately printed texts were dated by me according to a chronological list compiled by N. Cust. I was able to check most of the information by using indications found in Lady Welby's correspondence. Only Cust's dating of "The Focus" (Welby 1887e) seems to be inaccurate, as the letters, discussing this planned but unrealized project to start a magazine with the above mentioned title, were written already in 1884 (cf. Welby 1929: 83–85). Furthermore, in her list N. Cust mentions six texts which should have appeared or would appear in *The Expositor* (1886). From these I was unable to find "Darkness", "That they may be one even as we are one" and "One Voice" in *The Expositor* or anywhere else, whereas "Light" (Welby 1886m) which was published in it is not mentioned in N. Cust's list.

34) The "Questions for Teachers" (Welby 1885e) are probably referred to here, the answering of which presupposes an extraordinary performance in the field of critical Bible interpretation.

35) This quotation is the continuation of the motto given at the beginning of this chapter. The whole letter exists only in a version written in shorthand.

36) I was able to identify this contribution with the help of a letter written by Paul Carus (May 29, 1890) to Lady Welby, in which he agreed to publish "anonymously in letter form" a text written by her on the topic "New wine in old bottles". The text is an excerpt from a letter written by Lady Welby to one of her correspondents in 1888.

37) Cf. her letters to F. van Eeden (Nov. 22, 1908) and to Sir James Crichton-Browne (Sept. 26, 1889; Welby 1929: 188f).

38) Lady Welby in a letter to F.C.S. Schiller (Welby 1931: 46).

39) In the signfic movement in the Netherlands, the mathematician G. Mannoury, above all, pointed out later the problems connected with such expressions and terms.

40) Cf. Jackson (1884). – So as to arrive at a correct understanding and "translation" of the original scientific texts she made sure that the authors of these texts as well as other scientists gave her their support and their final opinion.

41) As far as I know, the term "psychological philology" was used by Lady Welby for the first time in a letter to Prof. Croom-Robertson written on Nov 5, 1889. She seems to have used " 'Semantics' " as "a new science, the science of meaning in its change" for the first time in a letter written to Sir F. Pollock on Dec. 19, 1890.

42) Clifford's book was first published in 1879. However, Lady Welby owned only the second edition published in 1886. K. Pearson's *The Grammar of Science* (1892) was just as important for the development of her thoughts. Referring to this book she wrote to Arnold Taylor (March 4, 1892): "It is almost like an essay on the science of significance which applies alike to science and art." Pearson developed Clifford's ideas on the philosophy of science, which were related to those of H. von Helmholtz and Ernst Mach (cf. on Clifford: *Encyclopaedia Britannica*, vol. 5, 1964: 913f; F. Pollock 1886).

43) Clifford, like Lady Welby, tried to make religion and science compatible. Cf. Pollock (1886: 21f).

44) Pollock (1886: 24f) painted a very impressive picture of the implications the “Darwinian enthusiasm” had on the scientific thinking of Clifford and his contemporaries. Even the last decade of the previous century was marked by this enthusiasm; however, not as strongly as before.

45) “I propose, accordingly, to call these inferred existences *ejects*, things thrown out of my consciousness, to distinguish them from *objects*, things presented in my consciousness, phenomena.” (Clifford 1886: 275)

46) Lady Welby quoted form this book at first in 1896 and then again after 1900. However, her correspondence and later events reveal that she sought discussions with Romanes as a result of this and similar publications.

47) Cf. Lady Welby’s letters to Tyndall (Feb. 8, 1890) and Romanes (Jan. 31, 1890).

48) Lady Welby searched for all sorts of excuses to avoid appearing at public readings. Thus she wrote to G.L. Gomme, Folklore Society (Sept. 19, 1891): “Then may I plead that a weak voice, deafness and extreme shyness (partly its result), would I fear greatly discount any advantage from being present?” – Of three readings between 1890 and 1891 she read only the last one herself. This did not change even after 1900.

49) Cf. letter from Lady Welby to G.L. Gomme, Folklore Society, written on August 20, 1891.

50) Cf. “Primal Sense and Significs” in this volume.

51) In this letter Lady Welby asked Romanes which topic, in his opinion, she should deal with first and then publish. Evidently, Romanes did not share Lady Welby’s emphasis of the problem of meaning, for he answered (May 11, 1891): “If this could be done, I think the first question would be much the most interesting; . . .”

52) Thus she wrote to Paul Carus (January 14, 1892): “. . ., I have reason to hope that the unworked subject of ‘Semantics’, that is the study of Significance itself, its origin and development, its scope, its conditions, its implications, – not merely in speech and thought but in action and conduct – may receive a distinct impetus as one consequence of this exceptional gathering.”

53) On June 3, 1892, Lady Welby wrote to Max Müller: “At a little gathering of scientific men which took place here in Easter week the subject which may perhaps be called Semantics (unless a better term be suggested) was considered. And I hope, as one practical result, that a little document may be circulated among the members of the Psychological Congress in August, pleading for more explicit warnings (to students and general readers) of the confusing and often almost contradictionary character of some of the commonest psychological metaphors.”

54) This letter exists only in shorthand.

55) This need not mean that Stout’s ideas concerning these terms were solely influenced by Lady Welby. Both of them were probably congenial with regard to the criticism of terminology. With regard to the special point, concerning the criticism of the difference between ‘inner’ and ‘outer’ experience, in Stout’s text, the influence of his teacher James Ward is however, evident: Stout took various sentences from Ward’s analysis of this dif-

ferentiation without indicating that they were quotations. Lady Welby had also cited the same passages from Ward's article (cf. Ward 1911: 547) in her pamphlet (1892c: 8f).

56) In this connection, Lady Welby had set great hopes on van Eeden. This is revealed quite clearly in her letters to van Eeden. — She wrote to W. Fuller, editor of *The University Review* (Feb. 7, 1906): "I just now have a friend staying here of whom the world will soon I think hear something though he carries modesty to extremes. I mean F. van Eeden the Dutch poet." (This letter is written in shorthand.) Another meeting on semantics was to have taken place in autumn 1892. Professor Sully wanted to organize it and invite competent psychologists and philosophers (cf. Lady Welby's letter to J.M. Baldwin of Aug. 3, 1892). According to my knowledge this meeting never took place.

57) The letter exists only in a shorthand version.

58) Lady Welby appears to have concerned herself with these etymological questions as early as 1892. For on May 28, 1892, she wrote to Romanes: "Meanwhile what I most need is an interview with Dr. Murray, that I feel would set me 'well and truly' on my road." Her exchange of letters with Sir James Murray appears, however, not to have begun until 1894. She probably went to see Murray in the summer of 1892 in Oxford.

59) Korzybski (1950: 280) was so far probably the first and only one to see this fact and to express it: "Lady Welby (. . .) formulated a more organismal theory under the name of 'Significs'."

60) "Sensal" was probably used by Lady Welby for the first time in a letter to G.F. Stout (October 31, 1895): ". . . I would ask whether we don't suffer for want of such a term as 'sens-al' instead of 'verbal' in contrast to real, as we are there concerned with a question of 'sense' while 'verbal' seems needed for questions arising from the use of words in their aspect *apart from sense*, questions of sound, of form, of length, of rhythm, & c.'" — This letter exists only in a shorthand version.

61) This shorthand version of the letter bears the same date as Vailati's letter, which it answers.

62) This is probably a draft of a letter. The typed text contains numerous hand written corrections.

63) This probably means John Earle, M.A., Rector of Swanswick, whose *Philology of the English Tongue* appeared in a completely revised version in 1887 (Earle 1887).

64) Cf. Darmesteter (1886). This English version appeared in print one year before the French one.

65) Under the last mentioned "théorie des significations" is to be found as the equivalent to significs. This was proposed to Lady Welby by Lalande (26 juillet, 1903), which she rejected however. For, as she wrote Lalande (August 13, 1903) ". . . 'Significs' means the study of the Significal Method and not only a 'theory of significations' (or meaning)." Lalande, however, stuck to his proposal (cf. Lalande 1976: 965).

66) Titchener, who had studied under Wundt in Leipzig among others, had been acquainted with Külpe for quite some time. He also did the translation of Külpe's *Outlines of Psychology Based upon the Results of Experimental Investigation* (London 1895). As a

condition for his membership on the committee, Külpe required only “a reassurance easy to give (I don’t know what)” (Stout to Lady Welby, Sept. 4, 1896).

67) Fouillée (1838–1912) was the author of *L’Évolutionnisme des idées-forces* (Paris 1890) among other works.

68) Frédéric Paulhan (1856–1931) published *Activité mentale* (1889) and *Types intellectuels* (1896).

69) Émile Boirac (1851–1917) tried to reconcile the theories of Fouillée and Renouvier on the reality of the external world with one another in his dissertation *L’Idée du phénomène* in 1895. In 1896 he was professor for philosophy at the Lycée Condorcet in Paris.

70) This resulted in Paul Carus’s declining to publish the announcement in *The Open Court* and in *The Monist* solely on the basis of Titchener’s assurances.

71) Titchener suggested extending the deadline – probably also because of the insufficient form of his first announcements in the USA (cf. Stout to Lady Welby, Nov. 24, 1896).

72) The same is true of the parable “A Royal Slave” of the same year (Welby 1897b).

73) These were children of Sir Charles Glynne Earle Welby. The eight-year-old was “Dickie” (Lady Welby to S. Alexander, June 19, 1897). In a later letter to F.C.S. Schiller (May 27, 1900), however, she speaks of “two grandchildren of 10 and 9 years old”. The older child could have been “Dorothy”, about whom I was unable to discover any biographical data.

74) At this conference a “Committee of Terminology” was actually drawn up “to consider and report upon the practicability of securing uniformity in the use of abbreviations and in other matters of terminology” (Sedgwick, ed. 1899: 99). I was not able to determine whether this was the result of the discussion of Lady Welby’s pamphlet.

75) The corresponding accompanying letter from Carus to Peirce was published by Hardwick (Peirce/Welby 1977: 1). The other persons on Carus’s list were: Major J.W. Powell, Dr. William T. Harris (Commissioner of Education in Washington), Prof. R.M. Wenley (University of Michigan), Prof. John Dewey, Prof. William James, Prof. Josiah Royce, Rev. Mr. Sterrett (President of the Philosophical Club, Washington, D.C.), Lester F. Ward (Washington), Prof. Joseph Le Conte (Paul Carus to Lady Welby, Oct. 8, 1898).

76) Concerning these dates cf. Eeden/Welby (1954), Lady Welby’s letter of March 15, 1901, to F.C.S. Schiller and her letter of March 10, 1900, to H.W. Paul.

77) The German philosopher Rudolf Eucken (1846–1926), 1908 Nobel Prize winner for literature, aroused Lady Welby’s interest because of his historical and terminology critical works (above all Eucken 1896), which she considered related to her own (cf. Welby 1897a: 33).

78) Lady Welby held the work of the Danish philosopher Harald Höffding (1843–1931) in high esteem, mainly because of the concept of value Höffding held: “– for your own keynote, that of *Value*, is very close to it [significs], indeed the two ideas while not losing distinction, may be said to interpenetrate.” (Lady Welby to Höffding, Jan. 4, 1909; the letter exists only in a shorthand version.) – The first contact with Höffding as well as with Eucken came about by means of F. Tönnies.

79) In the case of this text, in Lady Welby's handwriting with numerous corrections, we are probably dealing with the draft of a letter.

80) Stout was at that time in Oxford, as was Baldwin. Lady Welby had told them both that she was looking for an assistant. As can be seen from a letter from Lady Welby to Baldwin (July 18, 1901), it was, however, not Baldwin who recommended Greentree to her.

81) This letter exists in a partly shorthand version. – "Philosophical Dictionary" refers to Baldwin's *Dictionary of Philosophy and Psychology* (Baldwin, ed. 1901–1905).

82) Cf. Lady Welby's letter to John Neville Keynes (Oct. 21, 1902), in which she conveys her intention of substituting "Studies" for "An Essay", which she actually ended up doing.

83) The letter exists in a partly shorthand version.

84) Tönnies wrote this text without a title in pencil on three large sheets of light brown paper. The text is undated and unsigned, but the handwriting is definitely Tönnies'. On the back of the first sheet is written in Tönnies writing: "My obj.

that you cannot
-all expressions that
we use, must be provisional"

Tönnies sent the commentary together with a letter (Nov. 9, 1901) to Lady Welby, whereby he did not, however, make any further reference to the contents of the text included.

85) Above this word there is written "indirekten" (indirect) which is commented on in English in the margin: "one of the most important sense we have".

86) Next to this line in the margin stands the English word: "correlates".

87) Bréal concludes his evaluation of the book with the two sentences: 'J'espère cependant que l'élite du public européen saura lui faire l'accueil qui lui est dû. Je ne doute pas qu'il ne vous place au rang des premiers penseurs de notre temps.' (Letter to Lady Welby, 4 mars, 1903)

88) In addition to these prominent German scholars, Tönnies wanted to send a copy apiece to the protestant theologian Adolf von Harnack and to Prof. Martius, experimental psychologist in Kiel as well. However written and oral reactions to the book were not forthcoming. Tönnies reports of Wundt only that he promised to read the book soon (cf. Tönnies to Lady Welby, Dec. 15, 1903). It follows from his letter (July 30, 1903) to Höffding that he also sent a copy to Harald Höffding.

89) William Macdonald was the editor of the *Turner House Classics* since 1901 and the editor of *The Temple Autobiographies* from 1903 onwards. In 1895 he translated *Parasitism, Organic and Social* by J. Massart and E. Vandervelde; in 1901 H. deBalzac's *Pere Goriot*. In 1911 he published Robert Burns' *Songs and Lyrics*, in 1903 *The Works of Charles Lamb*. – Branford wrote about him to Lady Welby (Welby 1931: 189): ". . ., the critic whom his friends think the man of soundest and subtlest judgement of thought and style now Walter Pater and Matthew Arnold are gone."

90) This letter has not been published up to now: it is printed in full in chapter 4.5.

91) From 1909 onwards Tayler was a lecturer for biology and sociology at London University and at the same time minister of the Unitarian Churches, Newington Green and Lincoln.

92) Lady Welby wrote to the physicist Clifford Allbutt about the text published by Greenstreet (Nov. 22, 1906): It “. . . was taken (with my glad consent of course) almost bodily from my writings (unpublished).” Greenstreet translated many philosophical and scientific works from French into English and was editor and author of mathematical school books.

93) Hardwick reconstructed this letter with the help of a draft found in Lady Welby's correspondence (cf. Peirce/Welby 1977: 61).

94) Jerusalem, who was greatly responsible for introducing W. James to German-speaking countries, was at that time a lecturer on philosophy and pedagogics at the University of Vienna.

95) Kellner is the author of *Historical Outlines of English Syntax (1892)* and of *Restoring Shakespeare (1925)*. At that time he had been Professor at the University of Czernowitz since 1904.

96) This project is first mentioned in a letter from Lady Welby to H. Höffding written on April 18, 1909.

97) The ‘memorandum’ on *Essays on Significs*, which Slaughter sent at that time to the selected authors, suggests eight topics, all of which deal with questions which Lady Welby considered important for significs. Hardwick published the text of the ‘memorandum’ (cf. Peirce/Welby 1977: 176f).

98) This also explains the extraordinary efforts made by Lady Welby to persuade various authors and especially Peirce to contribute articles, although this book was supposed to be published without her involvement or co-operation.

99) Slaughter (1878–1964) was at that time (1905–1912) a lecturer at the University of London and later a lecturer on civics and philanthropy at the Rice Institute, Houston, Texas. He wrote *The Adolescent (1910)* and *Social Forces in Latin America (1912)*.

100) The quotations are taken from Peirce's letters of May 25, 1911 and July 25, 1911.

101) Hardwick published two letters written by Slaughter to Peirce which, together with the correspondence between Peirce and Lady Welby, reveal something of the course of events (cf. Peirce/Welby 1977: 176f). Peirce's situation at that time is revealed much more clearly in the letter he wrote to Slaughter on Sept. 2, 1909, a copy of which was sent to Lady Welby by Slaughter. For this reason this letter is printed in full in chapter 4.5.

102) For information on the whole project, namely *Essays on Significs*, I used the following letters: M. Calderoni to Lady Welby: Jan. 20, 1910 and July 30, 1911; Lady Welby to Calderoni: September 9, 1909, Jan. 3, 1910 and Dec. 14, 1910; Lady Welby to Höffding: July 29, 1911 (a draft); Höffding to Lady Welby: Sept. 8, 1909; Lady Welby to Sir James Murray: Jan. 15, 1910. After Lady Welby's death Stout evidently planned to use these *Essays on Significs* to put together a book in Lady Welby's memory. It was supposed to include a contribution from the Dutch significs adherent Jacob Israël de Haan and be published in 1913 (cf. Haan 1912: 481). Even this book was never published.

103) Lady Welby sent this poem, "A Confession in Doggerel", to Peirce (Feb. 23, 1906) who analyzed this poem in detail in a draft of a letter to Lady Welby (March 9, 1906) (cf. Peirce/Welby 1977: 58, 187). – The first poem which was published in a magazine appeared in 1890 (cf. Welby 1890f).

104) Lady Welby's confidence in the judgements of Stout and Geddes in this connection is revealed in the following sentence taken from her letter to D.G. Hogarth (July 20, 1903): "Both men have forbidden me to destroy any of my rubbish because I am no judge of what ought to be preserved!" – The letter is written in shorthand.

105) I owe this indication to G. Ungeheuer, in whose seminar on Leibniz's "Meditationes" I first became acquainted with the problem of "cognitio symbolica". Ungeheuer dedicated the last years of his life to the study of "cognitio symbolica" with respect to the history of science. Unfortunately, he was not destined to complete this major important work.

106) I.e. one can speak of the space of a time, but not of the time of a space. – Checking the possibility of a reversal of linguistic expressions was for Lady Welby one of her procedures of language analysis since about 1890.

107) Quite some time ago Ungeheuer had pointed out to me that Bergson also was among the authors who explicitly dealt with the problem of "cognitio symbolica", which Ungeheuer quite rightly designated as one of the "central problems of our history of ideas" (cf. Ungeheuer in press).

108) Cf. also Welby (1931: 67f). – Lady Welby was also engaged in a translation which was actually published. Prof. Williston S. Hough (George Washington University) sent her his portion of the translation of a book by R. Eucken (1909) from German into English so that she could look through it from a signfic point of view (cf. Welby 1931: 198f; Hough/Gibson 1909: ix). Lady Welby, who did not know any German, wrote R. Eucken on her qualification for such a task (September 27, 1907): ". . . I would like to point out that it is a wholly impersonal service, belonging to the employment of a method which I would call Significs, and hope to see adopted by the younger generation."

109) Taken from a text entitled "Brief notes upon the article 'Significs'" by F. Tönnies. Tönnies sent Lady Welby this text on July 4, 1908, that is nearly four months after she had handed the manuscript of the article in to the editors.

110) This letter exists only in a shorthand version. – Lady Welby wrote a similar letter to Paul Carus two days later.

111) Taken from the draft of a letter of Lady Welby's from July 29, 1911, in her handwriting. The letter is addressed to H. Höffding and continues: "(which I hope will be followed by a more satisfying one dealing with the overwhelming evidence of its need)."

112) F. Tönnies wrote Lady Welby in the same tenor (June 23, 1911).

113) This letter only exists in a shorthand version.

114) Shortly after the death of Lady Welby, J.I. de Haan traveled to Harrow together with F. van Eeden. De Haan's article of 1915 indicates that he saw the draft of this book in Harrow and that the title "Handbook of Significs" probably was suggested by Lady

Welby herself. Judging by the quotations which de Haan took from the draft of the book, this book probably had as its goal a sort of language criticism in which proofs of the insufficient and untimely state of language were to be presented and analyzed.

115) For details on this and on the following cf. the letter from Lady Maria L.H. Welby, Lady Welby's daughter in law, of Feb. 25, [1912] to Mrs. Peirce (Peirce/Welby 1977: 153) and the letters from Nellie Carter, Lady Welby's secretary, to F. van Eeden of Feb. 14, 1912, Feb. 26, 1912, March 12, 1912, March 30, 1912, and April 7, 1912.

116) This poem was possibly inspired by the following text passage in a book by Max Müller (1888: 82) which Lady Welby possessed: "We know matter as a name only, but as a name which conveys exactly what we have put into it, neither more nor less . . . People now speak of decaying matter, and matters of importance. 'What is the matter?' people say, and they answer, 'It does not matter.'"

117) Hardwick (1977b: xxxiii) could very well be right in assuming that Lady Welby was inspired to write this parabel by a sentence by Jowett which she cited in an earlier article (Welby 1893b: 521): "The greatest lesson which the philosophical analysis of language teaches us is, that we should be above language, making words our servants and not allowing them to be our masters." (Jowett: *Dialogues of Plato*) Jowett thus takes up the tradition that goes back to Horace and Lady Welby continues it in a changed form. Later (1903: 58) she also adopts the formulation of "the tyranny of language".

118) In exactly this context Ungeheuer formulates the summing up: "The will for the exactness of knowledge produces the ineffectivity of the communication of knowledge: . . ." (Ungeheuer in press)

119) The reader may convince himself that the majority of the central theses of Lakoff/Johnson (1980) were anticipated by Lady Welby (cf. on this point Lakoff/Johnson 1980: 3, 5f, 59, 109, 125, 179, 184, 229f). The insufficient differentiation of the various tropes is the same in both cases. Lady Welby's strong point compared to the approach of Lakoff/Johnson is that she includes above all analogy in her reflections in addition to the tropes.

120) Since Plato the main danger of symbolic knowledge has been seen precisely in this way, which gives rise to the possibility of chimaeras.

121) That Lady Welby should place such importance precisely on analogy is plausible in all communication not only with respect to this basic assumption. Rather, analogy plays an essential role also in the process of cognition as a first step toward the understanding of laws and connections in nature and society (cf. Emmet 1941; Nagel 1961: 107–111).

122) This quotation is taken from: R.L. Nettleship: *Philosophical Lectures and Remains*, vol. 1, 1897, p. 86.

123) In precisely this sense H. Bergson also uses the expression "traduction" (Bergson 1903: *passim*), which at the same time goes to show a further agreement between Lady Welby and Bergson.

124) The differentiation between direct, indirect and doubly indirect experience corresponds to that between "sense", "meaning", and "significance" in Lady Welby's work (cf. Ch. 3.3).

125) Questions as to a possible gradation of language later became essential for the studies within the *signific* movement in the Netherlands (cf. Mannoury 1949: 38–45). Independently of the Netherlands, Schächter handled these questions in an astoundingly similar fashion (cf. Schächter 1935).

126) The gradation of meaning in this sense is naturally the result of the thoroughly tropical nature of natural languages. In contrast to other representations of this phenomenon (such as that of J.H. Lambert, cf. Ungeheuer 1980b), Lady Welby apparently assumes an intermediate step, that of the combined “literal” – “metaphorical” realm of meaning. – It is possible that Lady Welby herself intended to carry out such studies one day. For in the Welby Collection (York University, Downsview, Canada) there is to be found in Box 37 a large number of copies of the “diagram of meaning” printed in two colors, which differ from the diagram printed in *What is Meaning?* only slightly in the formulation of the accompanying text.

127) Lady Welby remarks on this (1903: 29): “. . . the triad ‘specific, generic, ordinal’ found in *Outlines of Sociology* (Lester Ward, 1898), broadly answers to what is here called the planetary, the solar, and the cosmical, and thus to sense, meaning, and significance.”

128) Cf. Welby/Stout/Baldwin (1902: 529).

129) This letter of Lady Welby’s of Jan. 20, 1903, to David G. Hogarth (archaeologist and keeper of the Ashmolean Museum) refers to the manuscript of *What is Meaning?* and explicates the passages there on pages 10ff. – The words “which”, “would”, and “should” appear in the existing letter version as “wh”, “wd”, and “shd”.

130) On this point the typewritten version of the letter contains the handwritten footnote: “The French idiom is here suggestive”.

131) “To What End?” is among the eight essays which Lady Welby sent to Ch. S. Peirce together with her letter of January 21, 1909. The following sentence by Peirce in his letter of March 14, 1909, refers – Hardwick must not have seen this – to a passage in “To What End?": “When you speak in one of them [the “essay-lets”] of Man as *translating* vegetal and Brute strength into intellectual and spiritual vigor, that word *translating* seems to me to contain profound truth wrapped up in it.” (Peirce/Welby 1977: 111)

132) This text is one of the essays which Lady Welby sent to Peirce in 1909.

133) The last seven chapters of *What is Meaning?* concentrate above all on these questions.

134) Numerous prominent scholars belonged to this society including e.g. C. Lloyd Morgan, F. van Eeden, F.C.S. Schiller, and Henri Bergson.

135) Levi’s reference to Lady Welby is as follows: “Coigo volentieri l’occasione per ricordare la tenace propaganda, che una veneranda scrittrice inglese, Lady Victoria Welby, fa in favore dell’ esame del *significato* di ciò che pensiamo e diciamo. V.V. Welby, *Significics and language*, London, Macmillan, 1911.”

136) The contents of Parts I and II of this article consist mainly of a summary of the results of *Geschichte der philosophischen Terminologie im Umriss dargestellt* (Outline of the History of Philosophical Terminology), a book of Eucken’s that had already appeared in print in 1879 (cf. Eucken 1960).

137) Lalande was a professor at various Lycées in Paris and at the École normale de Sèvres; since 1904 he was “chargé de cours” at the Sorbonne. He made himself known in France and abroad by his dissertation: *L'idée directrice de la Dissolution opposée à celle de l'Évolution dans la méthode des sciences physiques et morales*.

138) By this Lalande means “la psychologie expérimentale, la logique, la science sociale, la méthodologie générale, la théorie de la matière . . .” in contrast to metaphysics, all of which he considers to be “systèmes de connaissances positives” (Lalande 1898: 576).

139) Couturat had been “agrégé de philosophie” since 1890 and dealt primarily with the philosophy of mathematics and of the application of mathematics to logic. Among his most important publications are his dissertation *De l'infini mathématique* (1896), *La Logique de Leibniz* (1901), *L'Algèbre de la logique* (1905) and – together with L. Léau – *Histoire de la langue universelle* (1903). – It is necessary for a characterization of the time around the turn of the century and the movement to which Couturat belonged to note that there was at that time an unusually great and widespread interest in the construction and introduction of an international auxiliary language. In the second edition of the work by Couturat and Léau (1907) 76 different plans for such languages from the entire European history of thought are dealt with or named. Of these, 54 were drawn up between 1880 and 1907 alone, that is 71% of all those planned.

140) Editor of a dictionary of philosophy.

141) Cf. on this point: *Bulletin de la Société Française de Philosophie*, vol. 1, 1900, pp. 1ff. Cf. there also (p. 88) Lalande's renewed reference to Eucken, Lady Welby, and Tönnies.

142) For this reason, Lalande also wrote his first letter to F. Tönnies in Latin (No. Cb 54.56).

143) In May, 1902, Tönnies also participated in a working session of the small group surrounding Lalande in L. Couturat's house in Paris (cf. *Bulletin de la Société Française de Philosophie*, vol. 2, 1902, p. 158; letter from L. Couturat to F. Tönnies on 5 mai 1905, No. Cb 54.56).

144) On this point and on the following cf. the letters of L. Couturat to F. Tönnies, No. Cb 54.56.

145) On this point and on the following cf. Lady Welby's letters of April 22, 1903 to P. Geddes, of August 17, 1908 to H. Höffding, of November 9, 1910 to W.J. Greenstreet.

146) In his publication of 1970, Jacoby mentions “Philosophical Terminology” only in passing, in his publication of 1971 he gives only a general sketch of Tönnies' explications pertaining to the construction of concepts and theories. In *On Social Ideas and Ideologies* (Tönnies 1974) Jacoby presents a new English translation with his commentary of several parts of the prize winning essay. The translation relies on the German book edition of 1906 and includes only pages 10–14, 46–53, 56–78, that is little more than Part II of “Philosophical Terminology”. – Although Jacoby knew about the preserved part of the correspondence between Lady Welby and Tönnies in the Welby Collection since 1973, his references to Lady Welby and her relationship to Tönnies are not only extremely scanty but also contain errors.

147) B. Delbrück (1842–1922), the German linguist and expert on Indogermanic who was a professor in Jena since 1870, critically discussed W. Wundt's theory of language in his *Grundlagen der Sprachforschung* (Straßburg 1901).

148) The corresponding formulation by Tönnies from the year 1908 (quoted according to Jacoby 1970: 28) reads: "Für allein richtig halte ich, theoretische und praktische, andererseits reine und angewandte Soziologie innerhalb der theoretischen, und von beiden die empirische zu unterscheiden." (I consider it correct only to differentiate theoretical and practical, on the other hand pure and applied sociology within the theoretical branch and both of them from the empirical branch.)

149) In this connection it is to be remembered that the expression "Voluntarismus" is traceable to Tönnies (cf. Tönnies 1900a: 421), that is, not, as F. Mauthner and others assumed, to Friedrich Paulsen.

150) This should be compared e.g. to the point of departure in Johann Heinrich Lambert (1728–1777) in the *Neues Organon* (1764): "Es wird dabey untersucht, was in den Sprachen *willkürliches, natürliches, nothwendiges* und zum theil auch *wissenschaftliches* vorkömmt, und wie sich das *metaphysische* in den Sprachen vom *chracteristischen* und bloß *grammatischen* unterscheidet." (It is therein investigated what occurs in languages which is *arbitrary, natural, necessary*, and how that which is *metaphysical* in languages differs from that which is *characteristic* and merely *grammatical*.) (quoted according to Ungeheuer 1979a: 78)

151) This is a case of agreement with corresponding views of Lady Welby on "pleasure" and "pain" which she first discussed with Stout and later with Tönnies.

152) On this point cf. Ungeheuer (1980a: 77) and Dascal (1976).

153) Here the fundamental principal of the "characteristica universalis" becomes recognizable. Compare with Tönnies' explication what Lambert wrote Plouquet in his letter of May 1, 1767: "Ich sage *characteristisch ausgedrückt* damit *welche Prämissen man immer zeichnet, man sie so bald sie gezeichnet sind aus der Zeichnung selbst bestimmen können* wohin sie führen, ohne nochmals auf die Sachen zurück zu sehen." (I say *expressed characteristically* so that *whichever premises one draws, one shall be able to determine from them as soon as they have been drawn where they lead without looking back again to the things*.) (quoted according to Ungeheuer 1979a: 80)

By the way, a similar idea is the basis of P. Geddes's graphic method and its application to non-mathematical problems (cf. Mumford 1968: 82). L. Couturat wrote the following interesting remark on this to F. Tönnies (21 avril 1902; No. Cb 54.56): " – A propos des idées pédagogiques de Lady Welby, elles ont peut-être quelque analogie avec celles de M.P. Geddes, déjà nommé: celui-ci veut rendre l'enseignement le plus intuitif possible, et employer des schèmes géométriques pour figurer toutes les connaissances. Il rêvait même que ce serait là une langue universelle, la langue des schèmes et des figures, signes naturels des idées. Si vous avez occasion de le voir vous pourrez en savoir davantage par lui-même." Tönnies was not at the time familiar with these inventions of Geddes'; Lady Welby, on the other hand, had been familiar with them for a long time.

154) Cf. on this point the letter from G.F. Stout to Ferdinand Tönnies, Feb. 18, 1900. – I owe the bibliographic details on the Japanese translation of Tönnies' essay to the well informed efforts of Mrs. Viktória Eschbach-Szabó (Ruhr-University Bochum).

155) It can be seen for example from the reply of the psychologist Forel to this essay by Tönnies (cf. Forel 1901) how Tönnies' central theses were accepted by some German scholars. – The signfic movement in the Netherlands also referred to the Welby Prize Essay (cf. Mannoury 1949: 14f). The differentiation made there between the indicative, emotional, and volitional components of meaning probably was at least suggested by Tönnies' text.

156) In English in the original.

157) Whereas Jacoby (1971: 262) assumed that only the first text was written as prize entry for the Frohschammer-Stiftung without being submitted and that the second text was an independent supplement to the first, Zander (1982) recently corrected this view. According to Zander's research, both manuscripts together comprise the prize entry which was in fact submitted but which did not win the prize. Since the publication of the Tönnies manuscript (cf. Tönnies 1982) undertaken by Zander did not appear until the present chapter on Tönnies had already been completed, I was not able to handle this work by Tönnies in detail.

158) The names of this committee, including Lalande and Ogden, are included in the large letter heading of the stationary which Neurath used for his correspondence with Morris and Carnap since 1940 at the latest. – The letters are located in the Regenstein Archives, Department of Special Collections, University of Chicago in the collection "Logical Positivism and the Unity of Science Movement". I am grateful to my friend A. Eschbach for letting me have several copies of these letters.

159) The student Gideon Freudenthal, Berlin, called my attention to this passage. His dissertation can be expected to take account of and comment in detail on the influence of Tönnies on Neurath for the first time.

160) One need only look thoughtfully at the line of ancestors which Neurath posited for Logical Empiricism in 1935 (cf. Neurath 1935).

161) Of the correspondence available in the Tönnies-Archiv of the Schleswig-Holsteinische Landesbibliothek in Kiel, only the letters of Neurath to Tönnies are preserved (No. Cb 54.56). These letters seem so far not to have been used for any biography of Neurath. – The Vienna Circle Foundation in Amsterdam possesses no letters from Tönnies to Neurath according to a personal communication of Henk L. Mulder. Likewise no such letters are in the possession of Mrs. Marie Neurath, London.

162) Personal communication of May 7, 1982 of Mrs. Marie Neurath whom I wish to thank for her support.

163) She wrote similarly in her letter of February 25, 1903, to M. Bréal. – None of the aspects of the relationship and collaboration between Lady Welby and Stout described here and in chapters 2.5 and 2.6 has so much as been mentioned in the literature on Stout (cf. among others Passmore 1952; Mace 1946) which is known to me!

164) Baldwin was one of the founders of the "American Psychological Association", president of the International Congress of Psychology, 1909–1913, and editor of the *Psychological Review*. He is the author of *Mental Development in the Child and Race* (1896), *Social and Ethical Interpretations* (1898), *Individual and Society* (1910), and *History of Psychology* (1913).

165) This letter exists only in a shorthand version.

166) This quotation is taken from the draft of a letter to P. Carus.

167) For more evidence of this nature cf. Peirce/Welby (1977: 10, 85f, 93, 151).

168) Not only in his review of *What is Meaning?* but also later in his letters Peirce frequently confused the expressions "significance" and "signification".

169) G.F. Stout exercised similar criticism of Lady Welby's investigations.

170) Mr. David Hughes, Archival Assistant of the York University Archives, kindly pointed out that this letter was missing from Hardwick's edition of the correspondence.

171) However, since this was also not the correct address for Lady Welby, she once again in her letter of December 22, 1903, went into detail on the current conventions as to why she must be called Victoria Lady Welby (cf. Peirce/Welby 1977: 13). Not until then did Peirce always use the correct form of address.

172) Scott (1973) did not mention this intermediary role of Lady Welby's.

173) Slaughter's first letter to Peirce of May 10, 1909, seems not to have been preserved. Hardwick published both his other letters to Peirce (cf. Peirce/Welby 1977: 176f).

174) In this handwritten note of Lady Welby's, the word after "Mind" is not identifiable. It might be "where". – Lady Welby is referring here to her contribution to Schiller's *Mind!* (Welby 1901b). Schiller signed this poem in dialogue form – thus "mimetic!" – with the highly suggestive pseudonym "Véra Welldon" against her will.

175) This letter was probably written at the end of 1904, for it is the answer to Lady Welby's letter to him of November 12, 1904, to which Lady Welby had enclosed a copy of Peirce's letter to her of October 12, 1904.

176) Peirce commented, probably rightly so, on this passage of her letter: "What you mean is Law looked upon from the point of view of its effect. So understood, it is as you say, precisely parallel to the question What is meaning." (Peirce/Welby 1977: 39).

177) However, this letter did not reach Russell. Lady Welby thereupon repeated the request contained here almost word by word in her letter of November 9, 1904. – Lady Welby's letters and postcards exist in the Welby Collection of the York University Archives both in form of typewritten transcripts and as photocopies of the handwritten originals. A comparison shows that the typewritten versions, be they in shorthand or written out in longhand, are all exact copies of the original letters and not drafts! It can therefore be assumed that this is also true of most of the typewritten versions of letters to other addressees such as they exist in the Welby Collection.

178) G.L. Dickinson (1862–1932), English educator and essayist, was at that time lecturer at the London School of Economics. Lady Welby had been corresponding with him since 1898.

179) Ungeheuer (in press, p. 6) refers to the *Cogitata Metaphysica* (1663) of Spinoza where Spinoza says the chimaera could only be called “ens verbaie”, because it can only be expressed by words; the chimaera is nothing but words, it is pure negation.

180) In the following, I refer to Lady Welby’s letters of November 14, 1905, November 15, 1905, November 29, 1905, and to Russell’s letters of November 25, 1905 and December 15, 1905.

181) Anything else would amount to a confusion between designating or naming and meaning (cf. on this point Quine 1960: 198f), and the significant clarification of sign theoretical concepts was supposed to cure particularly such confusion.

182) For a general evaluation of Schiller’s work cf. Ferrater (1979), vol. 4: 2952f) and Marett (1938); on Schiller’s pragmatism and his polemic dispute with intellectualism, absolutism, and the formal logic of Oxford philosophy (above all that of F.H. Bradley) cf. Thayer (1968: 273–303).

183) Lady Welby did protest against the line: “She taught us *Semantics*,” but Schiller replied laconically (April 17, 1901): “I’am afraid your disavowal of Semantics won’t do. You’re in for it!”

184) Not the least because of his neglect of these connections, Thayer (1968: 292–303) seems to me to have arrived at an incorrect and too negative an evaluation of Schiller’s criticism of formal logic.

185) The existing version of this letter is in typewritten shorthand.

186) For information on Vailati’s biography and work cf. above all his collected writings (Vailati 1911a) and the studies by Rossi-Landi (1957/1958), Facchi (1952), Ferrater (1979, vol. 4: 3369), Morra (1967), Santucci (1963: 156–215), and Thayer (1968: 324–346). – Thayer maintains, and rightly so, that the English translation of the major works of Vailati and Calderoni would be an important contribution to present research which is to be desired (Thayer 1968: 333).

187) The essay mentioned here is “Alcune osservazioni sulle questioni di parole nella storia della scienza e della cultura” (Vailati 1911b).

188) This list of literature is very informative, primarily because it also gives some indication of what Lady Welby had read on the topics named by Vailati. It includes: “I. On the history of the mathematical & physical sciences (1) *Dr W. Whewell* History of the Inductive Sciences . . . (2) History of Scientific Ideas . . . *Herbert Spencer*. (3) Classification of Sciences II Analysis of Scientific Methods etc *Prof. W.K. Clifford* Common Sense of the Exact Sciences . . . *Sir J. Henckel* Preliminary Discourse on the study of natural Philosophy . . . *Prof. Stanley Jevons* Principles of Science . . . *Dr. Venn* Empirical Logic . . . III Mathematical Logic etc. *George Boole*. Investigation of the Laws of Thought . . . *Prof. Stanley Jevons* Substitution of Similars . . . Pure Logic . . . *Prof. Q. de Morgan* Formal Logic, or the Calculus of Inference *Dr. Venn* Symbolic Logic”.

189) After Vailati’s early death, Lady Welby, together with W. James and B. Russell, was among the few non-Italians who first made possible the publication of Vailati’s collected works (Vailati 1911a) by means of a subscription.

190) It can be shown that Ogden's and Richards' treatment of interpretation and context basically coincides exactly with Stout's definition of "primarily acquired meaning" and "reproduced meaning" (cf. on this point e.g. Ogden/Richards 1952: 57 and Stout 1924: 182ff). But Stout is not mentioned in this context by Ogden and Richards.

191) An example of this can be seen in Ogden's and Richards' discussion of Aristotle's theory of signs in "De Interpretatione". There they met with ideas which were not compatible with their broad prejudice against the accomplishments of Greek philosophers (cf. 1952: 34ff). Yet this text by Aristotle they also pressed into their existing pattern of criticism. Lieb (1981), on the other hand, was able to demonstrate convincingly that Ogden's and Richards' triadic model of signs is merely a reformulation of the model of signs contained in *De Interpretatione*!

192) Cf. on this point Ramsey's letter to Wittgenstein of February 20, 1924 (Wittgenstein 1973: 84). — On Ogden's attempt to win Russell for a discussion of the manuscript of *The Meaning of Meaning* and on the reasons he proposed for it cf. Ogden's letter of November 5, 1921, to Russell (Russell 1968: 121f).

193) This letter exists only in a shorthand version.

194) In this point, Ogden relied, as is shown by the further correspondence with Lady Welby, primarily on Schiller's *Plato or Protagoras?* (Schiller 1908).

195) The one who is meant is John Horne (1736–1812), who in 1782 adopted the name John Horne Tooke. Horne Tooke was an English politician and philologist to whose philological treatise *Ἑλεα πτερόεντα* (2pts. 1786–1805) Ogden probably referred. Horne Tooke spent the last years of his life in the vicinity of Wimbledon Common, where he held the legendary Sunday parties which were attended by Thurlow, Bentham, Coleridge, Paine, and others. It is possible that Ogden arrived by means of his study of Horne Tooke at Bentham and his *Theory of Fictions* (cf. Ogden 1932).

196) This probably means Lady Welby's article "Significs" (Welby 1911a).

197) Ogden meant by this the book *Essays on Meaning* planned by Peirce (cf. on this point Peirce/Welby 1977: 133f).

198) Here Ogden refers to the publication of Lady Welby's article "Significs" in the *Encyclopaedia Britannica* (Welby 1911a).

199) I owe the pointing out of this passage in Wells' novel to G. Ungeheuer.

200) The relationship between Lady Welby and H.G. Wells appears, according to my knowledge of some of the standard works on Wells by students of literature, not to have been dealt with so far, e.g. it was not dealt with by N. and Jeanne MacKenzie, whose book *The Time Traveller* (1973) has generally been called "The definitive biography of Wells".

6. Bibliography

This bibliography contains only works which are referred to in the preceding pages. The sole exception is the bibliography of the printed texts of Lady Welby with respect to which I have attempted to achieve completeness as far as possible. But here too a few titles are still missing.

Data in brackets were made by me, and following every text by Lady Welby it is noted in parentheses under which name the text was published. However, if she used neither her name nor a pseudonym, this is indicated by “(—)”.

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Thus Far Unpublished Essays by V. Lady Welby

Right from the beginning of her scholarly work, Lady Welby was in the habit of formulating her thoughts in the form of short essays. She then sent the most important texts of this sort to those of her correspondents whose judgment meant especially much to her, in order to subsequently revise them or even to rewrite them completely. The number of such essays, which grew enormously in the course of the years, comprised the basic material from which her books arose respectively. This procedure is recognizable in *Links and Clues* (1881), and even plainer in *Grains of Sense* (1897) and *Significs and Language* (1911). Only *What is Meaning?* (1903) was not conceived as a collection of essays, but rather even more strictly than *Links and Clues* corresponded to the form of a monography, although it too made use of thoughts formulated in essays and previous publications.

The following essays, published for the first time, were chosen from a group within the Welby Collection (York University) encompassing eight boxes. They were all written in the years 1907 and 1908, and they deal with two topics which were not handled at all or only in passing in the already published works of Lady Welby: "Primal Sense" and "The Social Value of Expression". The idea underlying the concept of "Primal Sense" reaches back to the time around 1890, to be sure, but Lady Welby did not write more extensive papers on it until after her two contributions to the discussion of F. Galton's "Eugenics". "The Social Value of Expression" appears also to have been stimulated by the work within "The Sociological Society". This connection is hinted at in her letter of March 20, 1904, to Peirce and elsewhere. She there wrote him that she intended to quote from his chapter on "Ethics of Terminology" (C.P., 2.219–2.226)

". . . to include it in an Essay on Sociological Significs, one of a series now being arranged for."

But for the selection of the essays it was not only decisive that they should possibly give an all around picture of Lady Welby's significs. It appeared just as important to make Lady Welby's working method clear in terms of at least one essay. Precisely this is made possible by the material available on the topic "Primal Sense". The first printed text is a revised version (B) of Lady Welby's

first essay (A) on this topic; all alterations compared to the original essay (A) are described in my notes. In the second text (June 30, 1908), Lady Welby herself comments on her substitution of the expression "Primal Sense" for "Mother Sense", which represents the most essential deviation from the original paper (A) on the topic, and she reflects there on the reasons for the change from a significant point of view. The third text is a letter of Schiller to Lady Welby in which he subjects Lady Welby's essay (A) to a detailed criticism. Finally, the fourth text printed here is Lady Welby's answer to Schiller's letter. Both of these letters taken together give a good impression of the subject and nature of Lady Welby's disputes with some of her contemporaries. This is also the case because in her answering letter her position as a woman among scholars who were almost exclusively men is expressed more clearly than in her otherwise more reserved formulations.

All of the essays and letters printed below are given in the versions existing in typewritten form. Lady Welby's own comments and footnotes have been included together with my comments in a separate section of notes.

I

April 15th, 1907.

Primal sense and significs ¹

The connection between Mother-sense and Significs may be put thus: Primal Sense is what takes up and supplies to us the material of immediate awareness, conscious and interpretive. It is the successor in evolution, or constitutes a further stage in value, of the animal's instinct. It is thus at once primordial and universal, at all stages of human development; though varying greatly in the part which it plays in the thought-life of human beings at such stages. And as Primal Sense is the Mother of senses, it is still occasionally found in women. Hence the peculiar authority accorded in all times to 'wise women' — from the Mrs. Eddy ² of our day back to the Witch of Endor of Saul's ³ — in whom this primal and synthetic faculty has reasserted its ancient sway and been recognised as a special 'possession'. The tremendous emotional appeal which the message of the Christian Scientist has for so many minds is due to that 'gospel' being the re-announcement, the re-affirmation, of a comprehensive faculty, of a homogeneous

psycho-physical power of response and adjustment, which has been largely lost in use, but which we organically 'know' to have been once common to the race, and to have made historically for survival and effectiveness.

Nevertheless, all such movements as Christian Scientism fail, in the long run, to take the highest minds with them. They fail, in spite of being in touch with so mighty a source of enrichment, because they ignore the greatest of all special gifts, the rationalising intellect: which has not only to criticise, but also to reason out and construct from, the *données* of Primal Sense, its warnings, its *insights* and *farsights*, its revelations, its swift reading of worth, its penetrative recognition of reality.

It is just here, then, that the place and work of Significs is to be found, as the necessary link — rather, the medium of interpretative communication — between the constant 'givings' of Mother-sense and the constant 'constructions' (in all senses) of the intellect.

For in order effectively to criticise, or to construct, it is obviously requisite that the criticising and constructing faculty should be perfectly served by language: that the working hand, so to say, should not be defeated by its own tools, or rather indeed that the working brain should not be defeated by its own delegate. The reasoning intellect should have imposed upon it no expression which induces distortion, in the slightest degree, of those representative forms of thought, those direct perceptions of reality, which are always freshly emerging in the receptive and responsive mind, and most powerfully in the mind of the young. And more, it should always be resolutely searching, even at the cost of shocks, sometimes rude, to its historical or aesthetic sensitiveness, for the symbol or the simile which most significantly, centrally, undeniably, gives the fact or truth which we mean — which we intend to convey.

'Representative forms of thought', we have said; and 'distortion'. Let us take from these suggestive terms the service they can render us. Surely we all recognise that a picture of anything, if it is to speak truth, must never be out of drawing: nor a statue if it is to seem natural, ever out of proportion; nor a musical scheme, if it is to be music, pass out of harmony. The painting which has been worked into a daub, the sculpture that is an essentially 'formless' (because disproportionate) mass, or the music that is degraded into mere noise naturally repels the man of aesthetic sensibility. Similarly the man of logical

mind is sensitive to the *jar* of the 'false quantity' in reasoning. It is one of the ways, for him, of being out of tune, out of drawing, out of proportion.

All this is generally perceived. What is not yet so generally perceived is that each of these falsities, deformities, and dissonances, has its analogue or its equivalent in the *false*, the *distortive*, the *corruptive*, the variously *misfitting* forms of our common speech. Still less is it generally perceived that the persistence of such faults in language means, in effect, the supplying of the mind with a daily and hourly service of insidious mis-reports concerning that cosmic Reality with which it is the chief interest of humanity to get into ever more intimate touch and more adequate understanding. It has yet to be generally recognised that every misfitting form of speech is at the very least an arrestation of thought, even when it does not impart a positive misdirection making for perversion of truth and life.

The present condition of language may, with but little qualification, be compared to a state of things in which our sight continued to report dry land when we were on the sea, or our touch to report solid footing when we were plunging into empty air, or both sight and touch and hearing and smell reporting, when we were rushing forward in a train, that we were sitting in a garden or rowing in a boat.

We talk of the inner and the underlying where there is no question of either: we talk of he and she where there is nothing corresponding to sex: we talk of beginning and end as complementary and then of 'both ends'; but never of both beginnings. We talk of truth when we mean accuracy or fact: we talk of the literal ('it is written') when we mean the actual ('it is done'). We talk of natural 'law'; reducing its sphere to that of the 'law-court' with its imposed decisions, forgetting that a law is a rule deliberately decreed and enforced or 'passed' by consent and liable to abrogation: we talk of mind or consciousness as the analogue of a bag or box, or of a piece of stuff in various 'states': we talk of the unknowable when what that is or whether it exists is precisely what we cannot know — the idea presupposes what it denies: we talk of immortality, ignoring its correlative innativity: we use special terms, e.g. the inner and outer, to define (or express) the non-spatial and the difference between that and the spatial: we talk of solid foundations for life, for mind, for thought, and for the very world on which these are evolved: of the fundamentals when we mean the

germs, starting-points, foci: of the solid reasons when we mean the rays of true light or heat.

We speak of an eternal sleep when the very *raison d'être* of sleep is to end in awaking – it is not sleep unless it does: we appeal to a root as to an origin, and also figuratively give the locomotive animal roots. Again, we quite naturally go into a garden in spring and, meaning that there were no human beings or other animals visible there, say “There was not a living creature to be seen in it”. And when one says, “What an exquisite creature that flower is”, one never fails to get a puzzled look in return and then one of relief clearly meaning, “Oh, that’s a (poor) joke, or it’s a wayward, farfetched, impromptu metaphor.”

We talk of airy speculation, and are as much afraid of the airy, that is, of breathing, as of speculation, that is, of seeing; for we are as blind as we are stuffy. And then we go out for some fresh air and may be to buy spectacles to see with or to enjoy the spectacular, or to invest, and report the revelations of, a spectroscope. We talk of mysticism when one of us means by it enlightenment, a dawn; and another means (more justly) the mystifying twilight of mystery darkening into night and the unknown.

Can we realise this state of things (and the foregoing list is but a sample of it in one civilised language) and not agree that whatever else it denotes or suggests, there is no Mother-sense – no sense in the reasonable sense at all – in our helpless toleration of such a chaos and of much else like it, and in our teaching children thus to outrage their natural sense of fitness, risking thereby the killing down of their precious sense of symbolic relevance and fidelity?

It is of course an important as well as obvious truth (implied everywhere in this plea) that we must never aim at having – fortunately could never hope to have – a permanent standard of mechanical exactitude in language, since the experience which man is impelled to express, describe, and discuss, is continually changing and growing. But it will be found that children, unless their minds are being warped by a distortive training, will recognise the truth of this at once. From the first, they strike, in their quaint ways of speech, the keynote of freedom and growth and of pregnant expressiveness. Were their powers of linguistic suggestion, now allowed to run to seed, trained and developed, or their often original and significant sayings collected, not merely to make fun of but to learn from, our gain would be inestimable: and the next generation, it is

safe to say, would make an onward step in the interpretation of experience practically unique in the history of man.

For while they would tend to recover the lapsed heritage of the Mother-sense; while their natural aptitudes in expression would for the first time in the modern era have free play and worthy attention, they would have all the accumulated knowledge of the race, all the traditions of its intellectual ascent, to work with and upon.

To quote Prof. Munsterberg in the first number of *The Journal of Philosophy, Psychology, and Scientific Methods* ⁴: "The time seems to have come again when the realistic wave is ebbing and a new idealistic tide is swelling, just as they have alternated in the civilisation of three thousand years" (p. 2). I venture to suggest that this alternative is not final. There is a factor in such mental tides that is too much lost sight of, and may be compared to the ocean at whose margins they are found, or perhaps to the lunar drag upon the earth which affects that ocean.

The Primal Sense is concerned with the real, and may be traced as much in the humblest and simplest as in the proudest and most ambitious of man's activities. It is concerned with the ideal, not only because it is itself ideally immediate, practical, fruitful, but because it grows with the growth of the human appraisalment of worth, and is ever ahead of, as ever introductory to, man's ascending appeals for at least relative perfection.

The true ideal of human speech is that of a delicately sensitive, detective, responsive, creative organ, self-adjustive to all healthy developments and enrichments – as to all dangers – however recondit or subtle, *just as our senses are*; but also automatically rectified as the senses need to be, by the unfailing and rigorous action of the intellectual test. ⁵

August 18th, 1907. ⁶

But this ideal rigorously demands the concerted action of human rational will on the subject; the racial assumption of control over language more efficient than the painter's control of his brush or the musician's of his instrument: as thorough indeed as our normal and well-trained control of our voice itself, as of our hands and feet.

It is significant that a movement in this direction which seems likely at least to remain effective on the lowest plane of everyday intercourse but may yet fail to prove permanent, has already made unexpected headway.

It thus surely becomes absurd any longer to protest that a vigorous and thorough revision by the civilised races of the idioms and imagery of language in the light of growing experience and knowledge, is impossible. No one who has made a careful study of the wanton confusions which — save the mark! — we now teach to each new generation, could deny that the state of things which here prevails ought no longer to be tolerated. That we should still remain helpless victims to the survival or the introduction in speech of gratuitous sources of confusion like those of which a few only have here been quoted, seems, although actual fact, hardly credible. For an effort as determined as those made in all other such cases would result in immediate practical benefit, public and private, so great as to be unmistakable, and would be yet more universally hailed than any other assumption by man of his rightful powers and discharge of his obvious duties, in those matters which most vitally concern him.

II

June 30th, 1908 ⁷

My own transition (as a matter of precaution) from 'mother' to 'primal' (with, as variant, 'primary') Sense, is an illustration of the difficulties created by our neglect of Significs. For it ought to be understood at once, *that in such a context as mine* I cannot possibly mean by Mother-sense, mainly, still less only, the shrewd or practical insight of the typical 'mother' in the actual or organic sense.

Naturally I mean a primordial, inceptive, inborn, need-fertilised, danger-prompted, interest-stimulated, Sense. *'Mother' is indeed or ought to be, the wide and general, 'Father' the specialised, term.* The pre-sexual organism was the maternal, and *included* the paternal element. We already recognise this in our philosophical and scientific use of the term Matrix. We never, in this connection, use the term Patrix; and we are quite right. The 'mother' is enabled by stimulus to conceive, develop, nourish new life.

Recent research (like that of W. Heape⁸ and others whom he quotes) amply bears out this greater range of the term motherhood of which the rudiments indeed, exist in both sexes. But nevertheless I find that everywhere I am supposed to use the term in a narrow and popular sense; and we could not have a better example of the crying need for Significs. A generation educated, so to speak, out of a Matrix of elementary Significs – the subject of all others germane to the child's nature, as we see in his insistent early questioning – would find the source of endless confusion, impotence, and defeat, dried up at their very spring.

No normally intelligent child would make the absurd blunders or fail to see the inconsistencies and needless ambiguities of our present modes of expression. We take infinite pains to impose them upon him and praise him in proportion as he acquires *our* faulty usage. The gain of reversing all this, of acquiring through the new generation a purified, an enriched, a liberated, a really ordered, economised, fertilised language would not end with speech but would tell upon all modes of expression and through them upon all creative activities.

The re-cultivation of the Primal, Primary, or might we say Matrical⁹ sense: the release of that bent-down and forced-in spring of the expressive energies of the race would give us a truer humanity and a richer world. The very image I have here used, – the 'spring' – is an instance of the need of care in distinguishing between the senses in which a word is used. To attempt to gain *one word* for *one idea* would of course be a grotesque mistake. We may indeed overload a word with meanings and may thus dangerously transcend the power of context, tone, circumstance, emphasis &c. to interpret each sense that the word may bear.

But in truth a training in Significs would increase instead of lessening our powers of economising expressive resource. It is really this which enables us to use codes as well as technical notations. On that side as highly trained we are already significians. But then we are so far *precisians*: we have lost flexibility, we have lost the subtlety, the enriching gift of fine touch or allusive reference; we have also lost the freshness of simplicity and the power of the emotional and imaginative impulse. All these good things and much more is the reward of the future: of the mind which from the first has been allowed, and then trained, to Signify, to interpret, to translate and thus rightly to apply, the world of ex-

perience. Perhaps for the first time, in that day, shall we learn what creation means: perhaps we shall even find that experience may become in a true, though new sense, creative. In this indeed as in so much of the work of the significian, the Pragmatist will find the prolific germ of his own thought.¹⁰

But Significs can never become a denial of any opposite. It can never be controversial. Nobody will seriously champion insignificance or defend the senseless and the unmeaning from the significial onslaught! Intellectualism, for significs, has its work no less than pragmatism; though as a fact and in the sense of a return to a too widely neglected and ignored startpoint, it is prior to Pragmatism and absorbs the controversial element. Absorbs? Yes: if we add — energises, vitalises, transmutes and transfigures all this: if we add that Significs deprives us of nothing but adds much to our store even as the animal has added to the plant and man to the animal, we shall not be far wrong or altogether presumptuous or extravagant. In a sense and a true one, this is and must be so.

For it recognises — and this for the first time — the full significance and the full meaning and sense of Value itself, in all expression of 'energy' in the widest sense of that great word, and in the expressive nucleus which we call articulate speech, the supreme link between mind and mind.

III

F. C. S. Schiller on "Mother-Sense"

(From a letter to Lady Welby dated Oct. 2, 1907)¹¹

After reading your papers and listening to what you had to say I venture to think that I can make a few suggestions towards rendering your next book more palatable and readily digestible, by mitigating the stumbling-blocks which have hitherto upset your readers. The three chief of these are (1) the meaning of Mother-sense (2) its connexion with Significs and (3) the question of what can practically be done to remedy the defects of language, and my suggestions follow in order.

(1) You mean I think by Mother-sense the intuitive guidance of action which is not conscious or only very imperfectly conscious of the reasons for doing what turns out to be reasonable. That something of the sort exists throughout the

world, that it underlies the specialised 'instincts' of animals, that discursive reason is not a complete substitute for it, and indeed never quite dispenses with it, that women have it and are guided by it to a greater extent than men, all this I am ready to grant you.¹² But I think also that you should raise and try to answer the question 'Why then is it that the world in general has rejected this guidance, and preferred that of 'masculine' logic, thin, arid, and miserably one-sided and inadequate as that has often been?' The answer is in general the same as to the questions – why do we still cure by drugs and not by hypnotic suggestion, and predict by scientific calculation and not by divination? The methods that promised less have yielded more. They are less romantic but more trustworthy on the average and in the long run. So it is with 'logic' v. 'intuition', and if you wish to speak on behalf of the latter, the right policy is not to disavow logic but to reform it, to show that intuitions underlie it and that it is never in real life so dull and dry as in the text-books: Real thinking does not advance by a formal array of indisputable syllogisms; it sets out to prove a pet hypothesis it has set its heart upon, it dares and suffers (even defeat!) and thereby achieves: the more 'purely' rational the calculation, the more paralysed and impotent. As witness Percival Lowell and his Martians!¹³

Then again the word 'Mother-sense' is a serious handicap. It at once suggests to all *men* that it is no affair of theirs. And the majority of women are more ashamed of spiritual than of physical motherhood! Why that should be is one of the greatest psychological mysteries which no *man* will ever be able to explain. If women can not or will not give expression to their side of the question, they condemn us to lasting ignorance and themselves to a secondary position.

But why should you not identify your Mother-sense with Common-sense and call it (mainly) that? It is what at bottom you mean – the wisdom of the 'tout le monde' which is wiser than the sages, which pervades Society and its history and is rarely formulated and never adequately expressed in set logical terms. It is truly 'common' in that it can be fathered upon no one, and in that it is at the basis of our 'common' life in society; it is also 'mother', in that the logical acumen grows out of it. I am also willing to believe that women in general, when one gets beneath the surface of their frivolities and follies have retained a closer contact with this force and that e.g. the 'maternal instinct' will (despite all appearances to the contrary) triumph over 'race-suicide' temptations, if only

women are given a free hand in the regulation of things. So you would have ample reason for calling this 'common-sense' a 'Mother-sense', but the more you emphasised the former phrase the more intelligible you would become to the mere male!

(2) This is a more difficult matter to advise upon, because I don't feel I have grasped it clearly myself. However it is true I think that the 'Common-sense' often means more than it can express, and means right where it seems to express nonsense, and that therefore if it were held in greater honour by our commanding intellects, its babblings would escape much contempt and ridicule to the advantage of both sides. But the development of Significs is surely a matter of the discursive intellect. And you sometimes seem to over-rate the assistance that can be got from the babes and sucklings. Not all children are geniuses either — they are commonplace little souls, which it is primarily necessary to train in social conventions they will learn to love, and which after all do represent the wisdom as well as the folly of the ages. I quite admit that the renewal of generations has great advantages as well as drawbacks and that if we were immortal like the *Struldbrugs*,¹⁴ the hideousness of our spiritual fossilization which baffles all imagination and stop all progress. (But query why was progress necessary?) . . . I also admit that the world needs initiative and initiators (in both senses) and some dynamic person who will keep prodding it the whole time. But the way to satisfy this need is not I think to kneel for revelations before every cradle, but to impress on the world the necessity of progressive thinking and to transvalue the positions of the spiritual progressive and conservative, to do in fact what H. G. Wells tries to do in his 'Utopia'.¹⁵ And apropos of this I think you sometimes have a misleading way (which I don't suppose you really mean) of representing all knowledge and wisdom as being already there and needing merely to be brought to light. But this when logically thought out surely involves a denial of novelty and so the reduction of progress to an illusion — which is precisely what the metaphysicians and intellectualised logicians have nearly always maintained! Against them we have to assert the reality and sacredness of the New! The 'true' instinct, the perfect expression are not primeval lights which have grown dim from our failure to clean the glass through which they shone: they have to be *made*, by re-making the old material and moulding it into fresh shapes.

(3) This leads me on to the question of what can be done and here perhaps I am less sanguine than you in one way and more hopeful in another. I don't think that Language is such an imperfect instrument and that we are so dominated by its tricks. On the whole I think it reflects pretty accurately the mental condition of its users. If it is confused and fragmentary and perverse, it is because the minds of its users are this. You don't sufficiently allow for the fact that intellectual confusion and dishonesty are common vices and with some consuming passions. If you provided such minds with a perfect instrument they would at once proceed to ruin it. But secondly I don't think that in actual use language is so imperfect. In their context words get and convey meanings which they do not seem to bear per se. Misleading metaphors are seen through, hints are taken, ambiguities and illogicalities are overlooked (in the *good* as well as in the bad sense). In short we somehow *do* manage to express ourselves and to be understood. And your real master of language always manages to find words where-withal to express himself.

The bars to understanding are (1) the non-recognition of the infinite flexibility of words, (2) the reluctance to embark upon *new* thoughts, (3) the affection we all have for our old ones and the prejudices they generate. Now your Significs only seem to deal with the first factor in the trouble, and besides you do not suggest anything positive or specific that can be done to remedy the evil. I rather doubt that anything very specific can be done. You can teach people, no doubt, the nature and range of the instrument they use, the evils of its abuse, the immense psychological difficulties of really conveying meaning from one mind to another. But all this our ordinary education, literary and logical, does or should do. Beyond that what?

This letter, however, must stop. I don't know whether you will find anything of value in these suggestions, and in any case do not hurry to answer it. . . .

IV

V. Lady Welby's Reply to F. C. S. Schiller
(From an undated letter) ¹⁶

"Why then is it that the world in general has rejected this guidance, (of Mother-sense) and preferred that of 'masculine' logic, thin, arid, and miserably one-sided and inadequate as that has often been?"

- (A) *That is the question which you Pragmatists have to answer.* Mine is simple. There is always loss or at least abeyance in gain: and the gain of Logic "thin and dry" but inexorable, has been and is incalculable, even by its own methods!

Disavow logic! You forget that I at least am in my humble way loyal to laws of life which offer secondary characters of Manhood to the woman past middle life. You forget that I can show you lapses of logical sequence in its representatives apparently hitherto overlooked by writer and reader alike, which when pointed out, cannot be and are not denied. ¹⁷

Well, the mother-sense never "sets its heart" on any "pet hypothesis": if it had done this in the original days of its reign, you and I would never have been here. The race would have been snuffed out. No: it takes one hypothesis after the other, treating the one it 'cares' for with a more uncompromising scrutiny and severity than the others. The very life of its owner and her children once hung upon this instinct of suspicion and of test. It is sheer mother-sense – instinct of intellectual danger, – which in you, as in Dewey, Peirce and James, calls out the pragmatic reaction! It is the direct descendant of the keen awareness of the signs of primitive danger to the babes of the pair or the tribe, left in relatively weak hands. But let the pragmatists beware of exchanging one fallacy or one over-worked method for another, perhaps its opposite.

- (B) Yes, *all* half-words (and some spuriously used whole ones) are handicaps. They settle your involuntary dualisms from the first. As to the 'majority of women', the dominant Man with his imperious intellect ¹⁸ has for uncounted ages stamped down their original gift: all their activities beyond the nursery (and, alas, there also, now) are masculinised: language, originally the woman's as custodian of the camp, creator of its industries and first

trainer of the next generation, is now wholly 'male': the whole social order is laid down, prescribed for the woman on masculine lines only. Who ever, for instance, thought of consulting her about changes in marriage law? Well, it would after all have been useless: you have crushed out all but her illogical prejudices and her emotional insistencies, which urge her to set her heart on pet hypotheses or to cling to doctrinal mummies as though they were living. These are really the last refuge of a balked prerogative of mind.

Frivolities and follies! What else is left to one for whom 'strong-minded' has become an epithet of dislike and contempt? And when the suppressed energies of the race do, in spite of all, 'spurt up' in us women, what can their fruit be, as things are, but abortive and defective?

The present mode of 'College' or 'technical' training can at best but make the woman a second- or third-rate Man: she further loses thereby what little she has of the racial gifts — her natural and complementary powers of interpretation and problem-solution, of suggestion and correction. Again, look at her inventive complexities, e.g. of weaving. Woman was of course the original weaver. Look at her logic and mathematics of the knitting-pin, the hook, the shuttle, the needle. Look at old lace and embroidery. I myself have 'invented' elaborate figures produced by a mere hook, and 'stiches' by a mere needle. No man has ever, apparently, seen the significance of woman's ingenuities here and applied them to his inventions, or in his training of students. Practically only the sailor and the fisherman understand even knot- and net-work.

That the Mother-sense is 'common' seems to me a truism. Of course it is common. Only, the word common is used in several senses. In one it means despicable and is coupled with 'unclean'. On another side, Loeb's tropisms¹⁹ are common! And my Originating, Birth-giving, Reproductive, Interpretative — my Mother-sense, is common to the whole range of life and extends *beyond* it and *beneath* it.

- (C) This section is more difficult to answer. Of course 'all children' are not 'exceptional' ones, 'geniuses'. How about logic here? For 'genius' is not yet, as it ought to be, the human norm. However even the average child, as his brain, unharnessed to *our* conventions, first develops, is far from

commonplace. The truth is that he is an uncomfortable and inconvenient judge of *our criterions* of common-sense, of our copy-book wisdoms, moralities and religions: he is an intolerably candid critic: he says, Why, your Emperors have got nothing on! And the remote conscience of his elders, not quite crushed into silence, whispers, No more they have! So we promptly silence *that*, and put the child not in the midst but in the corner, or send him up to bed. (For of course, as you see I have to admit, the child is always a boy).

Ah yes, in childhood we have all been sent to bed: a hideous cruelty to the very Type of vitality and wide-awakeness. Thus we embitter or else dull and blunt that little Spring of Energy who is bound to make experiments and mistakes, and even now and then to revert to savagery, that he may teach us needed lessons. He is 'naughty' and must be civilised and moralised; discipline is necessary; granted. But let us see that we reverence and cherish in him his priceless gift of freshness and enthusiasm, of exploration and experiment, and of onward seeing eyes. And let us see that our logic and our ethic are good enough for him and that we are not driving him into sullen or rebellious protest with our inanities of maxim and fossilities of creed! Nothing has ever made me wince like the eyes of a 'naughty child'. Was it my fault that he had sinned? Had he transgressed bad laws, or good laws wrongly applied? Had he ever been shown the true *What*, the true *How*, the true *Why* he had done wrong?

When you ask in this context, "Why was progress necessary?", (as I have heard you asking, Why has every baby to 'begin' in mind all over again?) I retort, Why do you ask the question? We quickly tumble into the abyss of infinite regress . . . Still there *is* a whole chain of answerable Whys, of which we only yet know the nearest or latest links.

With regard to kneeling before cradles I agree with you that, though symbolically the 'wise men' may wisely kneel where there isn't even the luxury of a cradle, that is not the action or attitude now needed. Neither, I think, is that of stamping — 'impressing' the world: but rather, — since it seems to have become at once anaemic and neurotic — giving it shocks that impel it to sweep energetically round its true sun, not round a mock one due to its own vapourings!

- (D) You speak of my misleading way of assuming things 'already there'. May I say I think *you* are misled (1) by unconscious reference to the spatial 'there' (as it were in a given spot or area) and (2) by an unsound reference to Time as a primary category.²⁰ If you are to 'make' truth in any sense, then the 'already' is as much or as little relevant as the 'notyet' which would be a useful alternative word for the use of the Pragmatists. Neither the one nor the other is a denial of novelty any more than of the birth of successive generations; in our assumption that it is so we are betraying our slavery to our own spatial, and still worse temporal, imagery. As to your 'true' instinct and perfect expression as *made*, is not the word 'mould' dangerously near 'manufacture' which you repudiated?
- (E) Of course your (3) is a simple 'rebutter'. May I suggest that it ignores 30 years' diligent collection of evidence which, before you can pronounce on the matter should at least be looked into? I think I have earned the right to ask that before any one decides that it is only persons 'already' confused (and why ignore your own protest here? confusion is *made* – like hay) whose language is faulty or 'out of key', they should seriously look into my stores?²¹ You must excuse this little splash over, but I have been too remiss in speaking plainly on this matter. And here I will give *you* a challenge. Give me the names, say, of three 'masters of language' writing in English some time in the last 20 years and specify examples of their writing, and I will show you what Significs, even in my sadly inadequate hands, has to say on the matter. The question of what ought to be and can be done is one which is very clear in my mind, but which I should only suggest in the hope of stimulating others to 'better my instruction'.²²

V

The Social Value of Expression²³

I

I suppose we must begin by asking what Society means. And the answer will be, That depends on the Asker.

This asker then would first suggest that here and always, we ought not, unless we desire to perpetuate confusion and defeat our selves, to ask the question in that form, except in its proper sense. And that is, what does human society *intend*, what is its *purpose* in countenancing and fostering this tendency and discountenancing and neglecting or suppressing that one?

The question then arises, Has Society any conscious intention? If so, 'it' becomes a dangerous pronoun. We need a personal one. For if we want to be clear and consistent we must never ask What does it mean, but what do I, you, we, he, she, and they mean by it?

Mere things don't 'intend': they don't 'mean' anything, they are meaningless. They signify; they indicate; they imply; they are significant: it may be profoundly and urgently so. If we say that they have 'sense' we must 'mean' — intend our hearer to understand — that they arouse in us a sense of their existence, presence, and character: the sense of a word is our sense of its special use, of what it signifies.²⁴

But this may itself seem to the reader mere word-splitting: or at least he may ask, What is its sociological reference or bearing?

Well, of all subjects of human interest, human society, — its nature and its possibilities — most insistently calls for a clear conception and description. Without this we manifestly grope in the dark or in the fog: not to know exactly what and who we are is to be ignorant of *where* we are. We must gain our bearings and we must thus become able correctly to interpret our social experiences, — the swirl of the social tides, the lines of the social coast, the depth of the social sea, the direction of the ship's drift which is to be counteracted by our steering. No metaphor, however, can fathom all the depths or give the whole urgency of the need, if we would become more truly social, of a thorough and careful study of the conditions and the methods of interpretation — indeed of the very nature of that crowning gift of man.

This is of course no mere question of psychological, of logical, of philosophical, of philological, of pedagogical, of sociological study. It is in truth all that: but it is also something more: it is a question of the barest of common sense, of the very presuppositions of education: it is a question of practically securing the inferential harvest of even the simplest work-a-day experiences.

But this question of our mastery of the sense, of the meaning, of the significance of what life, whether individual or social, physical or mental, brings us,

cannot further be treated here. It is enough now to point out that from our very babyhood this has been our first need; and also that it has been too much ignored and neglected. We have even perhaps too elaborately analysed the values of experience in some other directions; but in that of clearly apprehending its supreme value; — what its treasures and its lessons *signify* for us — we have made too little effort to advance. Except in the aesthetic and especially the poetic form, we have not really learnt to interpret experience: for we have in fact been content with vague and often inconsistent ideas of what interpretation really is, and of what sense or meaning or significance really are and may actually bring us.

I have however made these suggestions elsewhere²⁵; and our present interest is first to see what sociological lessons may be learnt from a study of current terminology undertaken on new lines, as well as what lessons on the possibilities latent in expression may be gained by the student of Sociology.²⁶

II

And first we must put ourselves at the standpoint of the child with reference to expression and its value. I have already done this (“What is Meaning?” Chaps. XXVIII–XXXI) and hope later to pursue the same subject in more detail. There will only be space here to take one or two examples of the reckless way in which from the first our modes of colloquial speech tend to confuse the child’s naturally clear and simply logical outlook.²⁷

It hears, let us say, the word ‘story’ used (1) as tale or narrative (2) — as falsehood, lie. The reversal of sense is here of course calamitous. For the child learns that the parent’s power to ‘tell a story’ is a gift to be prized, is a thing to admire and praise. And at the same time it is told to be ashamed of and is punished for ‘telling a story’ that is, a falsehood. Thus again in later life the word ‘fiction’ like the verb ‘to feign’ comes to suggest deceit and hypocrisy instead of somewhat formed or fashioned like the potter’s work. Hence a condemnation of *imaginative* work and its confusion with *fanciful* work, another stumbling-block in the child’s way.²⁸

Take then another confusion — or rather lack of a valuable distinction which our own language actually gives us, — that between Truth and the accurate, the literal, the valid, the real. None of these last have the ethical reference of the

first. A true statement is one which is truthfully – honestly, candidly, veraciously – made. An accurate statement or a correct statement is one that conveys actual or theoretical fact, or an assumption justified by result, or a conclusion from ‘rightly’ interpreted experience, or arrived at by sound logical process. It is an incontrovertible product of observation, experiment, and reasoned inference. Thus a ‘true’ statement is free from falsity, falsehood, lie, deception, dishonesty (moral ambiguity). An accurate statement is free from error, mistake, confusion, oversight, overstatement (mental ambiguity). Yet even in the most careful writing we ignore the distinction.

We might follow the child growing into the student and discovering one after another of the bewildering and quite needless speech tangles through which we, his elders, have to ‘muddle’ as best we may. We might point out the disabling lacks which might so easily be supplied: e.g. a collective word like ‘audience’ for a body of spectators, a word to express speaker-writer and conversely hearer-reader.

But this would mean a volume and would soon lead out of the sphere of sociology proper. Indeed criticism of the more glaring examples of the loss and lack which leaves us so cheerfully complacent may even mislead the reader, unless it is fully understood that the evil, – as the hope – lies much deeper than that. It must be realised that as we are, some at least of the minds which could best help to raise the prevailing standards of human society are virtually silenced. Some of those thinkers who could best suggest or direct efforts to purge and to energise it are at least hampered, because for us there is no longer the freshness and freedom in language which enabled the greatest of ancient thinkers to appeal in every phrase, above all in every illustrative word, in every figurative allusion, to the knowledge and the interpretations of knowledge of all kinds, then available, current, effective. True that our minds, imprisoned within a framework of expression once adequate but which experience and knowledge have largely outgrown, are almost all unconscious of their condition. We suppose that our inability to solve the most pressing problems especially of social life, is entirely due either to the baffling complexity of the questions involved, or to our own lack of power. And these are of course operative factors to be taken into account. But in some cases the secret lies elsewhere. Our minds, so to speak, partly gagged and able only to mumble, are almost all unconscious of their condition. Some who have been effectually trained to conceive lan-

guage as only possible in its present defective state, have thus in their childhood had their most creative ideas ground down to a lower level. Over and over again, those who have not gone through that relentless mill, find that the expression (however lame) of their own still fresh and natural ideas call out the insistent response — I never thought of that, but I see it now: That's what I've often thought but could not see how to say it. Yes, that's the point of it all; it is quite clear.

Responses like these, or mere eager assent, attest the stimulus given by even the crudest or most elementary attempts to express ideas out of this great scarcely used, commonly ignored fountain of fresh expression, the world of pregnant significance. But what happens? The momentary flash into a truer and more living mind which ought to be the heritage of us all, dies down. Nothing comes of it: nothing can come of it. Any attempt to render it in our sophisticated, our antiquated modes of speech, baffles and defeats itself. So at best we go away having been, we may perhaps say, 'stimulated and inspired': with a vague idea that while we are puzzled and find that we cannot fit what we have heard into a scheme of things which an inherited vocabulary tends to force upon us, there was 'something in it', something to account for the thrill of answering perception which made some of us say at the moment 'Yes I do see it and what a difference it makes! It seems to clear everything else' — and then go away and find our sudden vision effectually obscured by the inevitable relapse into our present linguistic conditions.

The nearest approach to a parallel to this state of things was afforded not many years ago (is still afforded in some belated cases) by the first stirrings of the transformation of the very idea of education now in progress and by the effect of these upon all but a very few minds. Reforms the need of which are now so strongly seen and so loudly called for that the risk is lest we overdo them, and fall into an opposite pitfall, then appeared confusing, futile, or mischievous. The pioneers in this profoundly significant change found for long years that their attempts to express their ideals and their proposals merely produced bewilderment or indignant protest against that which they had *not* intended to convey. They were told that they were not merely 'visionary' (for our ideal, as that idiom indicates, is a blind one) but inconsequent; they were complained of as impossible to understand. Probably they were: for they were

speaking out of the very order of things which they saw the necessity of superseding.

Meanwhile, to use a suggestive physiological analogy, we may indeed be thankful that our eyes are focussed on the illimitable distance. Thus we must be prepared to find that in proportion to our predictive outlook will be the initial difficulty of dealing effectually with the present, and still more of putting our 'views' into words. When we are in close touch with reality, our vision of it is blurred — or we are blind to it. When our vision of reality is clear and distinct, we tend to 'lose touch' with it, but merely because our arms and fingers are not long enough. And to borrow one of the illuminating terms of optics, we must remember that the presumption is in favour of a focal or direct, and also of a peripheral or *indirect* experience, as we have in vision. 'Immediacy' answers to the focal. And this brings us to an unfortunate assumption which dominates us. Our social ideals and our social work must alike depend not only upon experience, but upon clear ideas of what we mean by that term. Yet, while we have discovered that we are organically and personally not simple but complex, most of us have yet to discover that experience is not simple either, that is, merely direct; but that an important part of it must needs be indirect; that experience itself is interpretative because it is largely inferential.

This view is illustrated if not justified by some of our concrete experiences themselves. For instance, the present moment, which we often describe as our only actual touch with reality — all else being definite image in memory or conjectural anticipation — is gone as it is reached. We cannot say to it, "Stay, O moment, and let us live in thee", and thus study the fully immediate experience in 'time' unalloyed by image, unalloyed by the indirect 'past' and 'future'. And until we have realised here and elsewhere the futility of demanding that experience shall be confined to the analogue of the elusive present, we cannot hope to enter into our full inheritance. This of course cannot be restricted to, cannot even be stated in terms of, any one of its contributory factors or elements. And moreover 'inheritance' needs must refer us to the past, whereas we are now interpreting the present in its evolutionary sense as implying and constantly overtaking the future; this always, in its turn, becoming a present, which instantly merges into a past.

But an important factor in the development of the social complex must be that racial and communitary experience which constitutes the social inheritance

and justifies the social aspiration. This implies an incipient social will, as yet "dim but persistent"²⁹ and ever tending to become not less but more rational and moral, not less but more nobly emotional, than that of all but the very greatest of its personal units, and enormously greater in interpretative, constructive and transforming power.

If that came about, when that comes about (for we are surely feeling towards it, albeit in a half-blind groping) we shall certainly wonder at the strange contentment of the present individual – however highly organised or developed intellectually, morally and 'spiritually' – with modes of expression often, especially in some of our inherited metaphors, barbarous, feeble and chaotic in relation to our present needs, but which alone are as yet available or at least permissible and current. For there is no need to wait for an ideal future society which shall be of one mind as of one heart and one life in many, one rich and powerful entity for which there is yet no name, in order to clear and exalt our thought by insisting on freedom to express it in whatever way *serves* best. Whatever best helps man to rise in feeling, in willing, in knowing, in *acting*, must also lead us out of a stagnant and barren state of things wherein the expressive changes are mostly degenerative and left to accident. Service, yes: that is what language, like all the faithful means which Nature with both hands offers us, is always ready and waiting to render. For speech is no despotic master, no capricious tyrant, as we are always supposing, but our own creation and the fullest of promise, as the highest, of our organic developments.

III

But the reader may again ask for concrete examples to justify such a sweeping indictment of contemporary language, as largely a hindrance rather than a help towards the realisation of a true social ideal. By some I shall be reminded of our splendid inheritance of creative thought, by others of the treasures of the modern scientific message, by others again of the triumphs of the masters of language. All this I fully concede. And indeed it is upon the greatness of expressive achievement in spite of the obstacles which we carelessly or wilfully leave in its path, in spite of a supineness which preserves the obsolete and effete and chiefly admits the 'undesirable alien', that I would lay stress; as enshrining the promise of the future.

I have purposely confined myself to the modern English idioms (many of the elder ones, alas, no longer in use, put us to shame). In other languages we should no doubt find some of our own defects absent or remedied, some of our own advantages lacking: each race must work out its own expressive salvation and each form of speech must be judged by its own users. Meanwhile English is a language of world-wide and growing use not merely in the commercial but in the intellectual world; so it is well, from the social point of view, whether national or international, that we should realise what we are doing or failing to do, with it. We cry, language cannot be controlled or directed: language compels us to this, refuses us that; whereas it is *we* who have shamefully failed to acquire, or rather who have idly let go of, the linguistic tiller or reins. But the very abundance of illustrative instances of current confusion easily to be culled from general literature bars the mere selection of a few, which is all that could here be made. Such selection would tend to over-emphasise the cases chosen. And the reader may perhaps have already felt impatient under the idea that he is to consider 'mere words'. What can they matter to me? he asks: surely that is the specialism of the professed philologist or at least only the concern of the purist and the pedant or at best of the 'stylist', not of the sociological student or reformer, still less of the ordinary reader. One example of usage, however, that of 'verbal questions', governs so much of our unconscious attitude towards the conditions of expression that it must be briefly noticed.

How if we have been calling one of the most pressing of all social questions — that of sense, — a merely verbal one? What if we have here been making a practically distasteful confusion? Have we never considered that the word 'sense' ranges from the first responsive quiver of the primitive organism to the sense of common interest or the sense of brotherhood or the sense of duty and honour which with other like 'senses', make human society possible and may make it beyond hope noble? Have we forgotten not only the value of a common sense, but even the value of the sense of a word or a phrase? If we will only condescend for the sake of practical outcome, say of sheer economy of brain-work, to notice such things, we shall I think find that here we must demand a word, — the 'sensal'. We must recognise that a 'verbal' question is one only of the phonetic, the graphic, the alphabetical, at most the historical aspects of language. These are not what we may call *sensal* questions — questions as to the sense (insensibly changing) in which we use, or our forefathers used words and

phrases. But unhappily they are almost invariably called 'verbal questions' and put aside as irrelevant to the matter in hand, or as pedantically petty. We class them with the fusses of the prig or at best with the technicalities of the grammarian.

We have now seen some of the consequences of this from the sociological standpoint. It would of course be easy to do the same thing in a more popular context, — in journalism and politics. The point however must not be further laboured. We will only here cite two among other cases making for that initial misunderstanding which is the first and most formidable obstacle to really fruitful social action, both being ethical; one is the confusion between belief and faith, and the other the opposition of justice and mercy.

IV

The sociological interest in the question of belief and faith is this. On many sides we hear rejoicing or lament, as the case may be, that the age of 'faith' is over and that of experimentally and critically assured knowledge and justified inference begun. But it is not *faith* which we mean or ought to mean at all. It is *belief* used in a question-begging sense. Now belief, though the fact seems generally ignored, has really nothing more to do not only with a special creed but with moral or spiritual issues, than have experiment or inference, judgment or conclusion. It is simply psychological; morally neutral. Yet we find it used on all sides as though obviously a question of moral praise or blame, or of adherence to some theological or mystical dogma. Hence the social reproach which has until lately been attached to the word 'unbelief'. It has made for a false social criterion.

As for faith, a quite different thing and essentially a moral quality, this is more than ever the note of our age. We are faithful to, full of faith in, ideals of life, of work, of art, of truth, of duty, which we do not accept as secured to us or as enforced by any special or guaranteed 'revelation' but to which, even though they be too narrow or too poor, we are actively loyal.³⁰

As to our accepted use of 'justice' as equivalent to severity or to a mechanically adjusted award; as involving the converse of 'mercy', as in fact rigidly unmerciful; and our use of mercy as meaning a relaxation or perversion or lapse of justice — as virtually unjust, — surely it only needs to be considered thus in

order that its dangerous falsity may become apparent. Justice always includes mercy in proportion to its purity; in this sense it is true that "tout savoir, c'est tout pardonner". So Mercy, like generosity is bound before all things to be just. Else it is spurious: it is mere easiness, indulgence, laxity. But these are only examples of many like hindrances to ideal social union which our present usages in expression entail. The subject of course needs a fuller treatment than it can here receive.

V

It will by this time be seen that I am not approaching the sociological problems on any of the usual lines. Neither am I suggesting any kind of social experiment. I am not even expressing a preference for any outward form of social order which may in the future become possible. Still less am I advocating a return — a reversion — to any order which we have lost and would fain 're-store', be it a communion or an infallible authority. I would rather here be understood as protesting against that uniformity of psychological judgment or belief (or assent) which makes of a body of living men, an aggregate of similar grains rather than one of differentiated and specialised units, each with its own identity and its own vocation, each with its diverse function and therefore diverse structure.

What then from the standpoint of this paper is the social value of Expression? That we are already essentially social, that our very humanity is that, needs here no proving. We are indeed social first in the animal sense of mutual dependence and in the power and need of consciously and rationally concerted action. But we are social next and pre-eminently in virtue of that power of expression for the development of which I plead. And we are social because only thus can we be truly individual: because we are bound to work for a future 'collective' intelligence and 'collective' conscience, of which as yet we have barely reached the conception and of which 'collective' itself is not an adequate definition.

But this is not the full answer. Can we even give it yet? Do we yet know what our selves are, in relation to *us*, — what the owned are to the owners? Does the human being, composite in heredity, composite in constitution, but ever tending to be *more* than merely composite — to be fully synthetic, — know yet what its

units who call themselves persons really are, might be, shall be? Do we yet grasp the full significance of forms of religious consciousness? Do we yet know fully – in the scientific as well as in the emotional sense – what the religious man means by consciously living in and through a higher, to him a perfect, being? And does the religious man himself know in the scientific sense what may be meant by living *as* such a being here and now? Not as a mere copy of a Personal Ideal, but as its actual and original fulfilment?

One thing makes it evident that as yet neither the one nor the other does so know. Both are compelled if they would socially justify or even confess their faith (not merely belief), nay, would realise it themselves, to use figurative means which daily become more inadequate, if not even more defeating, to present needs. So far the 'varieties of religious experience'³¹ have been content to express themselves by means of analogies which have long since ceased to do the work for which they were originally chosen, – some of which indeed, casually or accidentally taken, or simply inherited from primitive days, never worthily did this. So far the religious experience continues to express itself through (and thus to call up in the social mind) images which are hopelessly untrue to acquired knowledge and to now accepted views of 'life' and of 'nature'. Never before in the history of the world can such a failure have been so destructive. For in what we now know as science, each step is verified as it has never yet been verified; each hypothesis tested as it has never yet been, never yet could be tested. The result is thus a divorce between the intellect and the emotions, between knowledge and feeling, between light and love, which if it is to go on, must become fatal to the welfare of human society. It may still seem to many to savour even of bathos (here) to plead in that great name for a renaissance of Expression. It may still seem almost absurd to suggest that our first social need is the gradual transfiguration of language – through education – into a social organon as adequate and as powerful for its splendid work of humanising society and socialising Man, as those of physical science, whether intellectual or instrumental. But before all things, our way must lead through truth in every sense. And this it can never do while language is allowed to fail us where it could further us. For our very unconsciousness of the danger of our inherited imagery, doing its subtle work in mistranslating experience and therefore reality, – a mistranslation pervading all philosophies and all social

theories alike, — leads to the yet worse unconsciousness of the present falsity to *us* of much that was once true to our forefathers.

In truth, what it seems to me that the Sociologist needs first of all thoroughly to realise, is that we are all in a false position. We either do not really know where we are, or we interpret that knowledge wrongly. Hence the impotent efforts, the impracticable utopias of the ardent idealist. Hence the ossified maxims and schemes of the mechanical realist who takes the name of common sense in vain. Hence the rigid structures with which merely technical training or official authority, mainly serving party exigencies, provide us, in great human questions like that of education. In this last some of us have discovered and are crying that 'the children are forgotten'. Yes. Perhaps that is really the secret of our sociological chaos and of the terrible problems of poverty, of lack not merely of bodily necessities but of ideas, and of mental strength and clearness and control, which seems so ominously gaining upon us.

We have forgotten the children, or what is worse, we have remembered them in unchildlike ways. We have failed to realise our true position towards them and theirs towards us. We have hardly begun — though thank GOD we have begun — to set them in the midth and once for all recognise in them the very growth-points of humanity whose budding or exploring activities, whose insistent 'whys' are the signs of things of great price for us, and have much to reveal to the grown man who has not had his own child-powers starved out or paralysed by what we have called 'education'.

This subject however can only here be touched upon. Its relevance to our title must at least be obvious. We can never hope to realise a true social ideal unless we get our preconceptions clear, mutually coherent, true to experience and fact. At present the confusions, the mistakes, the stereotyped dogmas or their often illusory substitutes, which infest our primary assumptions and do their poisonous work in hidden and unsuspected ways, tend to invalidate alike all our ideas on the social welfare and the social potencies. And these evils necessarily do their deadly work through Expression. Let us then see that at least we make a worthy effort to purify, to enrich, to emancipate and also to control, — in short fully to humanise and socialise our means of articulate communication.

Let us work faithfully and patiently towards a social unanimity and efficiency of speech which must make for the solution of the social problems and for the advent of an ideal human society.

Notes

1) This essay is to be found in the Welby Collection (York University Archives) in Box 29, file 36. The first version (A) of this text was looked through in July, 1907, by F. van Eeden. He provided it with comments in the margins and then sent it back to Lady Welby. Version (A) bears the title "Mother-sense and Significs"; "Mother" was crossed out probably by Lady Welby, and she wrote in her handwriting "Primal" above it.

2) Mary Baker Eddy (1821–1910), founder of the Church of Christ, Scientist, arrived via personal experiences of healing at the conviction that Christianity even today still possesses the power to heal all sicknesses by spiritual means. She formulated her principles in a textbook, *Science and Health with Key to the Scriptures* (1875). She also taught and healed in the name of Christian Science, organized the Church of Christ, Scientist, in 1879 in Boston, and founded the *Christian Science Journal*, the *Christian Science Sentinel*, and the *Christian Science Monitor*.

3) Endor, an Israeli town south of Mount Tabor, was the residence of a conjuror of the dead, the witch of Endor. When Saul was fighting his last and unsuccessful battle with the Philistines at Mount Gilboa, he is said to have evoked the spirit of Samuel through the medium of the witch of Endor in his desperation (I Sam. xxviii, 7ff).

4) Lady Welby's footnote on this reads: "In a forecast of the International Congress of St. Louis." The following quotation is taken from: Hugo Münsterberg: *The International Congress of Arts and Science*, in: *The Journal of Philosophy, Psychology and Scientific Methods*, vol. 1, no. 1, January 7, 1904, pp. 1–8.

5) In version (A) this sentence is continued in W. Macdonald's handwriting: ". . . , and subject to the conscious control and direction of the educated social will." Version (A) reached its conclusion with this sentence. It bore solely the handwritten note of Lady Welby on the last page: "N.B. The first part of this owes much to Mr. Macdonald's editing".

6) This postscript also belongs – as the page numbering in the typewritten manuscript indicates – to the essay (B). It takes up in more detail the contents of the last incomplete sentence of Version (A), which is no longer contained in the version reproduced here.

7) This text, like the first one, is taken from Box 29, file 36 of the Welby Collection.

8) It would appear not to be determinable with certainty to which of Heape's publications Lady Welby is referring here, since the "List of Books in the Lady Welby Library" (University of London) contains no books by Heape. However, it is possible that she is referring to Walter Heape: *The Breeding Industry: Its Value to the Country and Its Needs* (National Problems), University Press, Cambridge 1906.

9) Lady Welby's footnote on this reads: "We say metrical from metre, practical from practice; why not matrical from matrix?"

10) Here and in the following Lady Welby is probably alluding to Schiller's version of pragmatism and his polemics against intellectualism (cf. on this point Ch. 4.7 of my introduction to this volume).

11) From Box 14 of the Welby Collection. – A typewritten transcript of this letter was marked off by Lady Welby in the margins, based on which outline she organised and constructed her own answer to Schiller.

12) Cf. on this F. C. S. Schiller: *Formal Logic. A Scientific and Social Problem*, London 1912, p. 236: "Now, in point of fact, 'intuitions' are not a monopoly of philosophers. All sorts of people are liable to them and believe in them, geniuses (like Prof. Bergson), ladies, and lunatics being particularly prone to them."

13) Percival Lowell (1855–1916), American astronomer, established the Lowell Observatory at Flagstaff, Ariz. Since the 90's, Lowell was especially interested in the observation of Mars and became the leading authority on Mars. He argued the opinion that all observations pointed to the existence of life on Mars: intelligent inhabitants of the dying planet were fighting for survival and channeled the water of the polar snows into a planet wide irrigation system. The so-called canals of Mars were, according to him, strips of vegetation dependent on irrigation. Schiller probably refers here to Lowell's book *Mars and Its Canals* (1906).

14) Struldbrugs are those cursed with immortality in Jonathan Swift's *Gulliver's Travels* (1726).

15) H.G. Wells' "A Modern Utopia. A Sociological Holiday" (1904/1905) is probably meant here; cf. on this point Ch. 4.10 of the introduction in this volume

16) The typewritten transcript of this letter to Schiller, which is reproduced here, was given the date "Oct. 20, 1907" by Nina Cust. This dating is probably justified by the course of the contents of Lady Welby's correspondence with Schiller. Like the date, I have not included other comments, supplements, and corrections as well which Nina Cust undertook for the existing version of the letter.

17) Lady Welby's footnote on this: "I have not yet shown you the evidence for this statement. To be convincing, it requires to be tabulated as well as indexed – and it grows every day – since a case here and there taken at haphazard might be explained away."

18) This includes Lady Welby's footnote: "How imperious you men are not yet conscious: you have the stupidity of your masterful intelligence which 'never knows when it is beaten' or when it talks non-sense instead of mother-sense."

19) Jacques Loeb (1859–1924), German experimental biologist and physiologist who formulated the theory of tropisms – the effects of environmental agents such as light and gravity on the movements of plants and animals (cf. his *Studies in General Physiology*, 1905). He became an American citizen in 1898. – Lady Welby owned at least Loeb's book *Comparative Physiology of the Brain and Comparative Psychology*, London 1901.

20) Cf. on this point Lady Welby's article "Time as Derivative" in: *Mind*, N.S., vol. 16, no. 63, 1907, pp. 383–400; and the introduction to this volume Ch. 2.6.

21) Lady Welby's footnote on this: "Of course these need to be properly tabulated and schematised: at present their full weight and significance cannot be realised on account of their unwieldy volume and their widely scattered condition. I am thinking of advertising for a man or asking the London Library or British Museum, or Dr. Murray to recommend me an expert! Seriously it is becoming imperative and I hope to get it done this winter."

22) The transcript of the letter, which is given here completely, ends with these words.

23) This text is to be found in the Welby Collection (York University Archives) in Box 31, file 52. The first version of the text was called "How and Why Are We Social? ". The original of the present essay has at the top of the first page the handwritten note (probably by Nina Cust) "Sept. 24. Sociology (in parts)"; it was probably written in the year 1908.

24) Lady Welby's footnote on this: "We owe to Romanes a very suggestive analysis of the idea of 'meaning' as correctly symbolised by that word. He begins ('Mental Evolution in Man'. p. 159) by giving the name 'indicative' to the earliest stage of '*intentional* sign-making'. The next stage (following Mill) he calls denotative and connotative and (p. 161) expresses surprise at the neglect of this valuable distinction by logicians. Finally for the 'exclusively conceptual extension of a name' he reserves *denomination*, which involves a 'truly conceptual *intention*'. It will thus be seen that not only ought 'meaning' to be distinguished from sense, signification, import and significance, but that there are different kinds of intentional signs – signs *intended* to convey certain ideas – in short, *different kinds of 'meaning'*." Lady Welby is referring here to George John Romanes and his book *Mental Evolution in Man. Origin of Human Faculty*, London 1888, which was included in her library.

25) Lady Welby's footnote on this: "Articles in 'Mind', January and April 1896. 'Grains of Sense'. 'What is Meaning?'"

26) Lady Welby's footnote: "A somewhat detailed analysis of usage among writers on Sociology (English and American) must be reserved for a separate Essay."

27) Lady Welby's handwritten footnote on this reads: "For obvious reasons I confine myself to English usage. Each language will furnish its own corresponding examples."

28) Lady Welby's footnote on this: "Many suggestive quotations might be made on this subject. One however must suffice. In his 1902 Address to the Royal Society, Sir William Huggins says with reference to education that 'above all things, such a practical study of natural phenomena should become an essential part of our national teaching as would draw out and foster that noblest of our faculties, the power of image-forming in the mind, which, in its highest and productive form, does not consist simply of the reproduction of old experiences from the stores of memory, but by new combinations of them – as by a marvellous alchemy – so transmutes them as to lead to the creation of a new imagery. This creative use of the imagination is not only the fountain of all inspiration in poetry and art, but is also the source of discovery in science, and indeed supplies the initial impulse to all development and progress. It is this creative power of the imagination which has inspired and guided all the great discoverers in science.' And then we confound that royal function

with the essentially erratic and dangerously fascinating Fancy which in the pursuit of knowledge is one of our worst foes!"

29) The footnote on this reads: "As, with reference to language, M. Michel Bréal insists. He adds 'En ce long travail, il n'y a rien qui ne vienne de la volonté!' ('Essai de Sémantique', p. 8)." Lady Welby is referring here to the first edition of Bréal's "Essai de Sémantique" (Paris 1897).

30) Lady Welby's footnote on this: "This view of the respective spheres of belief and faith finds expression in the 'Anticipations' of Mr. H.G. Wells. He says 'Excessive strenuous belief is not Faith. By Faith we disbelieve, and it is the drowning man and not the strong swimmer who clutches at the floating straw', though in the next page he unconsciously reverts to the discarded idea in saying 'To believe completely in GOD is to believe in the final rightness of all being'. Of course it should be 'To have complete Faith in GOD . . .' For *that* is content to have our own ignorance exposed by the revelations of growing knowledge, our own beliefs purged and transfigured by the searching flame and light of the Divine Energy. The trial of faith by the criticism of belief as Mr. Wells says, 'is not destruction, any more than a sculptor's work is stone-breaking'." Lady Welby is referring here to H. G. Wells' book *Anticipations of the Reaction of Mechanical and Scientific Progress upon Human Life and Thought* (Chapman & Hall, London 1901). She thought highly of Wells' writing (cf. Ch. 4.10 of the introduction to this volume) and owned nearly all his books (cf. "Catalogue of Books at Duneaves, Harrow, June 1902" in the Welby Collection of the York University Archives).

31) Lady Welby is alluding here to William James' *The Varieties of Religious Experience: A Study in Human Nature* (Longmans, Green and Co., New York/London 1902). — On Lady Welby's critical position toward James' writing cf. her letter to F. C. S. Schiller, printed in excerpts in: Welby, Victoria Lady: *Other Dimensions. A Selection from the Later Correspondence of Victoria Lady Welby*. Edited by Her Daughter Mrs. Henry Cust, Jonathan Cape, London 1931, pp. 40f.

MEANING AND METAPHOR.

PROFESSOR HUXLEY supposes* “that so long as the human mind exists, it will not escape its deep-seated instinct to personify its intellectual conceptions.” He finds that “the science of the present day is as full of this particular form of intellectual shadow-worship as is the nescience of ignorant ages.” The difference he sees is “that the philosopher who is worthy of the name knows that his personified hypotheses, such as law, and force, and ether, and the like, are merely useful symbols, while the ignorant and the careless take them for adequate expressions of reality.” He then goes on to warn us against dealing with symbols as though they were “real existences.”

Few indeed are free from reproach in this matter, so far as reproach is deserved at all in the general unconsciousness of what constitutes the danger. Few see the question to be vital or the danger to be urgent ; and even those who do are apt to deny that the search for a remedy can be a crusade worth attempting ; the very idea seems Utopian or pedantic. On the one hand, teachers as a rule do not take their own analogies and metaphors seriously. Both the literary and scientific, as well as the philosophic and historical instinct tell against their doing so. In their eyes figures have either faded into indifferent abstractions, or they are obviously pictorial and merely rhetorical. But the average reader is apt to take them at the foot of the letter. He is usually unaware both of the extent to which he literalises and of the curious inconsistencies which his

* *The Nineteenth Century*, April, 1886. (Reprinted in *Essays on Controverted Questions*.)

literalising involves. So he makes his inferences with a light heart, and wonders, perhaps, at the resulting confusion without suspecting its true cause.

Would that the real state of the case and its practical consequences could be pressed home to all with such force, that whatever be our line of work or thought or expression we should strive in earnest to mend matters. At least, we might begin by learning better what part symbolism plays in the rituals of expression, and ask ourselves what else is language itself but symbolism, and what it symbolises. We should then examine anew the relations of the "symbolic" to the "real"; of image, figure, metaphor, to what we call literal or actual. For this concerns us all. Imagery runs in and out, so to speak, from the symbolic to the real world and back again. As matters stand, we never know where we are because we know so little where our phrases or our words are; indeed, perhaps they and we are "neither here nor there"! Or, if we do know where we are, we cannot be sure that our hearer or reader knows where he is. He, too, is probably "neither here nor there." He often praises or agrees with us in the wrong place or the wrong manner. That is worse than being complained of or differed from; it is difficult to repudiate approval. Nor can we take refuge in lucidity and fancy that the clear must be the true. In the long run and in the cases which *signify* most, there is no escape through merely lucid style or method. The "luminous" speaker or writer, the "forcible" orator or essayist, the moment he tries to convey to the public mind a thought which is really new, will find himself hampered by his very clearness itself. His ideas are controverted on assumptions not really his; or he himself is misled in subtle ways by what he assumes in others.

Thus, by an instructive paradox, the clearest writer is often the most controversial; and he wonders at our perverseness as, while we admire his power and his "style," we wonder at the perverseness in him. We possibly agree with him in ways we do not suspect; he possibly agrees with us in senses he ignores. Such a writer may pride himself on a chary use of metaphor, or on a carefully sharp distinction between "image" and "thing" or "object." But

he is liable to forget the danger dogging him even here. One is tempted to say that there is only one term more figurative as well as more ambiguous than "metaphorical," and that is "literal." Most certainly much that is called "literal" is tinged with the figurative in varying degrees, not always easy to distinguish, even with the help of context. The word "literal" itself is indeed a case in point. It has rarely, if ever, any reference to writing.

The question is, whether this state of things is quite so inevitable as most of us seem to think. Certainly, so long as we are content to live in the fool's paradise of supposing that only the perverse, the prejudiced, the stupid, or the ignorant can possibly mistake our meaning, and that our misreadings of others are simply due to their "obscurity," or "quibbling," or literary incapacity, we shall ourselves contribute to the hopelessness of the situation. But this is a subject which cannot be dealt with in an incidental way; it is rather a hope for the future, that one of the most practically serviceable of subjects—that of Meaning, its conditions and its changes—shall be seriously taken up. Then, indeed, we may get back to the first of all questions, and that which is most pregnant of helpful answers; that which needs asking more than any other if good work is to be done in this day of universal "unsettlement":—What do we really mean? On all sides dead calms are stirred and ruffled, dead levels upheaved or depressed; nothing (happily) can hope to escape the wave of quickening force. So before long we may well be asking this question in good earnest; and when we do we can but be the better, even if we must needs submit in some cases where we may have been prematurely positive, to be content (for the moment) with the answer: We do not really know.

The fact is, that we have been postulating an absolute Plain Meaning to be thought of, as it were, in capital letters. We have been virtually assuming that our hearers and readers all share the same mental background and atmosphere. We have practically supposed that they all look through the same inferential eyes, that their attention waxes and wanes at the same points, that their associations, their halos of memory and circumstance, their congenital

tendencies to symbolise or picture, are all on one pattern. Verily, we need a "Critique of Plain Meaning"!

Again we *quote* on the same assumption. Unless the language of our author is obviously archaic; unless his allusions unmistakably betray a different life-context, a different social "milieu," in short, a different mental world, we claim him or we repudiate him on the same principle. We take his words, we take his phrases, we fill them out with the same content as our own, we make him mean precisely what we ourselves mean. And be it noted that it is always what we mean *now*. That this in any way varies from what we meant at some time when, e. g., our attention was differently focussed, rarely enters our heads.

We shall, I suppose, admit that until lately there was one very good reason for this state of things. Only the exceptional mind (if any); only the mind which could not make itself fully understood by its contemporaries, and would risk being reckoned crazy or criminal if it spoke "plainly," had any suspicion that this way of looking at things was being gradually invalidated by the general extension of the critical domain. The history of language, its relation to thought; the scope of expression and representation, the function of the figurative and symbolic; the growth of all means of mental communion from the simplest rudiments of gesture or cry to the highest point of intellectual complexity,—all this was either ignored or taken for granted on radically insecure bases.

Again, while the underlying conditions of language must be looked for in the domain of psycho-physics, that science had not yet come into existence. Even now it is but feeling its way and putting forth tentative hypotheses, warning us, as it does, so that they are liable to be constantly modified and occasionally revolutionised. And what does it realise, first and foremost? That our difficulties on the very threshold of the inquiry are, as usual, largely those of language. On all sides we have to use, as best we may, modes of expression that inevitably convey ambiguous meanings even to the thoughtful, even to the trained mind, which cannot but carry with them a background of outgrown or disproved premises, vitiating more or less every conclusion that we draw from them. The very

phrases which are our only shorthand for the vast oratory of nature and experience betray us in the using. We have taken them as though they were like numerals invariable in meaning, thus supposing them subject to a permanent uniformity. We have taken them as though they were without a history, merely fortuitous labels or symbols of unanimous consent; the accepted sense, we think, being easily ascertainable, always persistent, and wholly sufficient for practical purposes. In any case we strangely assume that we may safely play upon all the chords of imagery, reserving without difficulty for serious use a body of terms which are direct expressions of "fact."

But the suggestion now made is that this is precisely one of the most dangerous of presuppositions. It is not the man who has mystified himself, or who wishes to mystify others; it is not the man who confounds the reality of the logical with that of the actual; it is not the man who takes emotion for proof and notion for fact; it is none of these, but the man who is clear on such points and sees that they must be drawn out into clues and followed up to the uttermost, if we would know where we are—who is beginning to see that the paramount need of the moment is the "torpedo-shock" of the question, What do we really mean? He knows that the off-hand vagueness and ready-made confusion, which too often from sheer ignorance usurp the name of common-sense, are in the long run its most deadly enemies.

We may look forward then with a new hope to the rise of a systematic inquiry on the subject of meaning and its changes. This would entail the much-needed work of classifying metaphor, and might even be found to point to the existence of a third value, neither wholly literal, nor wholly figurative, as that of a large proportion of ordinary expression. From this and like causes, in this age of rapid changes due mainly to scientific conquest, we can all readily put to each other questions to which either a "yes" or a "no" must be equally misleading. And men of science have specially realised this, since many a time they have been unjustly credited with evasion, or with untenable or immoral views, because they either answered to a "plain question": "In one sense, yes; in

another, no," or else gave an answer which could not fail to be misunderstood by a mind which was governed by unconscious survivals. So far as we are in touch with modern culture, we no longer mean what we must have meant in the days before Copernicus, when we say, for instance, "the sun rises." When we speak of infection, we no longer mean what we used to mean before microbes had been heard of. When we talk of "heat," we no longer mean what we used to mean even fifty years ago. And when a man says that he believes in the sun, the planets, the cosmos, in the heavens and the earth, in mind and matter, in soul and body, in spirit and flesh, he cannot, if he would, mean just what his forefathers meant, or indeed anything at all absolutely and finally. Whether we will or no, the meaning of such terms is changing on our very tongues, and ever swaying between the extremes which we call literal and metaphorical; "heaven," e. g., ranging in value from sky to human destiny; "earth," from soil to the visible Home of Man. We may appeal, and are right to appeal to "hard, dry" facts; but we perforce put something out of ourselves even into these. They become "facts" under the quickening touch of "mind," while that emerges from a dim world of prepossession, bequeathing us many a primitive legacy from pre-intelligent sentience, and perhaps from little-suspected sources lying yet further back. For instance, primitive terror in its "superstitious" forms tended to represent man as inferior to and dependent on powers of some sort;—and this was true to natural order in the fact that his very world was not self-centred and was dependent for its best boons upon a greater than itself. As language advanced, he began quite naturally to express his meaning in "appropriate metaphors"; to use, e. g., the figures of light and then of sight to describe what he had, as we now say, "in his mind," or what sense-messages, as we now say, had "put into his head." For "something told him" that light, as it had been the first pleasure, was also the great means of life.* And he "saw," in however gro-

* "Light affects the new-born infant at an early stage, although in this as in other respects individual differences immediately assert themselves. The child seems to take pleasure in an excitation of light and tries (even on the second day

tesque a guise, the unbroken continuity of the organic and the inorganic, and perhaps even more clearly than most of us yet do, that of so-called "matter" and so-called "mind." Perhaps in some cases, therefore, he chose his imagery better than (after long ages of dualism carried to the splitting-point) we generally do now.

He knew again that the senses after all, stern masters though they were while life was so hard to live, had very narrow limits; and that the world was in some sense fuller and richer of life than it had seemed to be as known directly through them.* And then he wondered,—and began to ask. He was the first Questioner. As Prof. Max Müller says,† "the greater the savagery, the dullness, the stupidity with which *Homo sapiens* began, the greater the marvel at what must have been from the first, though undeveloped, in him, and made him in the end what we find him to be in the men of light and leading of our own age." The mere fact of the question is the riddle to be solved. For certainly the beasts had not taught him either to wonder or to ask. And not merely insatiable questioning but something more here rises to challenge our attention and to demand reflection. Man is the first critic because he is the first idealist; the first to be discontented, to protest, to see life as a "ravelled end,"

after birth) to turn towards it in order to retain it." (*Outlines of Psychology*, H. Höffding, p. 4.)

"Under the influence of light the conversion of inorganic matter into more complex organic matter takes place, more particularly in the green cells of plants." (*Ibid.*, p. 315.)

"It is certainly necessary to look further back than the visual sensations to understand the great influence of light on all creatures that have sensuous perception. . . . Light is thus one of the most elementary conditions of life." (*Ibid.*, p. 229.)

* It must be borne in mind that I am using psychological terms in a merely general sense. Among many examples of such use I may quote Sachs (*Physiology of Plants*, p. 200) and F. Darwin (*Address to Biological Section*, Brit. Assoc., August 1891), who speaks of the plant as "perceiving" external change, as "recognising" the vertical line, "knowing" where the centre of the earth is, "translating" stimulus, etc. See also Darwin's *Forms of Flowers*, p. 90.

Again Prof. M. Foster uses the word "will" in the same general (rather than metaphorical) sense. (*Text Book of Phys.*, Part 3, pp. 1059, 1062, 1063.) Modes of reaction are thus verbally linked with consciousness, and we must remember that all our terms for the "mental" belong first to the "physical," and that many are reciprocally used in the two spheres.

† *Natural Religion*, p. 243.

as something which is incomplete and speaks of something more. Surely in any case the step of all steps, the deepest yet the narrowest line to cross is the step from something noticed or found, from something which happens or appears, from something which somehow affects us, excites us, to its significance.

Of course in one sense it is impossible to fix any definite moment as that of the advent of this "significance." Animals interpret each others' aspect and gestures, often indeed with a subtle precision which to some extent we have lost. But interpretation in the intellectual sense becomes, from our present point of view, that which makes us really human. Our progress, our ascent, is mainly marked in this. The root-question to ask in gauging levels of humanity is, how much can a given man interpret or translate, of a world that teems with meaning? How much can he truly classify and relate, how much can he rightly infer and conclude, how much can he account for, explain, and fruitfully apply? For after all, results must be our tests. Claims and credentials are nothing, unless they can show this warrant; whereas truth which can use all facts alike is the very means of survival. Man begins by doing, by acting out impulse; then he learns to "think" little by little, observing, questioning, pondering, testing his way onward and upward. And throughout his patient, often painful journey, he is himself perpetually challenged. Nature's stimulating appeals rain upon him ceaselessly from every side; she orders him to master all her meanings. He responds:—at first again, "blindly," but ever rising to higher grades of answer. Both deficiency and error are no doubt more or less present in all mental response to actual fact—that is, in all experience. But the essence of sanity from the first lies in corrective power. Everywhere there is either absence of notice, absence of response, or there is experimental activity (broadly speaking) corrected at once; automatically or by the combined effect of the related organic activities. For instance, in health, if in using the hand, one finger accidentally goes astray, the coördinating muscles promptly recall it to a "sense of duty." We know how the same rule works in speech and writing. Therefore, unless "voluntary"

and "capricious" (or "willing" and "wilful") are synonyms, the advent of volition ought not to mean the abrogation of this rule.

It is, however, obvious that "natural selection" can only operate in cases where death or sterility is the consequence of failure in adaptation and appropriate reaction, or segregation the consequence of excessive variation. But the point here is, why does not a tendency to correction, thus established, survive automatically in incipient imagination and therefore in language? It seems almost a burlesque of popular notions of "free will" to suppose that the moment the death-penalty is taken off, the new-born intelligence, unique in adapting power, should go astray persistently without let or hindrance. Many now merely formal or even jocular customs still prevailing* testify, as legacies from a remote time of danger needing to be averted, to the strength of tendencies organised during myriads of generations under the pressure of the struggle for life. Why does not this apply to language?

But sight gives us here perhaps the most suggestive lesson; for therein the ascending series seems especially gradual and unbroken. The eye, unlike the other organs of sense is an outgrowth of the very brain itself; "the retina . . . is in reality a part of the brain."† We may well therefore connect its functions specially with the thought of significance; it is the main out-post of our central means of interpretation.

Taking the stages in the evolution of the eye, and using a short summary of these as a convenient means of testing the value of a conspicuous group of metaphors, we find (1) a mere dint; (2) this dint deepening into a pit which (3) gradually narrows. Hitherto we have had only light and darkness; now we have an image, though but a dim one. (4) The pit is closed by a transparent membrane; this is protection, not obstacle. (5) The lens is formed by deposit of cuticle. Gain; increased distinctness and increased brightness. The lens can focus a larger pencil of rays from each part of the ob-

* See Dr. Tylor's *Primitive Culture*, Vol. I, pp. 74-121; *Ibid.*, Vol. II, pp. 297-298, 404-428.

† Dr. M. Foster's *Text-Book of Physiology*, Part 4, p. 1142.

ject to each part of the retina (corresponding point). Finally, iris and eyelid protect the perfected eye more completely, and enable it both to bear more light and to discern more detail.

If mental development were in any way comparable to this physiological development, we should expect to find (1) something which would naturally be described as a vague or dim "impression"; gradually deepening, becoming more distinctly localised as the stimulus became more definitely "impressive." (2) We should begin to find "reality" and the "unreal"; "fact" and "fancy"; "truth" and "falsehood"; knowledge and ignorance,—contrasted as "light" and "darkness."* And this is what actually happens.†

(3) Still our mental "impression" would not as yet afford us an image; "imagination" only now comes upon the scene and begins to work (though as yet "dimly") upon the objects which more and more "incisively" "impress" us. (4) Our deep "impression" is closed in one sense from direct contact with the outward; mental vision becomes more delicately differentiated from the emotional "touch," however this may be specialised and intensified. But what secludes this is transparent; it is protection, not obstacle. We rightly speak of mental penetration; of "seeing through" a superficial limit. The mental "lens" is formed from that "continuum" on which the original "impression" was made. The gain now is increased distinctness and brightness. More rays of "light," of reality, of fact, of truth, of knowledge, can now be focussed from each part of a given object (or group of objects) of mental attention and interest; to each part of the responsive "sensitive plate" of the mind. Finally we

* I am of course merely directing attention to the relative aptness of metaphors of mental process familiarly in use in our own language. It is obvious that before any inference could be made from them as to the value of unconscious analogies of imagery, we should have to make appeal to comparative philology and embark on a wide inquiry, for which the English-speaking races must wait for Dr. Murray's epoch-making Dictionary.

† It must be borne in mind that the whole process presupposes the other senses or at least the temperature-sense, the "muscular sense" and that of touch; that is, we should have "felt" simple stimuli "emotionally" before we "saw" things intellectually. And hearing is not now in question, though in that, too, we should find the same character of development, i. e. the same prominence of the protective and discriminative factors.

have, so to speak, increased protective growth. The function of what are called academic culture and scientific method, with their fastidious standards of fitness and accuracy, may perhaps represent something not unlike that of iris and eyelid, enabling the developing mind safely to bear intenser illumination and also to discern more subtle detail.

It must be admitted that so far as it goes this is a significant psychological parable. However slender its right to the position even of a working clue to early stages of mind, it has at least better credentials than many accepted analogies can claim. And throughout its course what most "impresses" itself upon one's mind is the steady maintenance of invariable reaction to excitation, and of protection from unfavorable stimulus.

"Mind," as Mr. Shadworth Hodgson tells us,* "is a fiction of the fancy." Of course this is open to the retort that so is fancy a fiction of the mind, or fiction a fancy of the mind.

Psychology is full of these see-saws of paradox, depending on vicissitudes of linguistic usage or context. But mind is indeed a fiction of the fancy when we endow it with a fanciful freedom from all ties with what we call physical reality. For this, however plainly we may recognise its genesis in our own sequences of sense-impression, does practically through them rule us with an undeviating severity which neither fiction nor fancy can tamper with. Therefore, if we think it absurd to suppose that there may possibly be an undiscovered vein of authentic and really indicative symbol or metaphor running through the arbitrary meshes of fanciful custom or mythical term, we are in fact implying that all clues from the original interactions of physical energy were entirely lost when what we call "mind" issued first in language. But at all events we may be sure that links between the "physical" and the "psychical" are everywhere drawing closer and emerging clearer, however buried as yet in a mass of the fantastic or the arbitrary.

It will probably be objected that we can never hope to find these. No doubt such an attempt must mean the patient work of

* *Brain*, June, 1891. P. 13.

many lifetimes, and at best we could not hope to lay bare the ultimate point of "origin." But yet it seems worth trying. For after all, even the results which may appear so scanty in the tracing back of language, are already rich far beyond what could have been hoped for a few generations back. And if it were once realised that such a line of work might have practical and far-reaching issues; if we really saw that, thus some barren disputes and speculations might cease to bar the way or to waste some precious energies, we should be more than rewarded. In his "Dialogues of Plato"* Professor Jowett warned us twenty years ago of our linguistic dangers, repeating his warning with greater emphasis and in fresh forms in the admirable essays added in the edition just published. He urges that the "greatest lesson which the philosophical analysis of language teaches us is, that we should be above language, making words our servants and not allowing them to be our masters." "Words," he tells us, "appear to be isolated but they are really the parts of an organism which is always being reproduced. They are refined by civilisation, harmonised by poetry, emphasised by literature, technically applied in philosophy and art; they are used as symbols on the border-ground of human knowledge; they receive a fresh impress from individual genius, and come with a new force and association to every lively-minded person. They are fixed by the simultaneous utterance of millions and yet are always imperceptibly changing:—not the inventors of language, but writing and speaking, and particularly great writers, or works which pass into the hearts of nations, Homer, Shakespeare, Dante, the German or English Bible, Kant and Hegel, are the makers of them in later ages. They carry with them the faded recollection of their own past history; the use of a word in a striking and familiar passage, gives a complexion to its use everywhere else, and the new use of an old and familiar phrase has also a peculiar power over us." Then he reminds us of what we too often forget; that "language is an aspect of man, of nature, and of nations, the transfiguration of the world in thought, the meeting-point of the physical and mental sciences, and also the

* Vol. I, pp. 235-286, 293.

mirror in which they are reflected, an effect and partly a cause of our common humanity, present at every moment to the individual and yet having a sort of eternal or universal nature."*

Nowadays, when we feel most scathingly superior, we often announce that we fail to see and have yet to learn something which, bringing us, it may be, a really fresh idea, unpleasantly stirs misgiving. Let us go on with our greeting, meaning it in good earnest. For when we honestly and without reservation consent to learn and succeed in seeing some things now waiting for our study we may find more than we look for, within reach. After all it may be that

* The following, among many pregnant passages between which it is difficult to choose, may be further quoted :

"The famous dispute between Nominalists and Realists would never have been heard of, if, instead of transferring the Platonic ideas into a crude Latin phraseology, the spirit of Plato had been truly understood and appreciated. Upon the term substance at least two celebrated theological controversies appear to hinge, which would not have existed, or at least not in their present form, if we had 'interrogated' the word substance, as Plato has the notions of Unity and Being. Those weeds of philosophy have struck their roots deep into the soil, and are always tending to reappear, sometimes in new-fangled forms; while similar words, such as development, evolution, law, and the like, are constantly put in the place of facts, even by writers who profess to base truth entirely upon fact. In an unmetaphysical age there is probably more metaphysics in the common sense (i. e. more *a priori* assumption) than in any other, because there is more complete unconsciousness that we are resting on our own ideas, while we please ourselves with the conviction that we are resting on facts. We do not consider how much metaphysics are required to place us above metaphysics, or how difficult it is to prevent the forms of expression which are ready made for our use from outrunning actual observation and experiment." (Vol. IV, p. 39-40.)

"To have the true use of words we must compare them with things; in using them we acknowledge that they seldom give a perfect representation of our meaning. In like manner when we interrogate our ideas we find that we are not using them always in the sense which we supposed. (*Ibid.*, p. 41.)

"Many erroneous conceptions of the mind derived from former philosophies have found their way into language, and we with difficulty disengage ourselves from them. Mere figures of speech have unconsciously influenced the minds of great thinkers. Also there are some distinctions, as, for example, that of the will and of reason, and of the moral and intellectual faculties, which are carried further than is justified by experience. Any separation of things which we cannot see or exactly define, though it may be necessary, is a fertile source of error. The division of the mind into faculties or powers or virtues is too deeply rooted in language to be got rid of, but it gives a false impression. For if we reflect on ourselves we see that all our faculties easily pass into one another, and are bound together in a single mind or consciousness; but this mental unity is apt to be concealed from us by the distinctions of language." (*Ibid.*, p. 155.)

we have really failed to see and have really yet to learn the part that meaning—whether of language or of conduct—and its change or variations (successive or simultaneous) have had throughout the mental history of man. It may be that while the ordinary modern metaphor like the ordinary modern analogy is a mere rhetorical device, some few images may be found to hail from an altogether deeper and more authentic source. Many, however ancient, are not of course any the more valid for their antiquity. On the contrary it is obvious that such a figure for instance as “foundation” or “basis” to express an ultimate necessity, is a survival from days in which the earth was supposed to require and to possess such fixed and immutable base, while the analogies, e. g. between the human and the inorganic orders are now reversed. We import the idea of mechanism and invariable sequence into the former instead of exporting conscious intention into the latter; we level down where our forefathers levelled up. And we have to beware of the subtle atmosphere of fallacy thus introduced.

But on the other hand it is conceivable that some may be found to belong to that as yet mysterious energy on which natural selection plays and of which variation is the outcome or the sign. What we find in language may thus be, as it were, not merely the “scarred and weather-worn” remnant of geogenic strata but sometimes the meteorite, the calcined fragment of earlier worlds of correspondence, ultra-earthly, cosmical. We have no right to do more than ask and seek and knock at the gates of fact in such a matter as this. But until that has been done; until at least we have tried the experiment; have looked for grades of validity in metaphor and analogy in the light of modern science, and still more, have recognised clearly the powerful though hidden effects upon us of organised mental picture brought in surreptitiously with verbal imagery, or by comparison; we cannot know whether such an effort is worth while or no, or what harvest it may yield. For after all, whether we like it or no, we *are* heliocentric; the world and all that is in it is cosmically generated. As far as science—and experience—are concerned, anything which says “I don’t admit that origin; I claim to have produced myself or to have been originated by and on the

earth in a final sense," must make good its geocentric or self-creating pretensions with overwhelming cogency and rigorous proof. We appeal to the "light" of science, of reason, of experience, against the "darkness" of superstition, myth, and mysticism. And we are thus appealing not to the supersensuous or supernatural but to the ultra-satellitic. Not only beyond the earth and touch but beyond the atmosphere and hearing is the home of the light that lightens our small world, calling forth in us the answer of sight. And the manifold revelations through this sense—in its mental as well as bodily character—press upon us, with greater and greater insistence, the wealth of our relations with the universe.

In any case, *meaning*—in the widest sense of the word—is the only value of whatever "fact" presents itself to us. Without this, to observe and record appearances or occurrences would become a worse than wasteful task. Significance is the one value of all that consciousness brings, or that intelligence deals with; the one value of life itself. But perhaps for this very reason we have taken it too much for granted. It may need a more definite place in psychological inquiries. It may have unsuspected bearings.

When we have realised better what manner of gift this is, we may find answers of which we have prematurely despaired; answers coming not from the "mystical" point of the horizon of experience, but rather from the neural. And let us beware here of repeating the pre-scientific error of postulating, for figurative purposes, a flat earth on which whatever lies beyond "horizons" never meets! But, it may be said, why not? Why should it signify? Why, but because Man is the one not merely who thinks, or speaks, or writes, or looks upwards, but the one who *means*, the one who *is* the meaning of much, and makes the meaning of all; the one who will not tolerate the unmeaning anywhere in experience. Nothing remains but that he should interpret rightly; that he should apprehend nature and experience in their true sense. It is the glory of science that she puts this aim in the forefront of her labors. She tells us that nothing can be done without assumption and hypothesis as to the meaning of things. But that significance belongs to the very spring to which we owe her dauntless energy and her accumulating triumphs.

Why should it signify? The very term answers us. To "signify" is the one test of the important. The significant is alone worth notice. We inherit a mode of thinking which we are at last becoming able to criticise in the light of knowledge gained by observation and experiment. But if we persist in using, without warning to hearer or reader, imagery which has no longer either sense or relevance, or which tends to call up a false mental picture or to perpetuate an else decaying error, we shall to that extent forfeit the very gifts which science brings us, and must not complain of the obstinate persistence of ideas which needlessly divide us. At least, let us try to realise more clearly what we are losing in this way. The danger even thus must needs be lessened; detected bogies become powerless for mischief; but we need not leave their ancient home empty, swept, and garnished; stores of verified analogy are waiting to replace them. The figurative must not indeed be pressed, still less literalised. But we may see that it conveys a true rather than a false impression; and harmonises with, instead of contradicting that which we most surely know.*

It may be said in a true sense that the function of the hero, the saint, the poet, is to bring the world to *life*. But the function of the devoted servant of science, the critical scholar, the true philosopher, is to bring the world to *truth*, in a sense only now becoming possible. Through the last discipline alone, in its most thorough applications, can we hope fully to master the scope of all significance and the laws of all its workings. Then, indeed, we may further hope to read with a fresh eye the Significance of Life.

VICTORIA WELBY.

* I would gladly forward to any reader interested in a question of such practical bearings, a small collection of *Witnesses to Ambiguity* gathered from representative sources, and a pamphlet which was circulated at the International Congress of Experimental Psychology, held in London, August, 1892, giving examples of the mischievous confusions suggested by the use, even among writers of the first rank, of the metaphor, *Inner and Outer*. Prof. H. Sidgwick, the president, in his opening address, expressed the opinion that very important work of this kind remained to be done, and added, "I have much sympathy with the view urged in a pamphlet that I have received for distribution among members of the Congress, which illustrates forcibly the confusion caused by one established antithesis of terms. Professor Sully and others have expressed themselves strongly in the same sense.

II.—SENSE, MEANING AND INTERPRETATION. (I)

BY V. WELBY.

THE drawbacks and even dangers of linguistic ambiguity and obscurity have always been more or less recognised and deplored, and most of us have exhorted others and have been ourselves exhorted to be clear and definite in statement and exposition, and not to wander from the 'plain meaning' or the 'obvious sense' of the words which we might have occasion to use. For it is undeniable that obscurity or confusion in language, if it does not betray the same defect in thought, at least tends to create it. The clearest thinking in the world could hardly fail to suffer if *e.g.* an Englishman could only express it in broken Chinese.

But when we ask what authority is to be appealed to in order to settle such meaning or sense, and how we are to avoid ambiguity and obscurity: when we ask how we are always to be 'clear' for all hearers or readers alike under all circumstances: when we ask where we may obtain some training not only in the difficult art of conveying our own meaning, but also in that of interpreting the meaning of others: when further we inquire into the genesis of sign, symbol, mark, emblem, &c. and would learn how far their 'message' must always be ambiguous or may become more adequately representative and more accurately suggestive, then the only answers as yet obtainable are strangely meagre and inconsistent. And they can hardly be otherwise so long as no serious attention, still less study, is given to the important ideas which we vaguely and almost at random convey by 'sense,' 'meaning,' and allied terms, or to that process of 'interpretation' which might perhaps be held to include attention, discrimination, perception, interest, inference and judgment, but is certainly both distinct from, and as important as, any of these.

The question where the interpreting function begins: where any stimulus may be said to suggest, indicate or signalise

somewhat other than itself, is already to some extent a question of Meaning,—of the *sense* in which we use the very word. In one sense, the first thing which the living organism has to do,—beginning even with the plant—is to interpret an excitation and thus to discriminate between the appeals *e.g.* of food and danger. The lack of this power is avenged by elimination. From this point of view, therefore, the problem which every root as well as the tentacle and even the protozoic surface may be said to solve is that of ‘meaning,’ which thus applies in unbroken gradation and in ever-rising scale of value, from the lowest moment of life to the highest moment of mind.

But ‘meaning,’ one of the most important of our conceptions and indeed that on which the value of all thought necessarily depends, strangely remains for us a virtually unstudied subject. We are content to suppose it vaguely equivalent to ‘significance’ or to ideas expressed by a long list of so-called synonyms, never used with any attempt to utilise the distinctions of idea which they may embody, and which inquiry might show to be of real value in disentangling the intricacies and avoiding the pitfalls of philosophic thought. For example, for the purposes of such inquiry some of the main lines of thought might be tentatively correlated with the meaning-terms which seem more especially to belong to them; and this would at least help us to understand that we are not to demand of any one what more properly belongs to another.

The following attempt at such a classification is of course only a suggestion of what is here intended (*i.e.* meant):—

Philology and Signification	}	Meaning (or Intent?)
Logic and Import		
Science and Sense		
Philosophy		
Poetry		
Religion		
	}	and Significance

It is evident that the questions here opened are too wide to be adequately dealt with in an Article; but it may be possible briefly to suggest the kind of advantage which might accrue from the direction of attention to this subject.

Signification here represents the value of language itself: it seems naturally concerned with words and phrases, and is generally confined to them, although the numerous exceptions show that the distinction is not clearly recognised.

Import, on the other hand, introduces us to the idea of ‘importance’ and marks the intellectual character of the logical process. When we speak of the import of propositions, we are thinking of more than bare linguistic value: and we may find

that to master such 'import' has a real 'importance' with reference to the subtle dangers of fallacy.

In coupling *sense* with physical science, three main current senses of the word should be borne in mind. There must certainly be some 'sense' both as meaning and as judgment in observation and experiment to give them any value whatever, as our use of 'the senseless' testifies, while the word is perhaps freer from any speculative taint than even 'meaning.' But in another 'sense,' Sense is the inevitable starting-point and ultimate test of scientific generalisation, and this suggests the question whether these divers senses of the word 'sense' are independent: whether the fact of the one word being used to convey what are now quite different ideas is merely accidental, or whether it points to a very close original connection between the ideas, if not to their actual identity. There seems at least a strong presumption in favour of the latter alternative: since the divergence of the senses of 'sense' has been a comparatively recent development and is thus possible to trace. And we have the authority of Dr Murray¹, as I believe of

¹ I am allowed to quote the following passages from a private letter from Dr Murray:—

"*Sensus* became in common Romanic *sensio* (retained in Italian, Portuguese), which again became in French *sens*. From French we took *sens* into English, so spelling it at first; then, to prevent the final *s* being treated as a *z* as the plurals in *pens*, *hens*, *dens*, it was written *sence* (as in fence, hence, defence, offence, &c.), and finally, with the feeling of keeping it as like the Latin as possible, and thus 'showing the etymology,' *sense*.....Etymologically, *sensus* is the *u*-stem verbal substantive of *sentire*, to discern by the senses, to feel, see, hear, taste, or smell,—the general word expressing the operation of a sense-organ in acquainting us with external objects. We have no such general word in English, though *find*, and *feel*, have both been and still.....are extended beyond the faculty of touch, to include smell, and sometimes taste; *perceive* is probably the nearest English word. But *sentire* is also extended to the inner or mental perception, to perceive, be conscious, operate mentally, '*think*.' Hence, *sensus* meant primarily the operation of one of the bodily senses, the action or faculty of feeling, smelling, tasting, hearing, physical perception.

By the (partial) objectivizing of these faculties, it came to mean (2) what we call 'a sense,' one of the five senses; thus, 'quod neque oculis neque auribus neque ullo sensu percipi potest': what can be perceived neither by the eyes, nor by the ears, nor by any sense.

Then (3) it meant the act of conscious or mental perception, the perception of the mind or man himself, as effected by the instrumentality of a bodily sense (as when I feel a body in the dark, and thereby internally 'feel' or 'perceive' that some body is present), or of several bodily senses combined.

Then (4) the action of the mind or inner man generally, thought, feeling as to things known, opinion, view taken, &c.

Then (5) especially, the common or ordinary feeling or view of humanity in regard to any matter, or to matters in general, the 'common feeling or sense' of mankind as to what is true, proper, wise, or the con-

philologists in general, for this view. If admitted, the fact is a pregnant one, as we may see when the subject can be treated more fully. Here we may perhaps note that the word seems to give us the link between the sensory, the sensible and the significant: there is apparently a real connection between the 'sense'—say of sight—in which we react to stimulus, and the 'sense' in which we speak or act.

Meanwhile the idea of *significance* stands on a different footing from the other meaning-terms. It will hardly be denied that it has or may have an implication both of importance and special interest or value which is completely lacking not only to 'signification,' but also to 'import,' in spite of the verbal connection of this last with 'importance;' and to 'sense' in spite of its wider application. We naturally lay stress on the significance of some fact or event like the French Revolution or the Chino-Japanese war, when we feel that its 'import,' its 'sense,'—even its 'meaning'—are quite inadequate to express its effect on our minds, while it would not occur to any one to speak of its 'signification.' It has 'significance,' it is 'significant,' because it indicates, implies, involves, (or may entail) great changes or momentous issues: because it demands serious attention and, it may be, decisive action: or because it must modify more or less profoundly our mental attitude towards the nations or races affected by it, and towards the problems called social.

This applies still more in the case of the great provinces of thought we call philosophy, poetry and religion, as the ideas belonging to these pre-eminently possess that kind of value best expressed by 'significance.' And if we say that philology or logic or physical science may also claim significance, it is in virtue of these 'knowledges' possessing some at least of the

trary. In this, an individual man may share more or less largely, and is said to have *more* or *less sense* accordingly: the justifiable assumption being that 'the great soul of mankind is just,' and that consequently the more a man is a man of sense, *i.e.* possessed of a large share of the common feeling, views, or sense of humanity, the more he is to be valued.

But (6) the feeling, view, or thought, that a man or men have in regard to anything, is expressible in words: the words convey the sense of the speaker: we gather his sense from his words, and naturally call it the sense of the words, *i.e.* the sense conveyed by the words (as we call the water conveyed by an aqueduct 'aqueduct water,' or a letter conveyed by a ship 'a ship letter'). Hence the meaning expressed by any sentence is its sense; and by very natural and necessary extension the meaning expressed by any single word is its sense. This was fully developed already by the late Latin grammarians and rhetoricians: thus Quintilian, '*verba duos sensus significantia*'=(ambiguous) words expressing two *senses* or meanings. It is hardly popular or plebeian English yet: the man in the street would speak of the *sense* of a sentence or statement, but usually of the *meaning* of a single word. But he might in reference to a badly written word say he 'could make no sense of it.'"

higher value which the word has come to imply: it is in virtue of their special emotional or moral interest either for all intelligent minds or for special groups of these.

Besides the sense-terms already instanced, there are of course many others. We have purport, reference, acceptation, bearing, indication, implication: we speak of expressing, symbolising, standing for, marking out, signalising, designating, suggesting, betokening, portending: words or phrases (and also gestures or actions) are intelligible, descriptive, definitive, emblematic: they are used to this 'effect,' to that 'purpose,' in this 'sense,' or in that 'intent.' All these and many others come in ordinary usage under the general term 'meaning': it remains to consider the claim of Meaning to cover more ground than Sense, and to stand therefore for all those conceptions which are expressed by the words commonly used as its synonyms. In the first place we must not forget that import (or purport) is really the secondary sense of the word Meaning: and that when we say we 'mean' to do this and that (*i.e.* we intend to do it) we are using it in its primary sense. It therefore becomes, like the various senses of 'sense,' an interesting subject for inquiry how the idea of intention has here given way to the idea of sense; because there certainly does not seem at first sight to be any close connection between the 'intention' which implies volition and looks to the future, and the 'meaning' which has no direct reference to either. On the other hand, when we say 'it is my intention to do this or that' we may use as an alternative 'it is my purpose to do it': and does not that bring us to a teleological value? If so, may the link be found in the idea of End? If we organise some expedition and charter means of transport and supplies, our meaning in all this is the furtherance of the object of such expedition: all our actions have reference to this end, which is the point and only 'sense' of our exertions.

We have thus linked Intention, Meaning and End. The fact that Meaning includes Intention and End seems to indicate that it is the most general term we have for the value of a sign, symbol, or mark. And yet it is precisely Meaning which has given rise to the denotative *v.* connotative controversy and which some logicians would deny to the 'proper name.' Of this it need only at present be remarked that if the latter view is to prevail, the logical use in narrowing the sense of 'meaning' will traverse the popular one, thus tending to create confusion unless we can bring another term into use in its place; while it would seem that all needed purpose would be served by admitting that the proper name, being a sign, is *literally* significant, *i.e.* has meaning, but is neither descriptive nor definable.

What exactly then is the point to which I am venturing to

call the attention of scholars, thinkers, teachers? The very fact of the need and the lack of this attention makes a succinct answer which shall really be an answer, difficult if not even impossible. But we may provisionally express it as being, in the first place, the universal and strange neglect to master and teach the conditions of what is called, as vaguely in scientific as in philosophical writing, Sense, Meaning, Import, Significance, etc. with the conditions of its Interpretation, and in the second place the advantages, direct and indirect, present and future, of a systematic inquiry into the subject, and of its introduction from the first into all mental training.

This is emphatically more than a merely linguistic question, and it has more than even a logical or psychological value. But even if this were doubted, no one would deny that modes of expression tend both to reveal and to modify modes of thought; and this must be especially true in any attempt to make language express more perfectly, and thus enable thought to signify more and to interpret more. From this point of view we ought properly therefore to begin our quest from the linguistic stand-point, since a word *quod* word is a meaning-sign, and thus the so-called question of words is really a question of sense. It is not too much to say, though the fact seems little realised, that it is largely through the very instinct which prompts even the most futile 'verbal' dispute that language has gained that degree of efficiency which it already possesses. But it seems impossible here to enter satisfactorily upon this side of the question, which must thus wait for a more general recognition of the importance of the whole subject.

To take an instance of the increased power of discrimination which we might hope to gain if attention could be effectually roused on this subject, we may point to the many derivative forms of (bodily) sense, all of which are in fact used with consistency and clearness. We have *e.g.* the sensory, the sensible, the sensuous, the sensual, the sensitive; but all these have exclusive reference to the *feeling-sense* of sense¹. Again, we

¹ It is difficult for the student of meaning-sense not to look with an envious eye at the wealth of idea which the organic-sense derivatives enable us to express with such precision. But for the increased confusion which a double usage would entail, we might gladly avail ourselves of the whole list, for they would immensely facilitate the discussion of questions of meaning-sense. At least however we might be allowed to coin a new derivative and speak of 'sensal' where we often now speak of 'verbal' questions, to the loss of a valuable distinction. For the use of 'verbal' ought surely to be confined to the spheres of philology or literary style, whereas 'sensal' would mark the difference between mere 'sense' (as meaning) and 'reality' *e.g.* when we speak of the 'real' question at issue as distinct from the 'verbal,' we constantly mean, distinct from the 'sensal.'

have a different set of words for each special sense. We listen and hear, we glance, behold and stare, gaze and see; we touch and feel, etc. Now suppose that our sense-words were all used indifferently, and that we made no effort to remedy this, insisting when complaint was made that context determined quite well enough whether we meant sight or hearing or touch. In both these cases the loss of distinction would be a serious one. Yet in its meaning as significance, Sense is in fact credited with a number of synonyms, which we use simply at pleasure and only with reference to literary considerations instead of as valuable discriminatives, while no derivatives at all comparable with those from sense exist, from any word which stands for meaning. What is the consequence? That our speech is so far less significant than it might be: we fail to recognise what a wealth of significance lies in the idea of meaning itself, or how much depends upon the development of its applications. What after all is the moral basis of speech-life,—of articulate communion? Significance and lucidity. These are not merely accomplishments, they are ethically valuable. We owe it to our fellows to assimilate truth and to convey it to them unalloyed by needless rubbish of the senseless, the meaningless, the confused and the contradictory. It is our distinct duty to study the causes, to provide against the dangers, and to realise the true significance of ambiguity,—a point to which I shall hope to return later. But we find in serious discussion only too much witness to the absence of any cultivated sense either of the urgent need of conscientious, even scrupulous consistency in expression or of the importance of preserving the plasticity of language. Such a sense ought to be as delicate and as imperative as that of honour and honesty. We recognise that it is essential to good poetry that epithet and metaphor should be exquisitely chosen, should be delicately apposite, bringing us faithfully the picture or the emotion the poet wished for. But this is even more important when the result is to be not merely the highest delight but the most far-reaching and radical effect on knowledge. It is but seldom that a poet's metaphor or epithet can affect the whole outlook of generations to come, or will introduce permanent intellectual confusion. But when a philosophical or scientific writer uses metaphors or special epithets, they are intended to enforce some supposed truth or to convey fact often of crucial importance. It is therefore hardly far-fetched to appeal to the moral aspect of the question and to speak of developing a linguistic conscience. As it is, school-books abound with instances of the vagueness of our ideas of sense or meaning. We find, *e.g.* in an elementary text-book of Algebra: what is

the meaning = what is indicated = what is denoted; and are indiscriminately told to interpret, translate and express, apparently only with the object of avoiding tautology.

One difficulty with which we are thus brought face to face is this: how are we to secure a word for the act or process which has been so much overlooked that we have not yet even acquired a means of expressing it? A given excitation suggests what is not itself and thus becomes a Sign and acquires Sense. What are we to call the act of ascribing, attributing, assigning to, bestowing or imposing upon, the sensation or impression or object, the sense—or meaning, which constitutes its 'sign-hood'? Is the process a 'referential' one? Though Signification as the 'signifying act' would bear the sense above proposed for it, it has the serious disadvantage of being already appropriated to another use. In the absence of anything better I would therefore venture here to speak of the act or process of *sensifying*. It is true that 'to sensify' must share the uncertainty of reference which belongs to sense itself. It might mean *e.g.* the attributing of our 'senses' to a tree or rock, which we suppose to hear, feel, see, etc. like ourselves. But as there is apparently no word which is free from all established associations, we may perhaps be allowed to use 'sensification' for that fundamental tendency to 'assign sense' and 'give meaning' without which Attention, Imitation and even Adaptation itself would either not exist or would be deprived of all their practical value. For the lowest forms of response to excitation or reaction to stimulus only become useful, only become means of physical and mental rise in scale, in so far as they attach some 'meaning' to that which affects them, and thus foster the development of the discriminating function.

It must however be obvious by now that what we are considering is the need not merely of substituting one word for another, not merely of more precise definition or even of more accurate or consistent usage in expression, but of a profound change in mental perspective which must affect every form of thought and may indeed in time add indefinitely to its capacity. If we get this increased power both of signifying and of apprehending or understanding Significance, we might hope for a general agreement as to the possibility of expanding the present limits of valid speculation. Thought might well attain the power to overpass these boundaries with the most indisputably profitable result. There would be less danger of wasting thought and time on plausible but fruitless inquiry.

Indeed one is almost tempted to ask whether the peremptory stress laid by modern science on the futility of

attempts to overleap assumed mental barriers, may not be fully justified as in fact owing to an obscure instinctive sense that as yet thought is only reliable within these frontiers, as the lack of philosophical consensus seems to indicate; while on the other hand the tendency of the speculative mind to explore outlying regions, is in its turn due to an obscure impulse which is equally justified as really predictive. At present, it is true, such regions cannot be opened up for full colonization. Before the pioneer can hope to bring back the necessary information for the future colonist, he needs to be specially equipped for his task, and to have gone through a training which shall tend to heighten his natural powers of observation and inference. And we must not be misled by the popular notion that only a few of us can or may take up the vocation of a pioneer. As a matter of fact every one of us is in one sense a born explorer: our only choice is what world we will explore, our only doubt whether our exploration will be worth the trouble. From our earliest infancy we obey this law. And the idlest of us wonders: the stupidest of us stares: the most ignorant of us feels curiosity: while the thief actively explores his neighbour's pocket or breaks into the 'world' of his neighbour's house and plate-closet.

But the mental pioneer needs equipment, and it must be adequately provided in his training. The child's natural demand for the meaning of, as well as the reason for everything that he sees or that happens, is the best of all materials to work upon. He at least wants all that the richest vocabulary of meaning can give us. Just as every fresh acquirement of feeling-sense interests and excites him: just as he runs to us with the eager account of what he now finds he can detect by his eye or his ear or his finger: just as the exploring instinct develops in forms even sometimes trying to his elders, so it would be if the growth of the meaning-sense were stimulated and cultivated. And the thirst for exploring the inside of our watches might be diverted into the useful channel of exploring their 'meaning,'—or rather the different kinds of value they had, or the different senses in which they were valuable. Thus he would arrive at the *meaning* of one objection to their dissection, and everywhere would acquire fresh occasions for triumphant appeals to our admiration of his discoveries.

Beginning in the simplest and most graphic form: taking advantage of the child's sense of fun as well as of his endless store of interest and curiosity, it ought to be easy to make 'significs' or 'sensifics' the most attractive of studies. Following the physiological order, it would become the natural introduction to all other studies, while it would accompany

them into their highest developments; clearing and illuminating everything it touched, giving us a self-acting consensus where as yet that seems most hopeless, and suggesting, if not providing, solutions to some of the most apparently insoluble of problems.

Here then, if I am right, would be the gain. The area of confusion, misunderstanding and dispute would be continually shrinking, and the area of really significant expression and intelligent assent constantly expanding, the limits of consensus enlarging with it. The adaptation of language to growing complexity of experience and to continually developing need would become, like that of the organism, more and more adequate: while correspondence—or at least mutual recognition—in usage, would become compatible with endless variety in application and implication: a variety all the more possible because we had at last begun to realise in earnest the lesson which in one form begins with life and in another ends only with experience,—the lesson of Interpretation.

In his *Essentials of Logic*—lectures expressly intended for the elementary student—Mr Bosanquet complains (p. 99) that the commonest mistakes in the work of beginners within his experience as a teacher “consist in failure to interpret rightly the sentences given for analysis.” A much wider bearing, it seems to me, might be given to this remark. It surely applies to the whole field of mental activity. But can we wonder at any kind of failure to interpret, when we realise that the unhappy ‘beginner’ has never, unless incidentally or indirectly, been trained to interpret at all, or even to understand clearly what interpretation—as distinguished *e.g.* from judgment or inference or bare perception—really is?

Various objections may here suggest themselves. The principal ones may perhaps be summed up as (1) that there is no need for such a study as we are pleading for, since the subject is already dealt with in various connections and is implied in all sound educational methods: and (2) that its introduction would be impossible, and even if not impossible would be undesirable, as tending to foster pedantry and shackle thought.

The answer to the first of these objections is of course largely a matter of evidence, and of inference from admitted facts. The unexpected and startling conclusions to which a careful investigation of the present state of things has led me, require, I am well aware, the most irrefragable witness to sustain them. Before attempting to deal with this evidence even in the too brief form alone possible within our present limits—and thus at least to indicate the answer required—I

would lay stress upon two points: first, that the ablest of thinkers, speakers and writers is now at the mercy of students, hearers, and readers, who have never been definitely trained to be significant or lucid or interpretative, and who are therefore liable to read their own confusion of mind on the subject of meaning into the clearest exposition: and, secondly, that where inconsistency or ambiguity may seem to occur even in first-rate writing, it goes to prove that the highest and most thoroughly trained ability does not escape the disastrous effects of comparative indifference to questions of meaning from which all alike inevitably suffer, and for which I am venturing to bespeak special attention.

Bearing this in mind, I may perhaps be allowed to bring forward a few instances taken from logical and psychological sources tending to show how great is the need of such special attention and how little is yet given to it except in an incidental or fragmentary way: although indications of a growing impatience of current confusions and a growing sense of their danger are not wanting.

In the case of the logical use of 'sense' or 'meaning,' etc. it is no doubt necessary to draw a distinction between the technical terms of logic and those which it borrows from ordinary language. It may be said that when the formal logician employs technical terms like intension, connotation, comprehension, extension, denotation, he is bound to give a careful and precise analysis of the sense in which he uses these terms; whereas meaning, sense, etc. not being used as technical terms, need neither be formally differentiated nor made strictly synonymous, since they must always be interpreted by their context. But in the first place, as Dr Keynes and others impress upon us, logic takes no cognizance of context; and in the second I would myself earnestly deprecate either the sacrifice of valuable distinctions by making these and allied terms "strictly synonymous," or such a differentiation of their value as would diminish necessary elasticity, or preclude further modification in their use. Words like premiss, conclusion, postulate, equation, proposition: like real, verbal, positive, negative, relative, simple, complex, are borrowed from ordinary discourse, and are as a rule used in Logic with almost punctilious consistency. It is only when we get to the meaning-terms that we are left to gather as best we may their valid use and application, not merely in Formal Logic technically so called, but also in the discussion of those wider generalizations of the nature and conditions of valid thinking which lead on from Logic proper to Epistemology. As yet we are often left to gauge their value and their scope by a context which itself is often necessarily a severe tax on the

student's attention and power of 'interpretation,' just because of the closeness of the reasoning employed and the dryness and abstraction of the subject.

But there are signs that this will not much longer be the case.

In Mr W. E. Johnson's Notice in *Mind*¹ of Dr Keynes's 3rd edition of his *Formal Logic* he cites a number of additions and even special chapters as pointing to "the growing importance of questions dealing with what is called the import of propositions in view of recent controversies" (p. 240).

Technical distinctions in this, already emphasised, are more minutely applied. A fresh term, Exemplification, is introduced, leading to interesting results and throwing needed light on "the mutual relations between extension and intension" (p. 242). Mr Johnson points out that controversies connected with the "so-called import of propositions" are largely due to "Confusion between three distinct meanings of the term import. These may be called the *formulation*, the *interpretation* and the *fundamental analysis* of propositions."

The 'interpretation' here is what concerns us most; and by this is meant "the assignment of the precise degree and amount of significance to be attached to it." This is a definite step gained: but we still want to be clear whether, to the logician, significance = signification; or whether the difference of termination may not indicate a distinction of logical as well as general value. As "Ordinary language is often ambiguous," there is "need of *interpreting*" (italics Mr Johnson's) "any given form of words. Moreover in the process of reducing propositions to new forms, the logician may unwittingly put more or less of significance into the proposition than it originally bore" (p. 243).

But here and in the following passages 'significance' is used where there is none of that element which 'significance' can alone suggest, and where it would seem that some other word would give adequately and in fact more accurately the 'sense' intended. Might it not conduce to clearness if the use of 'significance' were discontinued in *Formal Logic*? However, the main point is that distinct stress is here laid, for the first time, on questions of interpretation, as well as of formulation and fundamental analysis; and these especially with reference to Import itself. Developments may thus be hopefully looked for.

In Dr Keynes's own work (3rd edition) I will venture to take one illustration of the point now under consideration.

¹ April, 1895.

In the exercises at the end of Chapter VII. (Part II.) the student is directed to "assign precisely the meaning of" an assertion, and to "examine carefully the meaning to be attached to" a denial (p. 210). But he may surely ask which of the many interpretations of 'meaning' he is to adopt here. To refer only to pp. 160—5, we may choose for 'meaning' any of the various 'senses,' intention, signification, connotation, application, import, purport, implication. Of a certain inference also it is said (p. 164) that "this would mean" (*i.e.* involve) the introduction of certain symbols. Ordinary logical doctrine, Dr Keynes reminds us, "should not depart more than can be helped from the forms of ordinary speech" (p. 165). But how confused these often are is illustrated by this very sentence; as the 'meaning' obviously is "more than *cannot* be *hindered*" (or strictly, 'avoided'). "Make no more noise than you can help" is of course "make no more noise than you *cannot avoid making*." Such an instance forcibly illustrates Dr Keynes's contention that "it is obviously of importance to the logician to clear up all ambiguities and ellipses of language" (p. 168).

In a Manual for use by students, Mr Welton tells us that

"Generalisation extends the application of words and so lessens their fixed meaning, and thus allows the same word to have different senses" (p. 13). A word may thus "call up very different ideas in different minds, or in the same mind at different times. Such terms are particularly unsuited to scientific discussion, and when they are used in it they invariably lead to misunderstanding and dispute" (p. 14).

Is 'idea' here a synonym of sense? Are application and sense convertible terms? Are not these words, *thus left undefined*, themselves "unsuited to scientific discussion" as tending to confusion? He takes the view that "An individual name may be a mere verbal sign devoid of meaning.....Proper names...can only *suggest*, not imply, and are therefore in themselves *unmeaning*" (pp. 62—3). (*Italics my own.*)

This distinction, we are assured, is of fundamental importance, and, through overlooking it, Jevons, Bradley and other logicians take the opposite view. But how comes it that logicians of such acumen and eminence 'overlook' a point of such importance? What hinders consensus? And what is the student to gather from all this? For instance, is he to conclude that the suggestive may be the unmeaning?

Dr Venn¹ writes with reference to convertible terms, "Even if we can find two which strictly mean the same thing, that is, which apply to exactly the same object or class, there are sure

¹ *Empirical Logic.*

to be differences amongst the many associations which cluster about them and blend with the true meaning" (p. 43).

Here to *mean* and to *apply* are used as synonymous. But presently we read of "Two aspects under which a name may be viewed. These are respectively its meaning and its range of application.....characteristics which it is meant to imply and objects to which it is found to apply....The more meaning we insist upon putting into a name the fewer.....the objects to which that name will be appropriate; the less the meaning contained, the wider will be the range of application of the name" (p. 174).

Is this "logical consistency"? How can we hope for it in the case of terms like 'meaning' until the ideas which they stand for have been carefully analysed? At present they seem marked out for loose usage even among the most accurate of writers.

But if, with Prof. Adamson, we are to admit that we cannot yet define even the exact status or province of Logic itself, since it is sometimes treated as an abstract science, sometimes as a subordinate branch of one, sometimes as a nondescript receptacle for formulations of method, it may be unreasonable to expect much from the present point of view until the various meanings of the term Logic are more clearly differentiated and more universally accepted. At present, as he says,

"The diversity in mode of treatment is so great that it would be impossible to select by comparison and criticism a certain body of theorems and methods, and assign to them the title of logic.....In tone, in method, in aim, in fundamental principles, in extent of field, they diverge so widely as to appear, not so many different expositions of the same science, but so many different sciences. In short, looking to the chaotic state of logical text-books at the present time, one would be inclined to say that there does not exist anywhere a recognised, currently received body of speculations to which the title logic can be unambiguously assigned, and that we must therefore resign the hope of attaining by any empirical consideration of the received doctrine a precise determination of the nature and limits of logical theory¹."

If we can gain a classification of meaning-sense itself, not merely as wide or narrow, direct or indirect, but as applicative, implicative, acceptative, indicative, &c., it must in some degree help towards more clearly determining, discriminating and relating the senses in which we may legitimately apply an all-important term like Logic: and would thus enable the true distinctions within such a concept to be definitely and consistently utilised, while fallacious or misleading uses would tend to expose and condemn themselves.

¹ "Logic" (*Encyc. Brit.*).

III.—SENSE, MEANING AND INTERPRETATION. (II.)

BY V. WELBY.

TURNING now from Logic to Psychology, the first question which suggests itself is whether Interpretation,—its genesis, its processes, and its developments,—has hitherto received the same attention from psychologists which they so conscientiously bestow on all other mental processes. That it is a mental process no one would deny: and as such by universal agreement it falls within the scope of psychological inquiry. If it prove on examination that such attention has not hitherto been given, we may further ask if there is a good reason for this omission, and whether such reason has been duly explained to the reader.

Let us see then what Psychology has to teach us about Interpretation. Where does it begin in the ascending scale of life? How does it do its work? What are the stages of its advance? How is it related on the one hand to Attention, Perception, Memory, Imitation, Judgment, Inference, Conception, and on the other to the physiological phenomena of response to excitation? Again, to what does the process properly apply? How far is the term metaphorical and therefore only partially applicable? What is it that needs, or bears, or demands interpretation? Is it primarily simple sensation, rising to that highly complex experience, the hearing of articulately 'significant' speech? Or is it from the first the 'meaning' of this sensation—the 'meaning' of the first touch which to the Protozoon was the signal of 'food' or 'danger,' to the 'meaning' of the most abstract of propositions? Or should we rather here say, 'sense'? Does the living organism from its lowest beginnings in some 'sense' 'interpret' sense? And does this 'interpretation' gradually become more conscious and more complex until the 'senses' of temperature, of resistance, or effort, of touch, of sight, of smell and taste, of hearing, resolve themselves into the intellectual 'sense' in which all experience, but especially all language, is to be interpreted?

We are told much of the impulse to imitate or mimic, but

rarely or never of the equally deep and primordial impulse to 'sensify'—to touch with 'meaning'—every stimulus, excitation, imitation, impression, sensation, perception, idea, till we reach conception, which may be identical with the 'result of interpretation,' and is often identified with 'meaning.' If 'idea' is here left out it is only because our neglect of the 'sensifying' process helps to render it one of the most ambiguous of terms, as in the case both of 'experience' and 'reality.' Certainly the impulse to 'sensify,' which makes the import of every unit of consciousness or experience the measure of its importance, which makes it 'signify' just as much as it 'signifies,' needs quite as much analysis and is as much a part of true scientific training, as the impulse to discriminate or to compare. The habit of 'attaching' meanings is as dangerous as the habit of seeking or assuming analogies, and as useful as that of detecting minute but important differences.

Dealing with the primary intellectual functions Prof. Sully¹ gives us "(a) the initial stage, viz. the presentation of an object to sense, and the fixing the attention on this, and (b) the stage of Intellection proper, the act of perceiving, interpreting or recognising what is presented" (p. 61). Here we have Interpretation, with Signification, its condition and implication, incidentally coupled with Perception and Recognition. No further notice is taken of or use made of it: it is given no status whatever: we are left without any guidance as to the nature or function of Interpretation as distinct from the Perception which precedes, accompanies, or at least conditions it, and the Recognition which links past with present experience. Here then I would venture to suggest that significance and interpretation should receive in future more definite 'recognition,' and that we need the triad,—Presentation, Attention, Interpretation. Attention, we learn, "underlies and helps to determine the whole process of mental elaboration" (p. 167) and is a fundamental process, appearing as a reflex at the very beginning of mental development; the whole movement of which is determined by the co-operation of this factor. According to the law of attention that we pass at once from the sign to the 'thing signified,' we have acquired an invincible habit of passing instantly from the muscular sensations of the eye to the representations which they call up. That is, of *interpreting* sensation. The child learns to interpret as he learns to attend and to infer. Why is this supremely important mental activity—the immediate result of attention—the only one left unanalysed? And what do we suppose to be the genesis of 'sign'? What is the first

¹ *The Human Mind*, Vol. I.

moment when a sensation or a thing stands not for itself but for something else, draws attention not to itself but beyond itself? We shall of course be referred to memory. But with loss of memory is the idea of meaning obliterated or the 'sensifying' function atrophied? Or may not this remain as an unsatisfied craving, an unanswered 'What does it all mean'? How far is the doubling tendency to see everywhere thing plus meaning, or sign plus significate, ineradicable because primordial? Where does the 'calling up' process begin? When one sensation suggests another 'remembered' one? Is that the link between association and signification?

Prof. James¹ considers that the great difference between man and brute is that the former "has a deliberate intention to apply a sign to everything" (p. 356). "How, then, does the general purpose arise? It arises as soon as the notion of a *sign as such*, apart from any particular import, is born; and this notion is born by dissociation from the outstanding portions of a number of concrete cases of signification" (p. 357).

At least here we have what I would call the sensifying instinct raised to the highest importance and marking the advent of humanity. But what is here meant is the fully conscious, volitional, 'intentional,' reflective application of the sign: and in this sense we may welcome the definition of man as the sign-generator—rather than merely the sign-maker.

Prof. Baldwin² considers that "the ultimate basis of psychological interpretation and construction is the mental experience of the individual, in so far as it has universal meaning" (p. 19). "... It is only after the words assume meaning and sense to us," like all sensations or sense-impressions, "that they become permanent acquisitions" (p. 202). He teaches that "the final constructive product is a true mental unity or picture, which has its own significance for the mind, apart from its elements. This significance is an ideal meaning, which possesses general interest, and appeals to man universally" (p. 234).

Here we get an incidental definition of significance as 'ideal meaning,' which would surely be more instructive if we had begun with a section on, let us say, the nature of the relation between real and ideal 'meaning,' and the function of interpretation as applied in each case and with express reference to the idea of 'sense³.' Further "the most important thing about interest is its quality as stimulating the will. A thing is

¹ *Principles of Psychology*, Vol. II.

² *Handbook of Psychology*, Vol. I.

³ Prof. Dewey's Article on "Knowledge as Idealisation" (*Mind*, Vol. XII. No. 47) calls attention strikingly and usefully to some of the questions here raised or implied.

interesting to me when, for any reason, it appeals to my attention—when it is worth looking at—when it is so related to me that I am led to investigate it; and the feeling of interest is this need of looking, investigating, finding out about” (p. 139). “In interests, therefore, we have a step in mental growth of enormous significance in psychological theory” (pp. 148—9)¹.

In ‘interests’ have we not in fact the key to the nature of ‘sensifying’ process? The ‘feeling of interest’ endows our surroundings with,—bestows upon them, attributes or ascribes to them,—somewhat which may be described as meaning or sense or significance: in other words makes them significant, suggestive, indicative, symbolical, and then prompts the function of interpretation. What is it that affects me? Where does it come from? What is it like? What will come of it? How shall I act upon it? are among the interpretative questions. It may be said that this subject is already discussed in logic and psychology under the heads of Attention, Perception, Memory, Judgment, &c. No doubt: but not from the point of view taken here. Sense *in the meaning sense* has never yet been taken as a centre to work out from: attention, perception, memory, judgment, &c. &c. have never been cross-examined from the direction of their common relation to a ‘meaning’ which has to be made out, a ‘sense’ which has to be mastered, a ‘significance’ which has to be felt, understood and acted upon. Before we ask, what is real? we not only need to ask the ‘meaning’ of the ‘sense of reality’ but the ‘meaning’ of the sense of ‘sense’; the sense, intent, import, purport, of the perceptions which make up or bring us experience.

Prof. Ladd’s works would supply materials for an independent Essay, and it is difficult to choose only one or two representative passages from his *Psychology*. But it may be noted that hardly any notice is taken of, or stress laid upon, this central factor of intelligence;—the reading of the messages of Sense, and of the *sense* of these messages from the stimuli by which perception is excited. Considering the enormous mass of careful detail which the book contains, surely a larger space might have been devoted to analysing not only the unifying grasp but the sensificatory and translative energy of the “interpretative consciousness.”

But the inquiry suggested seems to be endless, since the domain of ‘meaning’ covers all that can be discussed to any purpose, or indeed in any rational sense. I must be content therefore with having roughly indicated some of the many directions in which enhanced clearness of thought might be the

¹ Baldwin, *Feeling and Will*.

reward of a hitherto neglected investigation, and pass on to deal with (2) the objection that the study for which I am pleading would be impossible, and even if not impossible would be undesirable, as tending to foster pedantry and shackle thought. But the very idea of its impossibility seems largely owing to its non-existence. From the moment when we begin to make everything else subordinate to that vital interest for which we have only as yet the vague and unanalysed expression which belongs to vague and unanalysed thought, its importance begins to reveal itself, to stand out and to demand a more worthy appreciation than has yet been vouchsafed to it. In any inquiry we may be forced at some point to recognise that what we have taken for an 'object,'—even in the widest sense—is rather a 'meaning' or a 'sense': and that the halo of reality or objective existence which we have thrown round it is just part of its essential prerogative: is just part, that is, of the quality of 'sense' which is the one character to be always safely ascribed to it.

Why are we tempted to suppose that it would be impossible to study the subject of meaning without re-opening all the traditional controversies of philosophy, merely to plunge us into an ocean of baffling problems of thought without hope of rescue? Surely because a vital point has been missed in our training—in the very theory of training! We have not had the sensifying and interpretative functions developed: their nature has not been explained to us nor their true importance pointed out¹.

Again, why do we imagine that such a study could only end

¹ It is a curious—and may we say a significant?—fact in this connection that the only instance I have been able to find of any direct attempt to consider exactly what we mean by 'meaning' occurs in a forgotten book of somewhat quaint dialogues called *The Philosophy of Things*. *A* expresses surprise that *B* has never once asked him what he means by the word *meaning*.

A. "We have been talking almost of nothing else but the meaning of words, and of the uncertainty of the meanings which are annexed to them, and yet you have never once asked me the meaning of this same most important word *meaning*!—the very pivot on which the whole of my argument turns—the very hinge on which it hangs!"

B. "But by the word *meaning* you intend the *sense* in which a word is to be understood."

A. "Ay—there it is. I ask you to give me gold for my paper, and you only give me another piece of paper. I ask you to give me a thing for my word, and you only give me another word."

* * * * *

B. "What then do you mean by the word *meaning*?"

A. "Be patient. You can only learn the meaning of the word *meaning* from the consideration of the *nature of ideas*, and their connexion with *things*" (pp. 78—9).

in rigid pedantry and the sacrifice even of such power of adaptation as language has already attained? Surely, once more, because of that unfortunate hiatus in our training already so much insisted on: and notably also from our failure to appeal to that organic analogy for language which is admittedly the best we have. When the force of this analogy is once realised it becomes amazing that we should suppose it possible to ignore the need for new phrases and words, and insist on the established vocabulary and forms sufficing us for the expression of new experiences. In other words it betrays a curious atrophy, in this one direction, of the adaptive power which has attained such advanced developments, and has so enormously modified and enlarged the outlook of life in the form of mechanical invention, whether for commercial or for scientific purposes, or merely for the furtherance of comfort and convenience. This tremendous supplementary outgrowth, this unexampled expansion of the range of sense and muscle, ought surely to rebuke the strange hopelessness, apathy and contented bondage to the outgrown and the outworn which keeps the development of adaptive *expression* so far behind that of invention and discovery and thus behind experience: which deprives us of whole quarries of fresh simile whereby to express fresh lines of philosophical thought: and which acts, so far as it goes, as an effectual barrier to the acquirement of a more profound and really scientific Psychology, and a Logic which shall command acceptance without question or reserve.

If it be rejoined that the growing powers of language are in fact recognised, used, stimulated and systematised by every means in our power and especially through every form of training, I would answer that as yet the only work even recognising them which I have been able to find is Dr Jespersen's. His title *Progress in Language* at least strikes the needed and missing note: and whether his special theories are or are not accepted, we owe him gratitude for boldly saying that language is advancing and must rise in scale and value and power, that we have even to learn that grammar must be servant and not master, and that whatever expresses best and signifies most should be systematically adopted, absorbed, and if need be, allowed to transform and amplify the current canons of expression.

After all, language is 'made for man' and not man for language: he ought not to be its slave. If it be objected that linguistic advance cannot be deliberately organised or even cultivated because it refuses to be controlled, and that it is hopeless to attempt to secure universal consent even to the most obviously needed changes, the answer is that we already

assiduously cultivate correct articulation, true intonation and pronunciation, accurate spelling, punctuation and grammatical construction, and obtain in each case substantially uniform usage. Why then not direct the attention of the young from the very first to what is yet more important, the need of fresh developments in expression and their right direction and control? Might we not further urge upon those who are our natural leaders and teachers in speech and writing the pressing duty of asserting the power of Man to train within obvious limits his function of linguistic expression as he already trains his touch and his vision,—and indeed his memory and his intellect? J. S. Mill¹ reminds us that mathematical study induces wariness: it has the great advantage of training the mind to make sure of its steps: “at least it does not suffer us to let in, at any of the joints in the reasoning, any assumption which we have not previously faced in the shape of an axiom, postulate, or definition” (p. 612).

And this is surely one benefit that we should reap by making significance and interpretation the subject of elementary study. It would form the best introduction to mathematics, and even act in this respect as its substitute in those cases where there was no mathematical aptitude in the student.

At present we have not even attained to an adequate conception of what an ideal language should be: we think of it, if at all, as the impossible thing that Bishop Wilkins proposed—a formalised dialect of culture with its phrases “rendered according to the genuine and natural importance of words,” as if this were anything but what their speakers intended by them! Or we try to invent an artificial ‘Volapük.’ It is surely time that the fetish of a possible Plain Meaning, the same at all times and places and to all, were thoroughly exposed, and students more explicitly warned against anything approaching it, except on the narrowest basis of technical notation. Even Dr Jespersen tells us that an ideal language would “always express the same thing by the same, and similar things by similar means; any irregularity and ambiguity would be banished; sound and sense would be in perfect harmony; any number of delicate shades of meaning could be expressed with equal ease: poetry and prose, beauty and truth, thinking and feeling would be equally provided for: the human spirit would have found a garment combining freedom and gracefulness, fitting it closely and yet allowing full play to any movement” (p. 365).

But the organic analogy forbids the metaphor ‘garment,’

¹ *An Examination of Sir W. Hamilton's Philosophy.*

since it sacrifices an essential truth. Thought is not merely 'clothed' in language. And the whole passage seems to ignore too much the modifying effect of circumstance and 'atmosphere' on 'meaning,' and the need for the ideal interpreter, keenly sensitive to delicate differences of sense, to whatever cause these were due: besides which the writer seems to forget that in order to have a really higher grade of significance, we must train a new generation in 'sensifics.' Indeed we even require to evolve skilled 'sensificians' able to disengage the most subtle over-tones of sense from the complex note of expression. There is a great deal of sound in the meaning-world, but not enough delicacy of discrimination. The sound is not fully articulate to us: we are more or less meaning-deaf. In a wider than technical sense 'asymbolia' is more generally present than we suspect. Yet if an ideal language and its ideal interpreter cannot yet at all events be hoped for or practically aimed at, it would be something to realise, as Mr Balfour claims that the philosopher has done, what *not* to do.

"It is something to discover the causes of failure, even though we do not attain any positive knowledge of the conditions of success. It is an even more substantial gain to have done something towards disengaging the questions which require to be dealt with, and towards creating and perfecting the terminology without which they can scarcely be adequately stated, much less satisfactorily answered" (p. 160)¹.

I would adopt this very language with reference to expression, its defects, its possibilities, its prospects of development. It would be something to discover the causes of our failure to express our whole or exact—what? It would be more to discover whether it was idea, conception, fact, meaning or thing which we oftenest failed to express.

Mr Romanes², following out an analogy between the evolution of language and that from the single- to the many-celled organism, remarks that "as in the one case there is life, in the other there is meaning; but the meaning, like the life, is vague and unevolved: the sentence is an organism without organs, and is generalised only in the sense that it is protoplasmic" (p. 314).

The comparison of meaning to life suggests two questions: (1) whether our inquiry is after all merely a question of Definition, and (2) whether a conception like Meaning can be defined at all. But the very fact of any doubt as to the possibility of defining terms which stand for unique or ultimate (primary) ideas or any significant or *sense-ful* words at all, at once reduces the appeal to definition to a secondary place

¹ *The Foundations of Belief.*

² *Mental Evolution in Man.*

among possible solutions of our problem. There is perhaps no greater snare, when we begin to realise the chaos in which word-sense lies and to seek a remedy, than the easy and obvious one of definition. Define, define, we cry, and then all will be easy.

But surely we forget that in the first place, this is often precisely the most impossible thing to do; as a fixed meaning, the same for all, unaffected by context of any kind, applies only, if at all, to a small proportion of ordinary words: and secondly, that to define every word which needs it would at once render all important works simply unreadable. They would be so cumbered with definitions or with pleas for, and justifications of, proposed definitions, or with protests against certain received definitions, that the book itself would disappear, while the definitions would provoke challenge on every side, and except in a few cases gain no universal assent, and thus advance us no further. Definition, though essential on its own ground (which again may be variously defined) would tend, if exalted into a panacea, to hinder the evolution of the most precious quality of language,—that power of growth and adaptation by which even now it reflects changes in the psychological atmosphere, and utilises these to purify and enrich the treasures of thought and imagination. But even if this were not so, the main problems not merely of sense but of significance—in short of ‘sensifics,’—must have been solved before we could arrive at really authoritative definitions. Meanwhile the search for these must always itself have valuable uses. As Prof. H. Sidgwick says, there is often more profit in seeking than in finding definitions.

Prof. Minto¹ tells us that “words have little meaning for us; are mere vehicles of thin preconceptions, raw prejudices” (p. 88). The remedy, he thinks, is the verification of meaning. We must fix and readjust. Surely that is beginning at the wrong end? We want first to rouse a general ‘sense’ of what the *value* of language, whether in the direct ‘sense’ or as applied to all that ‘speaks’ to us,—Nature, Art, &c.—may become to us if we will: of how much it may convey and suggest to us if we only master its ‘meaning’ methods. The varying character of language of which we so complain, the changing complexities of its suggestiveness and its implicative flexibilities, are not in themselves evils: even its ‘ambiguity’ is in a certain sense a glory which it shares with all the higher organisms: at this moment the very richness of this living suggestiveness is the cause of strenuous biological discussion and even controversy on a central principle.

¹ *Logic: Induction and Deduction.*

Organic development tends in proportion to its complexity to suggest more than one inference, and in that case to have more than one possible meaning for the observer. And thought cannot be poorer than life, so that its expression must needs be capable of more than one interpretation. Only let us recognise this and act upon it, and we shall cease to crave or strive for the fatal gift of final and mechanical precision of outline, or to protest against the kind of 'vagueness' which belongs both to life and to the horizons of the world in which we know it. We shall rather seek to be less 'vague' in another sense: to know more clearly how things really are in this matter: to allow more intelligibly for the halos or penumbras and for the atmospheric refractions which surround the symbols of living thought and actively growing mind. Ours is not a dead world without atmosphere in which all outline is clear cut and hard: earth's outlines melt and vary, shift and disappear, are magnified, contracted, veiled, by a thousand changing conditions. So with the 'world' of experience and its expression. We are too apt to over-estimate the value of mere precision in language and even in thought; though for some purposes, as *e.g.* diplomacy, it may be very great. As Renan himself, that master of lucidity, says:

"The clearness and tact exacted by the French, which I am bound to confess compel one to say only part of what one thinks, and are damaging to depth of thought, seemed to me a tyranny. The French only care to express what is clear, whereas it happens that the most important processes, those that relate to transformations of life, are not clear; one only perceives them in a kind of half light."

This is suggestive witness. And when Mr Balfour¹ urges upon us the power of authority to produce "psychological 'atmospheres' or 'climates' favourable to the life of certain modes of belief, unfavourable, and even fatal, to the life of others" (p. 206): when he says that their range and the intensity and quality of their influence may vary infinitely, but that "their importance to the conduct of life, social and individual, cannot easily be overstated," he would do well, surely, to add a warning of their effect, not only upon Belief but upon the Meaning whether of conduct or of experience, or of the verbal expression and definition of either. For these 'climates' must powerfully affect and modify the 'significance' both of life and expression in act or word; while we are constantly tempted to ignore the fact at least in language, and to suppose that meaning is the same to all,—or ought to be so. It is well to be warned that "identity of statement does *not*

¹ *The Foundations of Belief.*

involve identity of belief" (p. 263); and that we are *not* entitled to assume "that when persons make the same assertions in good faith they mean the same thing." There is no precise or definite relation between language and belief; but Formal Logic and conventional usage, he complains, both assume the opposite, a constant relation between Symbol and 'thing symbolised'—that is, Symbolate. This is in fact "an artificial simplification of the facts" (p. 265).

"If in the sweat of our brow we can secure that inevitable differences of meaning do not vitiate the particular argument in hand, we have done all that logic requires, and all that lies in us to accomplish. Not only would more be impossible, but more would most certainly be undesirable. Incessant variation in the uses to which we put the same expression is absolutely necessary if the complexity of the Universe is, even in the most imperfect fashion, to find a response in thought. If terms were counters, each purporting always to represent the whole of one unalterable aspect of reality, language would become, not the servant of thought, nor even its ally, but its tyrant. The wealth of our ideas would be limited by the poverty of our vocabulary. Science could not flourish nor Literature exist. All play of mind, all variety, all development, would perish; and mankind would spend its energies, not in using words, but in endeavouring to define them" (pp. 266—7).

Truer words were never written. Yet if we say that when we have managed to secure the validity of a particular argument we have done all that can ever lie in us to accomplish, and that more would always be not only impossible but undesirable, surely this depends on what such 'more' was. Incessant variation, as we have seen, is indeed as vitally necessary in the world of expression as in the world of life. Here there is no question even of metaphor. But that variation may become infinitely more under control than it has ever been yet. To speak of our struggle with ambiguity under the metaphor "in the sweat of our brow" recalls the husbandry of the savage in contrast with the scientific developments of civilised agriculture. Truly the muscular effort and its result, and even the primitive spade and hoe and so on, survive but little changed. Yet how small a part they now play by comparison with the manual labour and the tools of the earliest days! Still greater of course is the difference in our weapons and in our means of transport. When we have sharpened the arrow or the hatchet and trained a service of human runners or even of swift animals, we have done all that is possible on that plane of development: but most assuredly we have not even begun, except so far as one phase insensibly succeeds another, the next stage in the long ascent of civilisation. By what right do we assume that Language is the one petrified, ossified, non-evolving function of humanity, doomed eternally to remain either clumsy and

rude, misleading, confusing, incongruous, inconsistent, or else narrowed and crushed into a mere mechanical notation like that of arithmetic? As well say that we must for ever be condemned in the matter of musical instruments to the alternative of a primitive bagpipe or horn and an elaborate barrel-organ. And if it be (rightly) objected that Language needs an organic rather than a mechanical analogy, let us remember the difference between the dexter finger of man and its humbler simian ancestors, or even between his eye and its primitive prototype in the mollusc.

"We are no more able to believe what other people believe than to feel what other people feel." We may put the word 'mean' here for the word believe: and that, even in the case of "friends attuned, so far as may be, to the same emotional key." The student of 'sensifics' at least may be grateful for Mr Balfour's plain statement that "this uniformity of conviction, which so many have striven to obtain for themselves, and to impose upon their fellows, is an unsubstantial phantasm, born of a confusion between language and the thought which language so imperfectly expresses. In this world, at least, we are doomed to differ even in the cases where we most agree" (p. 276).

At all events, if such 'uniformity of conviction' were ever attained it would mean the 'death' of all that makes conviction valuable. There are assuredly "differences where we most agree" and also "agreements where we most differ." Yet there is no doom in the matter except that which we pronounce upon ourselves. If for 'uniformity' we substitute intelligent sympathy and a consensus which has learned to understand its own conditions: if instead of a clumsy make-shift or a rigidly fixed and invariable mechanical action, we start from the idea of a delicately flexible organic adjustment, then our 'doom' turns into our hope and will issue in our rich reward.

We are not tied down to the action of Natural Selection only, for voluntary action tells here also: and the 'characters' that language acquires may certainly be 'transmitted' and to some extent deliberately bequeathed. Only first let us learn more about sense as the paramount value of Language, and thus about the true conditions of its growing significance. If the meaning—here equivalent to content—of such propositions as 'Cæsar is dead,' 'Stealing is wrong,' or 'God exists' "could be exhausted by one generation, they would be false for the next. It is because they can be charged with a richer and richer content as our knowledge slowly grows to a fuller harmony with the Infinite Reality, that they may be counted

among the most precious of our inalienable possessions" (p. 278).

And why should not Language itself be charged with a richer and richer content as we realise more clearly what it may do for us? After giving us a typical example of "all that is most lucid and most certain" (p. 281), we are warned that its purport "is clear only till it is examined, is certain only till it is questioned." It serves us for working purposes, but that is all. Yet even so its credentials are better than any 'Foundations' could be, as they vindicate themselves by results. The working test is pre-eminently that which applies to language.

When we see the beginnings of an appreciable diminution of mutual misunderstanding and controversy, together with a still greater increase of power to express and power to distinguish, to discriminate, to combine, to co-ordinate the wealth of experience: when we begin to acquire methods of interpretation enabling our "most lucid and most certain" judgments to bear the closest examination and question and to become the clearer for the process, we shall not need to trouble about the 'foundations' of what will thus more than vindicate itself. It will be enough to have diminished the present enormous and grievous waste of expression-power and to have raised language at least to the level of the nervous system to which it belongs, in its power of adaptive response to excitation.

Once let general attention be directed to the practical mischief—the waste and loss, the muddle and misery—caused or fostered by inherited habits of language, and the universal demand for economy of means and a 'way out' of deadlocks will come into play and soon make remedy possible. Indeed in these days of 'enterprising journalism' the danger may soon become one of going too far and too fast. But we are a long way from this yet. Most of us are content to remain on what might be called a non-volitional level of speech, checking rather than fostering the adaptive power which has given us all that makes language worth having—its beauty and fitness as well as its symbolical character. As it is, the growth-force is supinely allowed to spend itself in sporadic and simply wayward outbursts, mere play for the relief of superfluous organic energy and impulse: there is no deliberate or recognised system of directing these to intellectually useful ends. We practically assume that language must be as far as possible stereotyped, and that the only exceptions or alternatives are the casual innovations dictated to us by the man in the street, who has never been told that 'meaning' is of the smallest consequence, and airily destroys even for scholars valuable distinctions and associations while his supposed teachers look helplessly on, as

in the case, *e.g.* of 'phenomenal.' Though even here, changes apparently erratic and made purely at random may have a distinct psychological value and better reasons than we or their maker quite realise.

And if we sorely need a heightened sensibility to the possibilities and dangers of significance (with all its implications) we equally need it in the case of analogy. This however is a subject so large as well as so important from the point of view of this Paper that even to sketch it would demand a whole essay. The study of analogy, metaphor, simile and illustration from the point of view now suggested, is of vital importance not only for Logic and Psychology but also for Science and Philosophy. So indeed is the whole question of language as raised by 'sensifics'; but this again for want of space cannot now be discussed.

Both scientific men and philosophers complain more loudly every day (as I have a mass of evidence to show) of the extent to which they suffer from the present chaotic state of things. The truth is that just as we are trained to be familiar with 'foreign' languages, so we ought to be trained to be familiar with new dialects in expression, whether these were direct as in terminology, or indirect as in graphic or other aids to representation. And let us not object that this would be an enormous additional tax on memories already overburdened. The truth is that we need far greater skill in swiftly discerning the complexities of sense: in the art of seizing at a glance the point, the gist, the whole trend of whatever is said or written, to put it in a nut-shell if we choose: that we ought to be able to 'place' it, to translate it, to 'enter into' it, to assimilate it—that is, to transform it into living tissue of our own. And we ought besides to be imbued, to be saturated with the 'sense' of the moral obliquity of giving each other darkness when we might be giving light.

If we admit with Dr Ward¹ that "philosophy has no nomenclature and no terminology," that "every giant and every pigmy states and misstates and restates as much as he wills"; that "even babes and sucklings rush abroad brandishing the Infinite and the Absolute with infinite ignorance and absolute conceit," we can hardly deny the moral as well as the intellectual obligation to do our utmost in any way that seems feasible to end such a disastrous anomaly. The labour of fresh inquiry could not fail to be amply repaid. The results of this would be much more than literary. On the one hand it is a question of increased clearness and freedom in treating difficult or

¹ *Mind*, Vol. xv. No. 58, p. 226.

obscure subjects, increased power of propounding, and also of adequately criticising, new philosophical ideas: on the other many a fallacy or myth owes its survival in great measure to a dim general suspicion that the real gist of it has not been touched by adverse criticism. Popularise 'sensifics' and the faddists would have a hard time of it; unless indeed their 'fad' only required re-stating, limiting, guarding, in order to contribute some useful item of additional knowledge or some illuminative principle of thought. If more precise definition of the methods by which we might hope for a really new mental start is demanded, it must be answered that to attempt a premature formulation of these would be to court defeat; would in fact be fatal. Such an explanation or such a programme must be the outcome, not the preliminary, of the inquiry hoped for. First let us arouse a really active interest in the subject among those who are intellectually in touch with the rising generation and who are the virtual if sometimes the unrecognised leaders in all questions of thought. Then let us definitely examine the feasibility of an education avowedly starting from and centering round the principle of 'significs' or 'sensifics.'

If we are again tempted to object that this is too abstruse a subject for any but advanced students, we must remember that using the words in the wide sense which here alone applies and is called for, the first mental lesson which nature teaches the infant is precisely this. She surrounds him with stimuli and excitations: she prompts him to interpret these as best he may, and even to revise his translations under the pressure of pain and discomfort. And she leaves him no peace till he has learnt himself also to be significant, to 'convey meaning' and suggest 'sense' as unmistakably as possible, first by cries and gestures, then by imitative articulate speech. We have only to take up her curriculum and carry it on, as in fact we do in the case of reading, writing, arithmetic, &c. If only by the impulse and habit of imitation, consensus in language is soon assured to the early stages of the growing intelligence, and consensus is the one means by which we may hope to secure it on the highest intellectual plane. Communication is now so easy among the intellectual leaders of men that there ought to be no difficulty in obtaining it when its enormous advantages are realised. We have already specific studies of acknowledged value under names like Hermeneutics, Orthology, and Exegesis. Moreover, although philologists complain that Sematology "the science of meanings," and Semantics (Bréal, *sémantique*), "the science of change of meanings" have hardly yet been touched, the importance of these and of the psychological side of language

generally is rapidly coming into greater prominence. And as foreign scholars themselves admit the special fitness of our language for studies of this kind, may we not hope that before long a start may be made by English writers and teachers in the direction of a more definite and combined effort than has yet been made, to promote the development of the expressive and discriminative powers of language, and to give the study of its main value, 'sense' or 'meaning' a more prominent place in mental training?

Psychology itself has hardly begun to take or to define explicitly its true place in schemes of general training. But it is gradually, however obscurely, making itself felt as a really potent factor in these. And as questions of 'sensifics' emerge from their present chaos, they too must suggest important changes in educative method.

The subject must however be left here, with one personal word added. For while this Article deals with virtually new and untrodden ground, there are only the old modes of language for expressing it, and moreover, the writer was never trained either to 'mean' intellectually well, or to interpret—or sensify—adequately and accurately. The subject manifestly needs analytic and synthetic powers of the highest order; for while 'sense' is 'common' to the whole mental range, it is so in various ways, and thus is peculiarly difficult to deal with. At best, then, this sketch can but serve as the barest introduction to what seems worthy of ampler treatment by more capable hands. May any over emphasis or exaggeration in the foregoing pages be condoned, written as they were in the hope of drawing attention to the importance of an untried investigation, and with no prejudgment of questions and issues as yet only indicated or implied. If such inquiry and consequent discussion follow, the first object of the Article will be attained, whatever the result may be. As to ultimate bearings and final developments; if, as things are, it were possible definitely to map these out, the investigation asked for would by this very achievement, have proved itself to be superfluous.

SUMMARY OF PART I.

Although the disadvantages and dangers arising from the present failure of language to express more than roughly what is termed Meaning or Sense are generally recognised, no systematic attempt to attack these at their root has as yet been made. Neither the process of interpretation nor the conception of Meaning have so far received adequate treatment. This

leads to the loss of distinctions valuable for thought, and to a low average of interpreting power. Attention is here called to (1) the neglect, especially in education, of any careful study of the conditions of meaning and its interpretation; and (2) the advantages which must accrue from such study.

Much is lost by the present dearth of means of expression and of training in their use. There is not even a word to express what happens when a given excitation suggests something other than itself, thus becoming a 'sign' and acquiring 'sense.' The word 'sensify' is proposed for this. Works on science and philosophy and especially on logic and psychology supply ample witness—both conscious and unconscious—to the need for a special study of meaning, which might be called *Sensifics*, as no term already in use covers enough ground.

SUMMARY OF PART II.

Such a study so far from being impossible seems indicated and called for on every side, and might be made not only practical but attractive even to the youngest child. At present language betrays, largely from the absence of such training, a disastrous lack of power to adapt itself to the growing needs of experience. But this power would soon be generally acquired as the result of the training here suggested, and would even to a certain extent follow a general awakening to the importance of the question.

Definition, though useful in its own sphere, must not be regarded as a solution of the difficulty. Ambiguity is an inherent characteristic of language as of other forms of organic function. Thought may suffer from a too mechanical precision in speech. Meaning is sensitive to psychological 'climate.' Both philosophers and men of science complain bitterly of the evils arising from an inadequate nomenclature and terminology. We all alike, in fact, suffer and lose by this, and by the endless disputation which it entails. It rests with education to initiate the needed 'fresh start.' It is incumbent upon English teachers and thinkers to lead the way, since our language is admitted even by foreigners to have peculiar facilities for inquiries and studies of this kind. Meanwhile it will be something to realise at once more clearly some potent causes of present obscurity and confusion, and the directions in which we may hope for efficient practical remedy.

SIGNIFICS AND LANGUAGE

SIGNIFICS AND LANGUAGE

THE ARTICULATE FORM OF OUR
EXPRESSIVE AND INTERPRETATIVE
RESOURCES

BY

V. WELBY

"All life therefore comes back to the question of our speech, the medium through which we communicate with each other. . . . The more it suggests and expresses the more we live by it—the more it promotes and enhances life. Its quality, its authenticity, its security, are hence supremely important for the general multifold opportunity, for the dignity and integrity, of our existence."—HENRY JAMES.

MACMILLAN AND CO., LIMITED
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1911

DEDICATED
TO
MY MANY KIND SYMPATHISERS AND FRIENDS
AND TO
ALL THE YOUNG WORLD

PREFACE

SIGNIFICS may be briefly and provisionally defined as the study of the nature of Significance in all its forms and relations, and thus of its working in every possible sphere of human interest and purpose. But the fact that this study is completely neglected even in education renders a fully satisfactory definition difficult at present to formulate. The interpretative function is, in truth, the only one in any direct sense ignored or at least casually treated. And yet it is that which naturally precedes and is the very condition of human intercourse, as of man's mastery of his world.

In reading the following pages two things must throughout be borne in mind.

First, that the plea for Significs can only as yet be written in that very medium—conventional language—which so sorely needs to be

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lifted out of its present morass of shifting confusion and disentangled from a rank growth of falsifying survival ; and second, that the present writer has no claim to make that plea as it should be made by those who, even as things are, could do it far better justice.

Readers must also be warned that the book is not a continuous Essay, still less a systematic Treatise. It consists of a selection made from a great number of short papers, written over a course of years, and always without any view of publication. Some of these papers were intended to explain to correspondents and friends the writer's position with reference to language ; and others, again, were the form in which the writer recorded for personal use some new aspect or way of putting the matter, as it suggested itself. It has been thought that a selection of such Papers, of which these are but a few examples arranged and modified as seemed advisable, would serve to indicate some directions in which the theme of earlier writings could be developed.

In the Appendix will be found a small supplementary selection of a different kind ; that is, representative expressions of the needlessly

narrow limitations and positive obstructions of language which are now beginning to be widely felt.

It must finally be borne in mind that the suggestions here offered constitute little more than an elementary sketch of a vast subject. Even as contributed by the writer, there is abundant material for succeeding volumes, showing the practical bearing of Significs, not only on language but on every possible form of human expression in action, invention, and creation.

I now have to acknowledge my debt of gratitude to those who have helped me to make possible this suggestion of a central need and its true fulfilment.

In a previous stage of the work—that represented by *What is Meaning?*—I had to return thanks for the ungrudging help of a long list of distinguished advisers, who were also friendly critics. But of course I had no excuse for again troubling those who had so generously responded to my first appeal.

In this case I have to repeat my gratitude to Professor Stout, to whom I owe more than I can express. I must also warmly thank

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Dr. Slaughter and Mr. Greenstreet, and a few others who have indirectly helped on the work or encouraged the worker.

My main thanks, however, in the present undertaking are due to Mr. William Macdonald, without whose expert aid I could not, from somewhat failing strength, have faced so formidable a task.

V. W.

I

THERE are probably many who dimly realise, and would provisionally admit, that our present enormous and ever-growing developments of mechanical power and command are there to be interpreted in terms of psychology. This must presumably affect not only the very minds which are conceiving and applying them to such tremendous and apparently illimitable purpose, but also the thinkers concerned with the mental sphere itself, its content, and its range.

We may thus suspect, if not actually infer, that human thought also is on the threshold of corresponding developments of power,—developments to which the “new birth” of scientific method in the nineteenth century was but the prelude and preparation. If, indeed, we deny this conclusion, or dispute this assumption, we may effectually hold such a development in arrest—or risk forcing it out in unhealthy forms—just as, three hundred years ago, the spirit of

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scientific discovery was fettered and retarded on the verge of its great career of achievement. The explanation is in part, if only in part, the same now as it was then. For in the pre-Baconian age the study of phenomena, the inquiry into "the causes of things," was not more inhibited by theological prepossessions and denunciations than by the dominance of an intellectual nomenclature which ruled reality out of the universe and confidently took its place in all disquisition or discussion upon Man and Nature. The forward step taken was largely the result of a breaking of the barriers created by traditional terminology, a pushing aside of fictitious formulas, and a coming directly into the presence of things in order to learn whatever they had to say "for themselves"—and for the Whole. All the conditions—especially the supreme condition, an urgent need—are now existent for a second and similar forward step, but upon another plane and to higher purposes. For the fresh advance which now seems imminent, as it is sorely needed, should be no mere continuation of the Baconian search, the accumulation of data for a series of inferences regarding the properties of the material system as usually understood, but rather the interpretation, the translation at last into valid terms of life and

thought, of the knowledge already so abundantly gained. While man fails to make this translation—to moralise and humanise his knowledge of the cosmos, and so to unify and relate it to himself—his thinking is in arrears, and mentally he lags behind his enacted experience. That we in this age do lag behind, and that we have thus far failed to achieve a great and general act of translation, is a loss chiefly due to our unanimous neglect to understand Expression, its nature, conditions, range of form and function, unrealised potencies and full value or worth. And therefore the first message of what is now to be named Significs¹ is that we must amend this really inhuman fault; that we must now study Expression precisely as we have long been studying “Nature” and “Mind” in the varying ranges of both these terms.

We must do this; for until we do it, not merely metaphysical theory but natural fact, as well as moral and social valuations and aims, must continue to be perpetually misinterpreted because mis-stated. Great tracts of experience, direct and indirect, remain without an ordered vocabulary or notation—and better none than those which many others have—exactly as great

¹ For a definition of this term see the *Oxford Dictionary*, the *American Dictionary of Philosophy*, and the *Encyclopædia Britannica*, 11th edit.

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regions of natural fact remained without recognition and without name until man almost suddenly discovered that he had been looking for the whats and hows and whys of the world he lived in in the wrong direction and by the wrong method. At last he saw his true way—that of faithfully interrogating Nature, and rigorously testing his reading of her answer—and rich has been the reward of following it loyally. But the proper complement of this wonderful step forward, its very issue, must be the opening up of another true way hitherto untrodden. It must be the recognition and use of a method, a mental procedure and habit, enabling us to perceive the treasures of truth, the implications of reality, that even now are only hidden from us by our contented subjection to the tyranny of misfitting Expression,—Expression, of course, of all kinds, but mainly expression in language, taken in its ordinary sense.

Our punishment here is that some of the most intimate and homely as well as important and significant forms of experience, some of the plainest facts and most real existences in the world, remain 'unknowable' in the sense of being 'unspeakable' and therefore 'unthinkable' in any now fitting sense. As a fact, however, as we are constantly, though un-

consciously witnessing, we can think in an embarrassed and hindered way much more than language, in the forms which social and other conventions have imposed upon it, allows us satisfactorily to express. In all thoughtful and able writing we continually meet with signs of a sense of shortcoming in expressing given conceptions: but whatever the failure, the conceptions are there.

In these cases we do note the inadequacy of language to serve. In others, and more frequently, we note the fear of its great fund of fallacies. We constantly find scattered throughout the text of every thoughtful treatise what are essentially footnotes of protest or warning, made needful only by the universal attitude of a reader who has never been trained to demand new and fruitful ideas, and to be ready to welcome new and suggestive modes of setting these forth. For lack of such training, the reader persistently reads the old prepossessions into the new statement of truth, and so merely works over, *ad nauseam*, the bare and dead tissues of used-up thought, once living and active, now mummied.

Our language has been full of life, since all its similes, all its associations, like all its assumptions, were once in perfect accord with

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the current conceptions of 'nature,'—our own nature included,—and with our ideas of 'motion, matter, and mind.' But now, just as the forms of expression called social convention and common law no longer fit our knowledge of the biological and psychological facts of life, are confining us to stunted and mean conceptions of morality, and are causing cruel travesties of justice whether social or legal ; just as the form of expression called music puzzles and baffles, while it fascinates us and leads to barren controversy ;¹ just, indeed, as all current forms of expression, except, perhaps, the fast growing modes of mathematical symbolism tend to do this—so the form of expression called linguistic, our phrase and our word spoken or written, betrays us daily more disastrously, and atrophies alike action and thought.

¹ See Edmund Gurney's "Power of Sound" and Gehring's "Expression in Music," *Phil. Rev.*, July 1903, and many other recent Essays on Music.

II

APPARENTLY we suppose that the 'gift' of language is like the 'gift' of a nose, entirely (as to its position and office) outside the scope of our modifying control. And it is true that we cannot invert our nose, or give it four nostrils, or present it with the power of hearing or sight. Neither, indeed, can we develop it into an organ of (at present) transcendent smell, no, nor even restore to it its pristine and sub-human privileges. But all this only shows that we had better leave off talking of 'gift' when speaking of language. Rather, we have painfully earned the possession of speech by learning to control and order the sounds producible by our evolving larynx, and by continuously, consistently, arduously, purposively developing the complexities of the resulting system of vocal signs. In doing this we have evolved and developed syntax and prosody and much else that the philologist, orator, or poet can expound to us, or use to influence our feeling and action. The point is,

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that just when the need of adding consensus to a so far accomplished control was most urgent, and its neglect most certain to be disastrous to our intellectual fortunes ; just when a high civilisation and what we call the modern era of discovery and its reaction on philosophical thought and practical life set in, we began to lose more and more the very idea of a social control, and of power to direct the development, of the most precious of all our acquirements, that of articulate speech.

I can never forget the amazement I felt when I first began my study of philology and linguistics and the origins of language, and realised this fact and its full significance. The writers one and all treated language, not as you would treat muscle, as a means of work to be brought under the most minute, elaborate and unfailing functional control, but as you might treat some distant constellation in space and its, to us, mysterious movements. We might describe such a heavenly object and then lay down what seemed to be the conditions of its existence and activities. We might point out precedents ; possible origins ; possible destinies ; possible effects on other systems, including our own. But we should remain consciously and profoundly helpless to modify in the most

trifling degree, or in any sense, its career and its perturbing or contributory powers.

It does not seem to have dawned upon any one, either specialist or 'lay,' what a tremendous absurdity all this way of regarding language involves. No wonder, however, when so far no writer on the subject of language has ever reminded us with any emphasis, still less with the needed impressiveness, that the one crucial question in all Expression, whether by action or sound, symbol or picture, is its special property, first of Sense, that in which it is used, then of Meaning as the intention of the user, and, most far-reaching and momentous of all, of implication, of ultimate Significance.

When the cardinal importance of all forms of Expression, but pre-eminently of language, has been impressed on a coming generation from its very infancy, that generation will rise and resume an efficient direction of its own greatest acquisition. We have done, we are doing this with extensions of muscle and sensation; with Machine, Instrument, and Apparatus. We must do it with a greater than these in any ordinary sense of the words. We must do it with the greatest of extensions, that of natural cry into articulate and reasoned speech. And this, not merely as a question of

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redressing and giving better finish to a framework, or of improving on conventional grammar, prosody, and so forth, but as the development of an expansive and, so to say, organic power as yet only in embryo. And surely it is evident that no rhetoric and but little imagination are needed to convey an idea of what may be hoped for when this result has been at last, through a significantly sane education, brought about. It is indeed the plainest of common-sense that concentration upon the value of all Sign, and the effective co-ordination of all our means of enhancing and realising this to the very utmost, must bring about a forward step, one of the greatest Man has ever made and the world has ever seen.

III

It is true that we sometimes seem to lay claim to such control, as when we praise an orator or writer for his "command of language." But there is, in fact, no such command. There is an amazing and an even contented subserviency and helplessness, leading too often to inexcusable defect or deviation of sense.

We conceive that the nearest approach to the mastery which is our true birthright was achieved in what we call the classical era. And we are still living in an almost literal sense on its legacy. But the spirit of its conquests and domination is lost, and with that the lesson of its effective greatness. To a large extent, though in varying degrees in different races, we avail ourselves of attitude, gesture, and tone by these primitive means, shared in varying (and often to us imperceptible) modes and degrees by the whole organic world. But our speech constantly mocks us and our interest. This is not the fault of Expression itself in any form, least of all of articulate expression, that loyal creation and

unfailing servant of Man, ready and untiring as inexhaustible, waiting only for our recognition, and for that commanding guidance which only in the most important case of all we have failed to apply. No : it is our own fault.

The idea that such neglect and helplessness are inherent in the case is peculiarly inept. Articulate expression is the elaborated and transfigured form of attitude, gesture, and tone ; and more yet, of the marvellous skill of hand directed by creative brain, of the inventor and worker, the representative of imagination and reason. Why do we only 'invent' mechanical instruments, when the greatest instrument of all lies in comparative neglect, as a thing with which we have nothing to do beyond doing what we can with it as it is? Speech gives our 'mind,' our thought, our conception ; it conveys our knowledge, describes our difficulties, records our endeavours and our successes or defeats, warns or encourages, notifies objection, refutes error, exposes blunder or inaccuracy ; and finally explains and enables us to apply the principles of achievement of any kind. Having the offered service of such a power as this, why should we slight or disregard its promise, or be content with anything less than its highest efficiency, which will also be ours ?

IV

THE most important elements of experience are distinction and unification, comparison and combination — analysis and synthesis. We first analyse what is called a confused manifold, really a generic or 'given' manifold. Then we synthetise what we have distinguished to the uttermost. If the result were an actual complex, say a system of motions, particles, or masses, we should take care not to muddle up the constituents. We might pay too obviously dear for that ! But in language this elementary rule of practical or even rational procedure is violated by our pernicious misuse and perversion of one of the most splendid of all our intellectual instruments, namely, the image or the figure ; the image which is not merely the analogue, but in a broad and true sense the linear descendant of the retinal image indirectly giving us the immediate reality of the 'material world'—of perception.

Now we do know the danger of actual

optical illusion and of delusion arising from disease of mind or body. We do understand that if we supposed we saw solid earth beyond a cliff-edge, and walked over it, we should be killed ; and we infer this, although we had not deliberately realised or examined it. But we do not see that we are killing or injuring ourselves mentally by tumbling down logical precipices or into metaphorical pits and so on, because of the traps set by false mental images in language. Upon the presumptions suggested by these distortions of image we too often act, and in our thinking are continually influenced by them. Therefore it is hardly an exaggeration to say that within the realm of speech our procedure is that of the insane.

Hence the divisions, the antagonisms between men of goodwill. Hence the unsound pessimism and the equally or more unsound optimism which distort our interpretation of the world.

Hence, indeed, the 'insoluble problem,' even that of 'Life' itself, though if really a problem it must of course be soluble. If we could but see this ; if our insanity of mental image could be cured or, rather, averted in childhood ; if our imagery were rectified ; then ideas would emerge which now are killed in the germ. Then conceptions would be formed which now

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never come to the birth. Then mental organisms would come to perfect maturity, which now are stunted and deformed. Then beauty, dignity, grace of which as yet we have less than a possible measure, might be hoped for.

V

THROUGH the prevalence of misfitting imagery, which continually misrepresents the real aspects and relations of things, and warps our reasoning as well as our vision of the world, we are really living in what is (comparatively speaking) a kind of lunacy, a state of general illusion, 'materialising' here and there into definite delusions about which we are controversial and emphatic. We need a linguistic oculist to restore lost focussing power, to bring our images back to reality by some normalising kind of lens. Meanwhile the dementia of our metaphysics, popular and professional, spreads unchecked. Mind and its presumed 'states' are internal—*inside* some non-entity not specified. Matter is all *outside* this nonentity.¹ Distinction is all one with division. Roots become generating spores for the purposes of argument, or discharge the functions of ova.

¹ The obvious fact that space is 'internal' precisely as much—or little—as it is 'external' is, strangely enough, ignored. We might as well treat the spatial as 'upward' while using 'downward' for the non-spatial.

A spectre becomes a spirit. The world of experience, and our every thought about it, have ultimately a 'solid basis,' from which they must never move on pain of destruction. Light is dangerous, and must not be thrown upon the origin or reason of Belief, which is, of course, the same thing as Faith. What you *have*, from a house to a skin, a prejudice, and a self, is what you *are*. Pursue materialism, spiritism, pessimism, and all forms of rigid orthodoxy to their ultimate end, you will always find the implicitly false mental image, source of the false linguistic image. You will always find a remediable ocular defect in a 'seeing' mind, which is presumably no more perfect than its physical analogue the eye, but which is, like that, able to assist in rectifying the data of touch, smell, and hearing, and even those rightly or wrongly resulting from its own activity.

VI

PROFESSOR KARL PEARSON long ago submitted that in consequence of the fetishistic use of the terms matter, mass, motion, force, space, time, cause, atom, body, law, etc. (especially in text-books), physical science has made a false start. But the biologist, the physiologist, the psychologist have all been dependent on such terms, since no others were current when they adopted their terminology; and have taken them perforce in untenable and misleading senses. In these senses they have everywhere used them both directly and figuratively, and have passed them on into literary and popular usage. Therefore, if Prof. Pearson's position is capable of being maintained even in the broadest sense, Psychology and Ethics have so far made a false start also. It follows that their premisses are liable to vanish along with the superannuated connotations of the main-artery terms of physical science. At all events, if the modern scientist is compelled to use the old terms—taking them over as Chemistry

took over the terms of Alchemy, as Astronomy took over the terms of Astrology—due care should be taken to charge them publicly with new meanings, and so bring the popular mind into effective relation with its own vocabulary. Owing to this not having been done, the popular mind to-day is still largely steeped in the logic of magic, and yet seldom suspects it. And perhaps most where it least suspects it. For the securest stronghold of myth is just the mind which, in the name of common sense, refuses to question its own certainties.

Let a single example be cited of the way in which the so-called common-sense mind, starting from a misconception of the facts, confidently uses this misconception as the source of analogies and metaphors to which it gives authoritative and directive significance. Our eyes, as science now tells us, are “focussed to infinity.” It is their nature to look away : the distant vision is more germane to them (and us) than the inspection of things minute or immediately near. Here, surely, is a truth of great illuminating potency. But the ‘common-sense’ mind starts from quite a different conception of the facts, and draws a corresponding inference. It assumes a morbid shortsightedness as normal. It supposes that the hard thing, the effort, the strain, is to

look far away, to look beyond this or that 'limit': that our eyes are 'formed' to see with least trouble the things close to us, and therefore are most properly occupied with these things. And so the false premiss gets translated, by the fatal process of false metaphor, into a common-sense and unanswerable protest against every tendency to any kind of "transcendentalism" as being futile, a foolish attempt to reverse the wholesome order which makes the near world within touch or grasp our business, fits the mind for that, and condemns us to stretch and strain painfully if we would look towards what is beyond our reach;—*that is, our arm-stretch.*

Here, then, we have an instance of how the use of analogy and metaphor derived from a false view of the facts may result in an effective arrest or more mischievous misdirection of thought, and so in a further and deeper obscuration of truth.

A reference to the function of the rods and cones, as the receivers of light, would afford another instructive instance of useful analogy excluded and lost to us by the persistence of phrases which perpetuate the effects of earlier ignorance. But, indeed, the same testimony and lesson occurs throughout all our thinking. We

are always appealing to facts to furnish us with illustrations, and we are right in doing so. But if our appeal is really to a mere fancy which we are treating as a fact; if we seriously take the centaur as we take the 'horse' and the 'man,' and use its supposed movements as the analogues of something we want to illustrate, arguing from the one to the other as though a 'man-horse' were a 'fact' in 'nature'; then, of course, we re-import into our reasoning, by a misuse of expression, the very errors and fallacies which reason is chiefly occupied in exposing and removing.

If we appeal to a centaur at all, it must be as a fabulous monstrosity used to illustrate something else monstrous. But we too often use 'facts' of the centaur, or satyr, or dragon, or phœnix class, whereby to express the reasonable, the congruous, the orderly, the real; for instance, matter, force, spirit, cause, etc. in their popular or inherited sense. They create difficulties which else would not exist.

VII

WE always tend unconsciously to make whatever we have expressed in images and through metaphor behave like the 'real thing' or the original which we took as illustration or in analogy. Hence results endless confusion, the real source of which is not detected, and is therefore permitted to continue its mischievous work.

Take our use of Inner and Outer as metaphorical expressions of the mental and physical. Through the influence of that usage we instinctively try to make our minds, our ideas and thoughts, behave as if they were shut up inside definite bounds, that is, as if they were objects in space. Hence a false psychology, and educational ideals and methods that aim at the development—or production—of thinking machines, from which you grind out any desired product, coupled with a thought-cabinet with innumerable drawers, a thought-cupboard with innumerable shelves and cavities.

But sometimes this tendency is overcome in some related metaphor, which has to be forced into harmony with the falsity thus produced. *E.g.* we speak of introspection, of looking into our own consciousness, etc. The mental eye which looks inward is so far assumed, for the purposes of the occasion, to be 'outer' despite of its being mental and so (*ex hypothesi*) 'inner.' But biology knows of no visual organs which introspect, which turn on an axis or are fixed, to look 'inwards.' We are *not* intended to inspect our own 'internal economy' in action.

But having settled that the mental world exists inside some kind of containing outline, we have to invent impossible mental eyes that look inward before we can use the 'introspective method.' No wonder science protests against that method, though she does not seem to realise the initial reason for such protest.

Take again the Basis and Foundation. We try to consider things which are really—like the world itself—quite independent of a 'firm base,' as 'founded securely' upon this and that. But all 'foundation' on which we build has no security for itself save a deeper layer under it, and beyond that—nothing, or the ether.

VIII

AMONG the many defeating absurdities of current imagery perhaps that of 'laws of nature' is one of the worst. One would really think sometimes that nature had primordially summoned councils and decreed laws, or even brought in a bill in some Natural Assembly, discussed it, passed it, clause by clause, carefully defining its regulations and penalties! And one would think that nature's lawyers and judges expounded or laid down her laws and enforced her decrees, imposing the statutory penalties for their infringement. For, of course, we are supposed to 'break' nature's 'laws'—though the idea is as grotesque as it would be to suppose that we can break the 'law' of identity and difference, or the 'law' that $2 + 2 = 4$.

It may be said, and is constantly said in similar cases, that the image being a mere convenience, no one is misled by it. That is surely in all cases a profound error. True that

we are not consciously misled. But our 'subsequent proceedings'—our whole system of references to man's relation to nature, to the ethical import of reality in the widest sense—betray the fact that we are all the more dangerously misled because we have no suspicion of being so. Witness the much-confused and morbid optimism and pessimism which is the final outcome of our supposed observing, keeping, or breaking of nature's "laws." What to one of us seems a faultless legislative system, one by means of which discovery and exploitation of the universe by man becomes possible, to another seems a system of 'inhuman' tyranny and ruthless coercion, involving cruel and senseless waste of power, and outrage upon life. One man flies in despair to the 'supernatural,' while another sets his teeth and tries to convince himself that he lives under an absolute government of what he calls 'mechanical forces'; subject like the 'material' to immutable laws from which there is no escape, since an automatic policeman stands, or a patent lock is fixed, at every gate by which he might pass out into freedom and the larger, better, and more justly-ordered life which he has ideally conceived.

IX

A FEW examples may here be noted of a kind of metaphorical usage which oftener tends to throw dust in our eyes than to throw light on any subject, starting as it does from veiled fallacy or false assumption, now discredited by growing experience or widening and increasingly exact knowledge.

As we have already seen, the use of Internal and External, Inner and Outer, Within and Without, Inside and Outside, as means of contrasting mind and body, consciousness and nature, psychical and physical, thought and reality, is radically misleading. So also is the use of basis and foundation to express a primary or ultimate need ; and, in lesser degree, the use of ground and root for the same purpose. The first introduces in all sorts of connections the fallacies of primitive cosmogony. 'Ground' is only needed for standing, walking, dancing upon ; for planting in or building or mining, very rarely for grasping or holding. Roots, again,

only belong to a plant stage of existence, and are sent down to obtain nourishment and give a grip, or hold, for the plant. Yet all these are used indiscriminately as though they covered or illustrated the whole range of accessible realities and characteristic experiences of Man. There is, in fact, the whole scheme of material, substantial, static analogy and metaphor for the psychical or mental or intellectual (or 'spiritual') sphere.

There are, again, the metaphors — rather, perhaps, the figurative phrases — which depend on 'absolute' criterions of time, space, etc. ; or on an 'absolute' cosmical centre, and on 'impassable' gulfs which split up the whole fabric of experience and the inclusive sum of knowledge into isolated fragments, and thus bring into existence 'insoluble enigmas' ; these last mostly, it may be, dependent on the prevalent confusion between *distinction and division or separation*.

There are the misused metaphors of sense ; beginning with 'grasp' or 'touch' and 'tangible,' and ending with 'speculation,' the 'visionary,' 'insight,' a 'clear outlook,' a 'comprehensive view,' etc. ; these, again, all used indiscriminately as covering the whole field of experience, and of equal illustrative value in every connection. In all these cases the effect of the attempt to give to strictly limited or specific images an

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almost universal prevalence and application is, that their real value in use—the value which they might yield in intellectual use—is largely forfeited, and we are not even aware of the loss.

Finally, there is the imagery which gives peculiar sanction and almost sacredness to the straight line produced to infinity, though no one has ever seen it there. But of the tolerated inanities of superseded analogy there is indeed no limit.

X

WE all “compound for sins we are inclined to, By damning those we have no mind to.” Thus we are now freely banning as ‘superstition’ the animistic and mythical beliefs of our forefathers regarding the nature of things. Yet all the while we retain these very associations in our inherited language, the surface-sense only being altered, and the old associations being unconsciously but coercively called up in the ‘subconscious’ region whence come the most powerful of our impulses and tendencies, since *there* acts not merely the individual but the Race whose tradition he carries.

At any rate our ancestors did not do that. Their expressions called up the associations then valid, and their metaphors entirely harmonised with their supposed realities and facts. The difference between then and now is that our metaphors are divorced from our facts; and this often involves worse confusion than the

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wildest fetishism, or when it does not, defeats us by excluding that appeal to association which is the very optic nerve of thought as reflecting reality.

XI

WHAT a new mental world we should enter if we learned to pause in the act of using imagery, and to scrutinise intelligently our own and our 'opponent's' figurative habits! What discoveries we should make as to why some true and fruitful thought is so unwillingly received or is even rejected with protest by those to whom we should have expected it especially to appeal! We refer these effects now to 'cussedness' in things or in human nature; but then we should perceive that the initial 'cussedness' is rather in our barbaric speech than in the mind to which it gives such distorted expression. Then would come an era in which, instead of begging our reader not to take our imagery seriously, not to apply its implications, but to regard them as incidental excrescences of conventional expression, we should rather bid him, in certain cases, to lay these implications to heart for all they were worth or could yield.

We could safely afford to do so ; for then we should select the imagery which is to convey our meaning with the same scrupulous discrimination which the jeweller, the surgeon, or the electrician uses in selecting the implements for the finest processes of his work. Our analogies then would not only 'hold water'—pure water from the well of truth—but they would 'stand fire'—the hottest fire of criticism or the crucible of test. They would *work* in all senses ; not only as being consistently applicable, but as rendering profitable service ; indicating rich harvests, pointing the way to fresh lines of inquiry and modes of interpretation. The more they were analysed the more they would suggest and convey as their implications came into view.

True that the reality and the image can seldom if ever entirely coincide, that the most felicitous illustration stops short somewhere and fails to 'cover the whole ground.' But if the indirect mode of expression, so often the only one available for conveying the most precious and vital truths of life, were gradually assimilated to a world of order instead of remaining a tolerated chaos, we should all be taught betimes to recognise the limits of comparison or parallel. When in doubt, we should ask whether this or

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that inference really 'presses an analogy too far,' and whether some other analogy, equally apt, would bear 'pressing' farther, and so bring us a step nearer to the truth.

XII

To give one out of the mass of illustrations needed : Suppose a man engaged in controversy says, "I take my stand upon that fact." Three questions may arise.

(1) Does he mean what he says? That is, does he really intend to convey the image which the words express? If so, we might go on to ask, how *does* one "take one's stand upon" a fact? Is one found invariably trampling it, or is it always under one's heel? Does one never move with regard to it, so as to look at it or use it, especially in an argument?

(2) Is he telling us the actual truth, or is it on some other fact, unavowed or unrecognised, that he is really "taking his stand"?

(3) Is he figurating accurately, that is, appropriately and thus helpfully?

The last question is hardly ever asked, and yet it is the key to the other two.

For suppose that another man in the same controversy 'takes his stand' upon another

‘fact.’ Then in any case if the figure is accurate—that is, appropriate—they can never meet or even approximate, and to the argument there will be no end.

But if the first man says, “I take my departure from that point,” or “I start on that line,” and the second replies, “And I from (or on) this other”—then the possibility of deflection at least comes in, to help them to a solution or agreement. For alter direction in either case, and the lines may sooner or later meet at one point, perhaps at several ; or the two may even run for a little way together. Then they may once more diverge—or they may cross.

Now, will any one deny that the latter is a better image than the former for what we require in discussion? that is, a more helpful type of image for mental process, incident, and purpose?

Generalising, we may say: Grant but the idea of motion—the minimum intellectual postulate in a moving world—and there is always the hope, and almost the certainty, of the most widely divergent ‘views’ or ways of putting it consistent with reason and fact meeting somewhen, somewhere. And meanwhile their ‘holders’ may have traversed a whole universe of assimilable experience. Not, we will hope,

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as a rolling stone gathering no moss, but as the little creature which gathers silica as it creeps, to form an exquisite shell-home. Or, better still, as the amœba ingests and transforms food, new substance for its own vital growth, acquired by sensitive contact with the nutritive reality around it.

XIII

UPON the whole, therefore, it may be truly said that imagery, as we are content to use it, is liable to be insane in two senses: in the sense of *raving*, and in the sense of *waste*. In the first place, it is as though we were shouting at random and talking nonsense; in the second, as though we were throwing food out of the window and money into the sea. The two combined represent sheer and cruel loss and paralysis of thought.

Paralysis of thought. For do what we will, we cannot escape the law which unites, as in our very eye, image and object, reflection and reality, sign and what it signifies, figure and the figurate, and, generally, token or symbol and what they stand for. Those of us who consciously think pictorially are so far more or less able to realise the gravity and extent of this insidious danger. But those of us who do not are in far worse case. They do not even receive automatic warning of the mischief going on. And the

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difficulties which their thinking presently encounters are of course traced to the wrong source—probably charged to Nature or to human ignorance, or to the innate perversity of original principles. But it is needless to defend Nature, which presents problems, as it were, in order that we may learn how simply they may be solved; while as to original principles, we may complain of their innate perversity when we have begun to agree as to what they are. And as to human ignorance, that is scarcely a valid excuse, so long as we do our best to preserve such ignorance, both by the tolerated misfits of imagery in actual use, and by the neglect to provide for a constantly growing adequacy of language: not merely through accretion of new words, but also through the drastic critique of imagery and the resulting acquirement of more fitting idioms, figures, and expressive forms in general.

It is part of the same costly folly to allow, as we do, such daily additions in slang and popular talk as tend to create fresh confusion. And this is the more reprehensible, because both slang and popular talk, if intelligently regarded and appraised, are reservoirs from which valuable new currents might be drawn into the main stream of language—rather perhaps armouries

from which its existing powers could be continuously re-equipped and reinforced.

The poet very largely shares with the scientist the responsibility of maintaining and worsening the evil tradition of unsound and therefore insane imagery. For instance, when Mr. William Watson writes of "foundations in the world's heart," he deserves to undergo such a world's experience and to have figurative foundations in his own figurative heart! For foundations—we must hope of solid and immovable stone, or preferably of impermeable concrete—in a physical heart would be more fatal even than ossification. In truth, Nature seems to have taken a deserved vengeance, and left us to the solid stone basis or foundation on which we are always, out of place, insisting; left us to talk portentously of Life, while in the same breath we explain that it is 'built up' (from our fixed foundations)! and therefore must be a mere aggregate of cemented bricks or stones with no nexus but cement.

Considering all these things, the question suggests itself, Can we be fully alive yet? Have we even a glimmering of the Sense of which we talk so vaguely and confusingly? Do we so much as suspect what such a Sense as ours ought

to be, and do, and preserve us from? Do we ever dream of the almost Utopian results which must accrue when the sense of our symbols becomes really fitting; when we find really good sense and common sense, and are sensitive in the best sense, in our estimate and treatment of the cardinal questions of that expression on which alike depend practical activities and the thinking which alone controls, directs, interprets, applies, and utilises them?

There is need of some great poet to write worthily, from a fresh view-point, on the Power of the Word—the word which we blow about as though it were but chaff, gravely explaining indeed that it is ‘merely word,’ and so implicitly of no moment. But our use of words is never that; for whether positive or negative, excessive or deficient, present or absent even, our words are of moment always. “For the first time,” says a recent writer, “there swept over him that awful sense of unavailing repentance for the word said which might so well have been left unsaid, which most human beings are fated to feel at some time of their lives.” Aye; but the author should have included the *word unsaid*, which has often helped or hindered, and in all human ways signified so much. Indeed, that word ‘merely’ is constantly misused and per-

haps never more so than in conjunction with 'verbal.' Let us tread softly with our merelys, onlys, simplys . . . and use them with fear and trembling. Yet even in silence there is no escape for us either from danger or duty. Silence is often a most significant declaration, and a most misleading one.

There is but one safety ; and that is, to realise as we have never done yet what we are doing with speech, and what with significant silence. And we have to realise vitally, intimately, actively, the power of symbol not only in Word, as in legend, narrative, parable, name, and all social speech and all intellectual discussions ; but also in act, as in ritual, ceremony, performance, posture, dance. There has been as yet no adequate, no thorough, no logical and scientific attempt on the widest basis to deal with this central interest of man's expression and realisation of himself and the world through Symbol ; no attempt, with this paramount object in view, to wed the sacred and the secular, the emotional and the intellectual domains and examples. But indeed it cannot be adequately done until we know what the Word really is ; until at long last we begin worthily to speak ; until we understand that the Word may be, as in our usage it often is, a mere articulate sound

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with a mean sense, a capricious, idle, abusive meaning,—or, as also a Child, a Son, a Divine Messenger, and Reason itself are bearers and expressions of the Significance of life.

XIV

CAN we even appraise the value of the Symbol? Can we, say by any effort of imagination, place ourselves at the standpoint of the unfortunate in the limbo of the Asymbolic, hungering and yearning for the Sign that gives significance, albeit with no likeness to itself, yet giving us the world of the indicated and implied; signalling the messages which are there to be interpreted and to be acted upon as rousing, drawing, reassuring, or warning us?

We know something of the thirst of the excluded when, loving the holy, we know ourselves unholy; when, looking up with intellectual reverence to knowledge and the will and power to wield it—to the creative or victorious energy of the leader, the man we call great—we know ourselves ignorant, supine, indifferent in comparison; stupid or silly, superficial, or (as we say of the hardminded) commonplace and unresponsive.

Well, at least it is something to know ourselves

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all that and worse. For *who* is thus confessing and lamenting? That is a divine discontent. But sharper than all the pangs of such perception, sadder even than such sense of humiliation and banishment, would be the pangs of the prisoner of the asymbolic limbo looking up with infinite longing and yearning at the treasures we so amazingly disregard, or abuse and despise.

All other powers have come under the higher brain of Man ; that wonderful enabling instrument of orderly creation which does for mind what so-called Law, conceived of as a marshalling and directive principle in the physical world, may be pictured as doing for motion and matter. But the real power of symbol in its articulate and logical form ; the real function of the word in this sense ; the power of sense itself, of meaning itself, and of that significance which is pre-eminently the glory of speech : this power is as yet practically in abeyance and almost pitiably ignored. For we are all guilty of or tolerate in this matter a dereliction, an ignorance and a waste which we should not suffer to continue for a day in any other case of vital importance or even of interested curiosity.

XV

It might be useful (and there may be more warrant for it than we know) if we were to regard the physical world as a complex acted metaphor of the mental world, and both as essentially expressive of a common nature.

Be it premised that 'language' is a term which admits of being used in a wide sense, as poets and philologists both know and teach us. May it be, then, that as our eyes reverse the position of external objects and the brain has to restore it: as our consciousness gives as at least world-wide, the field of view which is in reality no larger than the eye itself: so in fact does Nature speak to us in a language of unerringly fitting metaphor and valid analogy, by simply doing what 'she' does: manifesting her doings gradually to our growing intelligence through what we call 'sense,' but keeping a margin of reserve in her yet undiscovered or unrelated secrets? May it be that our 'speech' is but an awkward, half-adjusted, and therefore confused

and ambiguous rendering or re-presentation of the irrefutable eloquence of natural phenomena ?

We look to the material for metaphors of the mental ; we trace up most words and phrases—perhaps all—to the physical. But we are also constrained to reverse this process : we find *e.g.* that emotional terms best picture and help us to realise some qualities in physical nature. And in fact does not the physical world require the mental world as that whereby to represent itself, as we know that the red rose requires the light for its redness, while in its turn the light is only completed or rendered operative by that responsive activity we call ‘sight’ ? Supposing that we personified Nature in a scientific sense, postulating her as a unified series of impressions, would she now be found speaking of us in a metaphor as we of her, only with speech reversed ? That is, would her every ‘word’ be taken metaphorically from the action or process of consciousness, reason, reflection, judgment ? Thus might we not say that motion, and mass, and the so-called ‘matter’ assumed as behind them, are as full of mind-metaphor as mind is of matter-metaphor ; the mind-metaphor arising in the conscious world, and reaching us through intelligence, and intellect, as matter-metaphor arises in the unconscious world, and reaches us through sense ?

XVI

WHETHER we see it under that aspect or another, the fact remains that not only Nature in the ordinary sense of the term, but also these human constructions which consist in adaptation of Nature's properties and material to the use and service of man, are all charged with potential metaphor of the highest illustrative value. For the sake of an instance, let us consider the familiar allegorical way of speaking of human life as a voyage.

We speak of steering our way or navigating our course in the "voyage of life." With this we contrast the rudderless drifting which ends in wreck, or at least reaches no harbour, and lands in no port or goal at all, the sailors on the awful deeps of life. We image in our minds the sudden hurricane, the impenetrable fog, the persistent gale, the heavy seas, which are to try the soundness of our life-ship's timbers, the training and seamanship of her officers and crew, and her general seaworthiness.

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We recognise the need, not only of efficiency, but of knowledge—and that not merely terrestrial, but cosmical—if we would attain, with the least possible delay or danger, the haven at which we would arrive. And last, we picture to ourselves the rugged coasts, the sunken rocks, the hidden reefs, the entangling weeds of the shallow waters to which the track of most of us is confined, and which in any case confront us in more or less threatening forms at both ends of our voyage, as well as at intermediate calling-places.

And now, let us ask those who are our beacon-givers in the world of earth and water for such facts as may afford, at least, not false or merely fanciful, but true-to-nature illustrations of what the beacon-givers of mind and conscience ought to bring us for help in our life-voyage.

Here are some answers received from one source out of many, *A Chapter on Lighthouse Work*, by the late Professor Tyndall.¹ In the first place, let us note that

The atmosphere through which the rays have to pass from the lighthouse to the mariner is the truest photometer. The opacity of the atmosphere is entirely due to suspended matter, foreign to pure air. . . . Atmospheric opacity is not due to

¹ It must not be supposed that an instance like this one is exceptionally valuable. The wealth of illustrative material that really illustrates and yet is never utilised is little suspected.

absorption, but to the waste of the light *in echoes* from the particles on which the light-waves impinge.

And surely it is equally true that the prevailing 'opacity' (or denseness) of mind which often usurps the honourable name of 'common-sense'—or the 'practical,' the 'active,' the 'productive'—is due to "suspended matter foreign to the pure air" of clear, transparent thinking: to 'thoughts' that have really never been thought, but only borrowed by those who hold them. And this, too, is not due to 'absorption,' which may, so to speak, store up that energy which again may take the form of heat or even light, but to the waste of intellectual and moral force in echoes (or reflex beams) even from a reflective mind or sensitive conscience, when encumbered with much dusty detail, orderless or crowded.

Secondly, let us observe the gain in power (for beacon-work) from the depth of a light-giving flame.

It is depth alone that confers upon the flame its augmented intensity when used in a revolving apparatus. In this case eight luminous strata send their light simultaneously in the same direction to the lens, the hinder strata radiating *through* the layers of flame in front of them.

So, even when we do find minds which give out light, how thin, and thus how weak to penetrate, it mostly is! How true we feel the

principle to be, that if revealing power is to come, and mariners be safely guided on their way, there must be layers of flame of which the inner ones shall radiate through the outer. And even that is not the only need ; for ‘lateral divergence’ must be given to the rays, else much will still remain in outside shadow, of which we need a warning right and left. But all we yet have reached by our means of mental aid and guidance falls short of ‘group-flashing.’

In the material beacon this “gives the impression that there is life in it”; that it is “actively exerting itself to warn” and guide. And what, after all, is life? Has it not been said to be, in some sense, “latent in a fiery cloud”? Why may it not have affinity of some kind (through consciousness) with light?¹ To quote again :

A point connected with physiological optics deserves mention here. The optic nerve is partially and rapidly paralysed by light ; and the value of the group-flashing light is enhanced by the fact that during the intervals of darkness the eye in great part recovers its sensibility and is rendered more appreciative of the succeeding shock. The suddenness of the illumination and the preparedness of the retina are points to which I always attached importance. The thrilling of distant lightning through dense clouds suggests an idea to be aimed at in

¹ Since this was written, electricity has brought life and light into very close relation.

experiments of this character. . . . The more I think of it, and the more I experiment upon it, the more important does this question of flashes appear to me. . . . It is its suddenness that renders the lightning flash so startlingly vivid through a cloud. . . .

Too seldom do we try to translate facts like these into the dialect of mind-vision. The sight-nerves of our mind get numbed and dulled by that continuous light impression which we ignorantly treasure. An interval of darkness we abhor ; a time of shadow is to us a horror. We even strive to nullify its service, insisting on persistent, unbroken light from whatever source, of whatever quality, without one respite to the tired mind-eyes ; and then we shake our heads and cry, "We cannot see ; at least there is nothing visible, we are sure of that." And yet the pause may be the means of better seeing—may be the actual secret of the keenest sight we have. The law of rhythm claims obedience thus ; each self and all the race must say, Amen. And let us bear in mind that 'laws' like this act through vast ages of development. A week or even a thousand years of darkness may mean, to race or unit, one vibration. What matter, if to rested eyes light flashes, coming when they can use it to good purpose, revealing, making clear, the ways of life ?

XVII

THERE are few things more unintelligent, because wasteful where economy is especially needed, than our use of certain popular metaphors. This is one of the many cases in which present education, as it were, permits notorious and removable obstacles to block the path of mental advance, or connives at the true lines of that advance being constantly warped. The result is something fairly equivalent on the mental plane to mis-pronunciation and mis-spelling on the social one.

We rightly correct with care these last tendencies, not merely as a matter of custom, but also because neither ignorance nor neglect of rule, nor peculiarities of dialect, however racy in their effect, must be allowed to complicate the unanimity and ease of intercourse. Having corrected slipshod usage in matters of sound and form, we proceed to grammar, and replace caprice or disorder by consistency and order ; explaining always that not merely custom but

economy and expressiveness are at stake. Finally, we add some training in at least elementary logic, sufficient for the conduct of social life and thinking at various given levels of requirement or use.

One may venture, indeed, to think that some of these precautions are too rigidly taken ; that expressiveness, apt, fitting, pungent, illuminative, illustrative, suggestive, is often needlessly sacrificed by our hastily denouncing instead of adopting some apt and significant idiom or accent or spelling of unsophisticated dialects, or of the child's spontaneous speech. But then, if we did in that direction seek to enrich, economise, and invigorate language, we should have to be careful in so doing to make it less cumbersome, less wordy, less pedantically formulative than popular speech frequently is. We must see that our contributions neither impoverish nor sacrifice quality in accumulating a larger choice ; that they lessen neither dignity, grace, nor delicacy. Even the whimsical, when admitted, must be obviously subservient to the one great need and rule : concentrated, apt, effective, and terse expressiveness. When usage has been made as flawless as we can make it, beauty must inevitably follow. But the instrument must be 'in perfect tune' before the musician can entrance us or even attract us by his playing.

Now, in this sphere of imagery, analogy, metaphor, trope, etc.—in short, of linguistic comparison, reflection, parallel, or likeness—we find one of the most notable examples of our inconsistency. Whereas we press convention and formality into a rigid ‘board-school’ or ‘academic’ mould, and risk loss on this side, we are curiously careless,—generally, indeed, unsuspecting,—of the fact that we are liable to be powerfully swayed by the unintentional suggestions of language; as when the common or direct use of a word or phrase infects, so to speak, its analogical or metaphorical use.

Our analogical use of the terms solid ground, basis, foundation, has been already dealt with, but is worth considering more closely. Nothing can be more interesting or educative than the racial history of the stress we lay on these physical facts and the mental use we make of them. Nothing can be more admirable than the service they can and often do render. But it is none the less lamentable that for many generations teachers should, instead of leading in the path of rational linguistic advance, have followed fortuitous degenerative usage, and perpetuated actual ignorance of facts, actual confusion of thought, in the use of analogies of this kind. Before the days of Galileo, as it

must be remembered and insisted on, the use of solid ground, basis, and foundation, as figures of universal and primary necessity, or of ultimate security, was entirely justified. The earth itself was assumed to be securely founded; and its being detached from its basis and set whirling in space was the last thing which there was any reason to fear. Solid ground was the need of the very world we lived on: to be 'supported on nothing' was crashing ruin.

Well, so it still is for us men. We must have a firm substratum to stand and yet more to build upon. To build? yes: with wood, brick, stone, or concrete, our shelters, defences, huts, towns. All must be as firmly founded as the tree is rooted.

Yet even now we are making aeroplanes, not merely geoplanes; and daily inventing fresh means of speeding through air without touch of earth or water. Therefore, we have less excuse than ever for forgetting the secure and powerful flight of the bird, or the fact that the earth on which we build so heavily rests, or rather floats, more safely on the bosom of space than a soap-bubble on the air. And when the time comes when some of us shall work and practically live in the air in some roomy air-boat anchored in our garden, and only descend to solid earth for

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food or other need, we may then, perhaps, recognise practically what science has long ago announced to us, that the ultimate 'foundations' of all visible power are neither builded nor built upon, but are sources of energy and centres of force, the suns and atoms of the cosmos. And recognising this, we shall perhaps permit the fact to have its proper influence, not only on our views of life, but on our ways of expressing that and ourselves.

XVIII

PHRASES like 'the material world,' 'human life,' 'spiritual experience,' 'heavenly aspiration,' 'insoluble problem,' 'matter of fact,' 'measurable and calculable value,' the 'actual' or 'prosaic' reality are bandied about, sometimes with literary skill, sometimes merely as controversial weapons, sometimes as conventions handed down by those who meant to convey by them conceptions or assumptions which are now either obsolete or greatly changed in bearing. Correspondingly, terms like Nature, matter, force, mass, spirit, mind, and much current image, metaphor, and analogy are used in undetected confusion and a welter of defeating inconsistency. Instead of being informed, directed, enlightened by them—which is the purpose that each of them was originally made to serve—we have either to think away their inherited associations, which is really an addition to the labour of thinking, or else to allow our most momentous conclusions to be vitiated by

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them. What such vitiation costs us is to be seen in the present enormous waste of exposition and controversy as well as in difficulties and deadlocks actually created by the lack of a real consensus in the quest and achievement of an adequate, consistent, ever intensifying and expanding Expression.

If we realised the situation and acted upon it, the results must at first appear miraculous, like recovery of sight by the lifelong blind; or rather, perhaps, like the exploits of the primitive kindlers of fire and constructors of weapons, tools, boats, wheels, etc., and of grammatical language itself, who were the real leaders of the race.

But for this very reason it is easier at present to take concrete cases, in which the choice is bewilderingly wide, since we are "all in the same boat." From one end to the other in our speech and writing we have the too futile complaint that this or that obsolete convention or current custom compels us here, hinders us there, in ways which ought not to be tolerated for a moment. And the complaining author himself inevitably, though in varying degrees, falls into the trap which he is denouncing.

Undoubtedly we are all in the same boat. For the critic who writes from the point of view

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of Significs, that is, from the really expressive, descriptive and interpretative standpoint, has frequent occasion to remember that he has no other means of protest and exposition than current language, the very one which so urgently calls for them. All that is said or written, therefore, by the significian, is necessarily itself subject to the very criticism which he brings and urges. And, meanwhile, the literary expert or the artist in verbal expression only reveals by his mastery of phrase or his brilliant use of imagery or comparison, and by the ease, dignity, and harmonious flow of his diction, how much more we might hope for if his powers were really set free, and his readers trained to welcome what, as working in a purified and enriched medium, he could give us.

XIX

STORIES used to be told of a man who always explained to his servants that “when I ask for a corkscrew I mean a carving-knife.” One knows now that this is quite a common form of memory disease. But we all virtually do this without the warning! We take for granted that the needed shift—the tacit “he does not mean what he says but the other unsaid thing”—is automatically made, as no doubt to some extent it is.

But why, in this world of crowding obstacle to a clear mental path, do we tolerate even the minutest avoidable barrier to the smooth and swift running, in coupled order, of thought and speech? It is just as cheap and easy to use the root image or the foundation image or other like ones in the case where they do fit, and some other image or figure where they don't, as it is to persist in a falsifying usage. Any one who has learnt to notice these things may many a time detect in conversation the sub-attentive

results of leaving our linguistic instrument out of tune. What should we say to a violin player who smiled and said, What does it matter that my instrument isn't tuned? You all know what note I mean to play; you can all by habit set it right or ignore it. And the same excuse avails for the player of a false note, which may easily become a convention to people who have defective 'ears.' "O, he does not mean F sharp but F flat!" Doubtless too many of us have defective ears in this sense, and both commit and tolerate much discord without knowing it. But still, the commonest strummer who wrote or printed a jingle, and then played it, would be pulled up by his hearers if he not only used flats and sharps and other notes indiscriminately, but justified it by saying, "Nobody is misled!" These things are all convention, and one note does as well as another if it is accepted as the proper thing.

And it is true that these things, in musical composition or rendering, do little harm beyond tormenting the sensitive ear. The practical world goes on placidly while we play sharp for flat, and accepts the one for the other. But the corresponding state of things in all expression; the obscurity and ambiguity of our expressive *score*, the use in language of a (perhaps faintly)

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discordant note or a half-tuned instrument—even though passably right to an artificially dulled ear—*that* is an unthinkable loss to the interests and the powers of Man, whose ideal, surely, is to be embodied harmony, like the normal organism, and consciously faultless Expression. Discord in this domain does not merely torture the mental analogue of a musical ear. It makes for mental confusion and obstruction; it needlessly adds to difficulties already serious enough, and lessens the too scanty treasure of illuminative thought and communicative power.

Even at the best we can do and think and say too little that is really worth while in the fullest sense. Our noblest eloquence is confessed by the worker, thinker, poet, to fall short of a true mark. But we are profoundly stirred; great and wise and beautiful things are conveyed to us, and we rise in response beyond the self of commonplace with which we have no right to be content. Only, that response is unconsciously impoverished and even distorted by quite avoidable drawbacks, which we not only complacently tolerate but teach to children, thus ensuring their permanence and stifling the instinct of right expression which, though in quaint forms, shows itself clearly in the normal child until successfully suppressed. And though

we do now and then recoil from a glaring misuse of term in the 'rising generation,' and lament such a lapse from *our* good ways, we never see that the fatal seed has been sown, the fatal tradition of a far more extensive misuse has been handed on, by us ; that in scores and hundreds of instances we have carefully habituated the child, trained it, to say one thing when it means another, or to be content to leave much of language in rags or else cramped by antique armour.

And, be it remembered, not language only suffers by this toleration of what is perverse and impoverishing. In 'art' some painters or composers would apparently make up for the lack of original genius or freshness of idea, by a deliberate reversion to barbarism or by an elaboration which is merely artificial and sophisticated. This tendency, in fact, runs through all forms of expressive activity—and is there any form of activity non-expressive, be it only of the inanity of the actor?

XX

THE characteristic function of man in the long evolutionary ascent which he has accomplished may be described as Translation. In mind that function has had its work to do, but in the body its effects are most obviously apparent. Man has translated wing into arm, paw into hand, snout into nose. His translations of vital function and ensuing translations of structure have indeed been innumerable, inevitable, triumphant. Why? Because they were always ascending adaptations; because they always meant readiness to change, to develop, to be modified, even to atrophy and thus make room, on occasion, for the purposes of a vital ascent. . . .

Man, then, has been organically and typically plastic. But his language, except in secondary senses or for superficial purposes, is still rigid. If he has any intentions in regard to speech, it manifestly does not heed them as the paw and the wing of an earlier day heeded the promptings of the phyletic will and took new form and

power. He has never yet been able to secure the control and direction of that very gift which most differentiates him from the 'dumb' world. Meantime, there are societies and congresses, national and international, for ensuring the command and developing the potencies of almost all the social activities; all except the one which most profoundly affects and should precede them all. There are reforming movements in every direction except in regard to that which is their very condition—the power, namely, of really expressive and significant definition of feelings, thoughts, and purposes.

XXI

WHAT, broadly speaking, is the difference between the most perfect of modern instruments, machines, apparatus of any kind, and those organic instruments out of which they have been developed, or for which they have been substituted? The difference consists, for practice, in their greater precision and accuracy. But this greater precision and accuracy is always understood as not restricting but widening the efficiency of the instrument. As its exquisite complexity increases, it becomes increasingly adaptable; and it automatically stops or even changes its action when a knot or gap or other incident in working occurs. It is even said that when some unfavourable condition occurs which necessitates the intervention of intelligence, a bell is sounded which brings the expert. Little by little the instrument assimilates, by the will of its maker, some fraction of his own power of adjustment and of flexibility in providing for small changes or of averting dangers. In all

such examples of engine and instrument we have, in fact, a projection of man's own prerogative of adaptation. Every instrument is, broadly speaking, an extension of sense and organic function.

We have still, however, only a constructed machine, invented and manufactured; with its limitations relatively rigid and narrow, however much they may have in recent years expanded. It is desirable, therefore, to supplement this ideal of precision by relating it again with the admitted evolution of the hand from flipper and paw. This latter evolution excludes the idea of actual manufacture and even of a conscious and rational will. But it implies a form of what may be called Racial or Phyletic Will, that will which, profiting by the very existence of favourable varieties able to rise above and overcome adverse conditions, makes the work of natural selection possible.

Now, let us combine these two ideas. Think of the exquisite delicacy in both cases. Realise the marvellous subtlety of the response of violin, microscope, or spectroscope, and of the even more astonishing instruments which are almost crowding upon us, and then consider the consummate skill of the trained hand, free *because* determined and *because* loyal to fact and

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order—and you have some suggestion of what language is not yet, but has to become. Something of it, but not all. For Language is Thought in audible activity.

XXII

BUT indeed the example which language has to follow, and its ultimate scope and limitations, are those of the phenomenal world itself. We are therein aware, thanks mainly to the work of science, that there are many processes and changes going on and things existing round us which we cannot directly 'sense' or 'feel.' In some cases, though we cannot see, hear, or feel directly, we can do so indirectly; we can invent instruments which are sensitive to stimuli to which we are entirely insensitive. This brings us an immense extension of our range of sense-perception. Yet on the other hand, unless we can either re-acquire forms of excitability which are found in the animal world—and to some extent still in the uncivilised world or in pathological forms—or else evolve fresh response-power on a still ascending organic spiral, we must in the last resort be hampered by a narrowness of sense-range which even threatens to increase.

In both respects, that of acquiring command of an ever more efficient instrument, and that of intensifying the range of natural awareness, the world of phenomena accessible to us cannot so far be said to have translated itself adequately into our world of words,—into Language. We experience much that we cannot articulately express, and therefore cannot usefully study or record. And why? Because after all language, in the present sense of the word, is comparatively a late acquisition; and for reasons which can, though dimly, be discerned, the development of articulate expression has lagged behind all other forms of development since its first great advance in what to us are 'classical' periods.

And yet the fact of this arrested development, if we only could see it objectively, as an historical phenomenon, might well move us to wonder. For throughout history there has been, apparently, a widely felt instinct that somehow articulate reasoning—the highest because the rationally ordered form of response to our environment and of analysis of experience—was our supreme attribute and prerogative. The Greek Logos is, of course, the most conspicuous instance of this recognition. But it may be found, I believe, throughout Oriental tradition and, in ruder forms, in most types of barbarous and even

savage myth. It seems strange that man should so completely have lost sight of the full value of that to which apparently he has hitherto, in the more exalted as well as the most primitive historic phases of his being, rendered instinctive homage. We shall do well in this context to remember that though in the spiritual sphere 'inspiration' is first attributed to the speaker and writer, and 'revelation' comes mainly in speech or writing, yet both forms really apply to all original conception, and even to all original 'composition,' not to the literary alone.

XXIII

LANGUAGE might in one aspect be called articulate music. And we may be grateful to the so-called stylists, although in their efforts after beauty they sometimes sacrifice instead of transfiguring significance, and always tend to defeat themselves by making significance secondary. For at least their work recognises some analogy between the ordered harmony of music which we call attunement, and the true ideal of language.

And thus we are reminded that as yet language in ordinary use barely rises above the level of noise, and only suggests the perfect natural harmony which ought to be its essential character. The reason for this, however, is not merely that in language we have failed to develop a full control of our 'singing' power, or that we are still content with the rude instruments of ancient days, although this is to a great extent true. We may put it in another way and, as already suggested, may say that in civilised speech we have acquired linguistic instruments of real com-

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plexity and implicit power to render subtle forms of harmony, but that it has never occurred to us to tune them together, to attune them. And we may suppose ourselves to have told one who suggested the need of this that the proposal was pedantic, and that to tune an instrument was to restrict its scope, as the ambiguity of tone and conflict of intention which reduces music to noise means a valuable freedom secured. We are liberating music by ostracising the tuner, enriching the language with grunt, squall, yell, squeal, and excruciating discord !

XXIV

WE may experimentally assume that every process really ascertained in physiology fits, has its corresponding process, in psychology. The danger is that we are not yet advanced enough to apply safely the translations in detail which this natural correspondence should make possible and instructive ; and a mistranslation would be worse than none. But if the systematic correspondence be postulated, it should follow that the advance of knowledge in each sphere ought to contribute towards advance in the other. The intrinsic unity is perfect ; witness the existence of psycho-physics, and even the fact that already language is full of expressions borrowed from both sides, though usually in the wrong way and conveying the wrong idea. Its assumptions being out of date, too much of it is like talking of railways and steamer traffic in terms of horse or bicycle traffic ; even as presently we may be talking of the mis-named 'aviation' in

terms of tramping and rolling. This is hardly a caricature.

To some extent, of course, language should carry on the many traditions of experience. But a language loaded with dead traditions has its nerve-channels choked and its reflexes dislocated, and the ensuing general paralysis results in a diseased exuberance of expression. Of the typical expressive diseases, no adequate diagnosis or even description has yet been made. Most generally they are of a diffuse, non-acute, negative kind, analogues of a low or deficient vitality. Healthy action, sound development from simple to complex, and thus to a higher level of simplicity and economy, is usually suppressed in children by their teachers; so are spontaneous and needed returns to an early heritage of pregnantly significant idiom. What English has lost in this way can only be guessed at. The epigrams of folk-speech which linguistic folk-lore collects and preserves afford examples, and so do the few early narratives we have. But much can never have been committed to writing, or been noticed even to be ridiculed!

Meanwhile, to return to our analogy, linguistic disease in various forms is assiduously imparted or at best left untreated. We helplessly accept our general paralysis, our dropsy, our cancer

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of speech ; and the many forms of mental indigestion which result from indulgence in unwholesome speech-food are but one type of the mental ills caused by, and causing, the expressional ills. For the mischief is, of course, reciprocal.

In one case—that alone called ‘bad language’—we do realise this ; we do understand the powerful reaction on mind and character which forms of speech may involve. But unhappily bad language, in a wider sense, is imposed upon our writers and thinkers from the first, and convention chains them to it.

XXV

THERE can be, of course, no question of the convenience and economy of using one word in many senses. The ever-increasing richness and variety of experience would else make vocabularies impossibly cumbrous. The wealth of variation in language, far from being an evil, is a priceless advantage. Outside the region of technical notation, mechanical precision of outline or constancy of content would be both the cause and sign of arrested growth or decaying life. What is wanted is to secure that each of us shall know better where others are, and he himself is, in the matter of expression; also that we shall allow more than we do yet for the general failure to classify and appraise the shifting penumbras which surround the symbols of thought. We are too apt to assume the true analogy of language to be a world without atmosphere in which every outline is clear cut and sharp; whereas a truer analogy is that of the world enveloped in an atmosphere which

causes outlines to melt and vary, to shift and disappear, to be magnified, contracted, distorted, veiled, in a thousand changing conditions. These changes are not drawbacks or dangers except in so far as they deceive or baffle; they are the reflections of life itself as well as of its home. And in proportion as we are worthy of the human name in its highest sense, we are able to understand the significance of, to allow for, even to exploit that element of uncertainty, of possible deception, which thus acts as a powerful stimulant of the higher cerebral activities. The normal result of such a stimulation both on the physical and mental planes is that we learn to interpret, and to see order and consistency behind, what have seemed the vagaries of natural hazard.

An assured command of language—one as yet not even fully possessed by our greatest writers so long as the immense majority of their readers have been brought up to misread them or to read them in incompatible senses—would correspond to that command of mechanical resource which is the amazing result of the renaissance of the signifi- cal function in that one direction.

XXVI

A NECESSARY distinction which is continually ignored is that between verbal and sensal.¹ The verbal is question of symbolic instrument regarded as a thing detached and out of actual use ; the sensal is question of value conveyed thereby on any particular occasion. The two are at present hopelessly confused. But no word in actual use is merely verbal : there and then it is sensal also. You may have endless variety in the subtle little tunes or 'airs' that we call words or word-groups, and in the written symbols which again stand for these ; but this endless verbal variety ought to give us an endless sensal treasure. The sense and meaning, the import and significance which language carries or makes possible, constitute its value. What we call its beauty, partly a verbal and partly a sensal effect, is, as already suggested, akin to that of music, which is much more significant than most of

¹ If this word be rejected, we shall require another : but it conveys a needed variant from sensible.

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us suppose. Harmony and melody ought to convey much more to us than they do.

But the idea of *conveyance* is essentially that of the biological tradition and transference which made ascent possible. Some developments of sense which we had on the animal and doubtless on the primitively human plane have been lost through relaxation of the stress of vital need. Yet in the interests of new mental need we must even try to regain some of these, while acquiring fresh ranges of all senses and fresh subtlety of application. And with this must go, as part of the same enhancing and vivifying process, fresh delicacy and force of reasoning and fresh intolerance of the confusion in language at present unheeded.

XXVII

It seems obvious that mathematics should not only become the general benefactor as thus 'applied' to all practical wants, but that it should be equally translatable into other and higher spheres of our common need. But it cannot do this while language (and especially while imagery) remains the neglected discord that it is, even in hands from which one would expect results which throughout rang as true as the music drawn from a perfectly adjusted instrument, and above all from the healthy and most highly organised human larynx. So far from leading to or making for pedantry, this vital command of a perfectly flexible expression in word as in act would reflect the plastic powers of the life-impulse itself in all the richness of its adaptive variation, and would continually surprise us with fresh forms of truth, wonder and beauty, in their turn involving, and in a sense creating, new developments of expressive achievement. At present we see the promise of

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this gift almost alone on the emotional and imaginative side. The poet does on his own ground surmount the difficulties of language, and by a sort of miracle arouses in us responses which, if we dispassionately analysed his method, we should see to be due to an induced thrill of sympathetic vibration that must ignore the obstacle and exploit emotionally the utmost power of a yet unworthy medium of expression.

But as things are we agree to discount his message, which indeed fails to reach many at all, or to touch, with any perfect healing, the deepest ills, or answer the pregnant questions of life. It is but too evident, also, that the message of religion as yet tends rather to accentuate inevitable differences than to interpret and gather up these into an organic richness of response. Religion, like poetry, comes, as it were, as an isolated lung or an isolated heart, and language is largely to blame for the persistence of this dividing tendency which so effectually breaks up the normal unity of a sane human wholeness on its highest levels.

XXVIII

“LANGUAGE in its present sense,” I have said. For be it confessed at once that I would transcend the level and limits of mere ‘language.’ A mere tongue does not satisfy me except as a necessary compromise—a detail. What we now call language is but one, the most comprehensive and delicate, mode of expressing ourselves, of feeling and thinking together, of articulating our nature, our knowledge, our hopes, our ideals. All I care for is first and always that Significance which is reached through sense and meaning, and which (if you give these free play) must ultimately involve and induce beauty of sound and form. I am quite ready for the most drastic changes as well as for the most scrupulous and anxious preservation of our existing resources all over the world. I want Greek ; I want Chaucer ; I want Esperanto, or rather its worthier successor when that shall appear. I want the Zulu clicks ; I want modes of expression as yet unused, though we must not say undreamt of, since there are

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many scientist's and idealist's diagrams, symbols and other 'thinking machines,' all ready and in order, to rebuke us.

It may be true that the larynx and tongue must remain the main means. Still, you have refinement of gesture and of expressive action, the potentialities of which are practically unexplored; and you have the whole field of 'written' symbol and of 'Morse alphabet,' of the artist's tools and the laboratory apparatus, open to you. Let us learn to think in radiations and in ether waves. Let us transfigure grammar and prosody. Already the poets give us hints of the plasticity and beauty and wonder of words. We analyse, yet we do not touch the secret; but why not catch at least some of the infection? And let us learn to use machinery in higher ways: let us annex it to the service of thought, of beauty, of significance. Let us indeed fearlessly accrete words and phrases from all forms of science. All the ancient philosophers whom we revere absorbed the scientific terminology of their day and used it seriously and exactly. Still more should we now do this, when science is giving us not only rudder and compass, but such turbines of mind as the world has never seen. Nay, is not acceleration itself just *quickenings*, and the whole of contemporary mechanical development one

parable? Language must be regenerated. It must be re-conceived and re-born, and must grow to a glorious stature. Of what that may be and become if only we resolve that it shall be, the greatest words of the greatest thinkers give us but a hint. It is quite ready to serve us: it is only we who are too stupid and vulgar to be worthy of such waiting-on. We think in the pigmental, and get our 'colour' through mud. Let us think in the spectral, and get our 'colour' through the rainbow. The true Word, let us realise, is not merely a conventional noise or scrawl or stamp; it is the Logos, it is Reason. It is more than that. It is that which can truly say 'I am': it is the revelation of the Way through truth to life.

XXIX

THE social phenomena of language, observes M. A. Dauzat,¹ are extremely complex. First synthesis and then analysis defy the inquirer ("est rebelle au chercheur"). But this ought to be the case no more, as no less, than in any other kind of research which involves the social conditions of life. It all depends on how we tackle the problem. If in any subject of human study we may accept disorder and caprice as our masters, calling those enslaving factors the inevitable concomitants of 'freedom of will' and of an innate tendency to error, of course the writer's complaint holds good. But it is time we ceased to make use of the false contrast between the invariable as mechanical and the chaotic as voluntary. The will in sound health has all the trustworthiness of the natural order and constructed machine, lacking only its indiscriminative pressure and its senseless persistence which, dynamically uncontrolled and statically obstructive, makes for ruin.

¹ *La Vie du langage*, p. 11.

The truly sane mind never errs, never swerves from natural loyalty to the real. It must seek knowledge and ensue it, else it can have no worthy peace. But there is a misunderstood 'ignorance' which really means the attainment of a temporary frontier ; a pause merely to enable us to organise a fresh expedition for the exploration of what lies beyond. For frontiers of knowledge and capacity exist to be crossed ; and when every child shall be permitted to re-enter and, according to its share of the racial powers, to dominate its lost cosmical kingdom, we shall hear no more of barriers except the healthy ones of sanity, there, and ours, to bar out error alone : barriers that are themselves the very condition of really fruitful exploitation of reality, and so of yet further advance.

All this, then, applies to language, and to its temporary conditions and permanent tendencies. Once let us begin by a clear understanding of the true gist, trend, goal, and jurisdiction of expressive communication, and we enter a whole new world of power to discern and appraise, and thus to co-ordinate and act out of and upon, those realms of experience now most tragically arresting or misleading us.

Only, this fresh factor, this guiding conception of what Language is, and must become, will

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need first to be applied in education. When such an application really begins, much will have been gained besides more perfect communication in the linguistic sense. We shall hear no more, then, of ability which might render the highest service to the race being wasted in routine work, or driven to suicide and even crime by sheer desperation induced by non-recognition of gift. Those now blind and dull to the unused human resources will have recovered a quick and keen sense, a racial sense, of the presence of these resources in unlikely directions—will, in fact, have been trained to look out for them—and will with this have evolved, in regard to the genuineness of claim to power of any kind, a much more discerning judgment than is yet possible, except in the rarest cases.

When the present state of things, as it has been vaguely and generally indicated in the preceding pages, is widely realised and admitted, it will be acknowledged that a radical regeneration of education, beginning in the nursery, is urgently called for. As, however, this regenerated education will run with, and not as now against, a sanely broadening and deepening stream of effectiveness and human conquest in individuals and societies ; as it will mean, in fact, the application of normal powers now more or

less in abeyance or misused, and so will make for a true solution of the most baffling problems of life, there need be no misgiving as to its ultimate effect. And it will not be the least merit of such an education, that, alone among such ventures in the unknown, it will automatically furnish and bring to bear its own criticism, which must needs be of the severest type we know. For speech and writing will be conducted by a quickened and clarified intelligence, using a linguistic instrument of immensely enhanced delicacy and power, and therefore of faithfulness at once to the cosmic reality and the human intention.

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MEANWHILE we have first to realise that to be inexpressive is for us the deepest of disgraces, involving the culpable neglect of our most precious power, the shameful disregard of our highest call. For all nature, all reality is expressive in an inexhaustible sense: but Man has the potency of a higher because an articulate and interpretative expressiveness. He alone reaches the level of the why and the because—inaccessible until the what and the how have been reached—and he alone can, if he will, raise this level to undreamt-of heights which are, even now, touched here and there by the hand of genius. But, except, perhaps, in the case of mathematics—and that only as separated off from the interests of all but specialised minds—and of the rare poetry which in the deepest sense should mean touch with the beauty, the honour, the divine grace, and the infinite range of truth, he misses as yet the noblest of all inheritances and the crown of his powers, that of the

interpretative expression which is what many of us—vaguely or ambiguously or conventionally—call Revelation.

There is no veil over ineffable priceless Reality to be withdrawn: only over clouded human eyes. One sees with reverence its reflection even now in the eyes less clouded than those of most of us; in the eyes of the saint, the thinker, the worker; above all, in the heavenly transparent simplicity of the true child's eyes. All these *express* in their degree and at moments, and in so doing reveal. But we allow what we call Expression, and especially that articulate language which should be our truest servant and greatest faculty, not merely to fail in revealing, but to mask and even falsify the urgent realities ever waiting for their appointed revealer. We do not even yet know what Expression in its full compass might include and deliver to us. But already we admit from time to time that some attitude or act, some gesture, or some change of these—all of them acknowledged lesser varieties of expressive resource—may, like some change of condition in natural objects, be profoundly suggestive and even explanatory.

Let us then resolve that articulate expression shall at last become worthy of Man, of one whose first duty and highest power is to interpret

and thus to reveal ; whose prerogative it shall be to lay open to the pure eye of the candid and fearless because faithful mind, what are only secrets and mysteries to our ignorant sophistry and our often grotesque but enslaving belief.

For there is no ultimate difficulty. Truth is not innately mysterious. So far from trying to baffle us in order to enhance its command of us and keep us humble, as creatures of the ground ;¹ so far from inducing spiritual coma or delirium or dangerous obsession, Reality throws wide her blessed arms, opens wide all ways and paths which lead to her very heart, the heart of the Real. She asks only that the word of the enigma shall become a fitting word : that the expression of Man who himself is to *be* her expression shall be worthily 'incarnated' : that what is the very life-blood of man's thinking shall be enriched by purification : that in such a Word, while wealth of connotation and association may be boundless, a confusing or impoverishing ambiguity shall be reckoned as intellectual disgrace, as spiritual anathema.

And upon such a way let us bear in mind that Reality, our true goal, never breaks us up into rival, and thus mutually defeating and impotent, groups ; never creates cults which exclude a

¹ Latin *humilis* = of the ground, near the ground.

hundred types of humanity in order to dominate one. No ; Reality groups, no doubt, but groups as our own organism groups the co-operating functions of its unified life : a type of grouping in which every system of parts serves every other faithfully and gladly. The life-current, the community of cells, the ramifying brotherhood of fibre, muscular and nervous : each adds to each other's power ; each is gladly servant of all other. And all ultimately unite in serving, and are as their great reward crowned by, a Brain as yet in the infancy of its conquests—a Brain which is there to cover the whole range of vital activities fully attained, embryonic, or still but potential.

Is any organic aim, indeed, yet fully attained ? Is the brain to generate its own superior ? Well, we know not. But at least we need not inflate Reality with our empty bladders of used-up thought, or shrink her into the wrinkled skin of decay. And to say 'we know not,' and for an unnecessary moment to rest content with that, is a crime against the Real around us and within us which calls in the most pleading, as the most commanding, of all voices.

Live in Me ; learn and know Me, saith all that is Real. For the glamour or the horror of the Dream which haunts or fascinates, entrances or

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repels you—the adoration of false hopes, the cult of false despairs—shall vanish with the rising of my Sun, with the bearing and the birth of my being, as your true and waiting heritage.

I open all: I keep back nothing: see that at least you learn to express me nobly, without flaw that need not be, or falsity that shames you, or blankness that defeats your highest powers. . . .

APPENDIX

“WE live in old cells, we move in old grooves, we go on using old watchwords, apparently unconscious that these are out of date and have lost their savour of meaning. . . . Do we not need a leaven of independent thought to make us distinguish what is from what has ceased to be real and essential? . . . One is sometimes driven to conjecture that the faculty of independent thought is for the time weakened or distracted or numbed; or may we hope and believe that the thought is there, and is only deficient in expression?” (1)

“. . . language which is quite adequate in everyday life, language in which we describe ourselves as if we were things, living beings assigned to a particular time . . . that kind of language which is useful and legitimate for everyday purposes, becomes altogether misleading when we get to the problem of what is the true nature of reality. And the great difficulty which the metaphysician . . . has to face is just these incrustations of the everyday point of view, the language which we get into the habit of using, and the notions which pass current, and which give rise to what we may call superstitions of common sense based upon them, such as that the mind may be properly spoken of as a thing.” (2)

“To what end led these ‘new and fruitful physical conceptions’ to which I have just referred? It is often described as the discovery of the ‘laws connecting phenomena.’ But this is certainly a misleading, and, in my opinion, a very inadequate, account of the subject. To begin with, it is not only inconvenient, but confusing, to describe as ‘phenomena’ things which do not appear,

(1) Lord Rosebery, “On National Culture,” October 15, 1901 (*Times* report). (2) R. B. Haldane, *The Pathway to Reality*, Series I. p. 40.

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which never have appeared, and which never can appear, to beings so poorly provided as ourselves with the apparatus of sense perception. But apart from this, which is a linguistic error too deeply rooted to be easily exterminated, is it not most inaccurate in substance to say that a knowledge of Nature's laws is all we seek when investigating Nature?" (3)

"In the expressions we adopt to prescribe physical phenomena we necessarily hover between two extremes. We either have to choose a word which implies more than we can prove, or we have to use vague and general terms which hide the essential point, instead of bringing it out. . . . One of the principal obstacles to the rapid diffusion of a new idea lies in the difficulty of finding suitable expression to convey its essential point to other minds. Words have to be strained into a new sense, and scientific controversies constantly resolve themselves into differences about the meaning of words. On the other hand, a happy nomenclature has sometimes been more powerful than rigorous logic in allowing a new train of thought to be quickly and generally accepted." (4)

"Tous les observateurs sont aujourd'hui convaincus qu'il faut distinguer avec précision des réflexes cutanés ou tendineux, des réflexes inférieurs ou supérieurs, qu'il est puéril de confondre sous le même nom des amaigrissements et des atrophies, des tics et des spasmes, des secousses émotives et du clonus ; il faut se décider à comprendre qu'on ne doit pas davantage employer à tort et à travers les mots 'démonstration, persuasion, suggestion, association, idée fixe, etc.,' qu'il faut distinguer, dans les troubles de l'esprit, les idées fixes de telle ou telle espèce, les diverses formes de la conscience, les divers degrés de la dissociation psychologique.

"Cette précision du langage permettra seule de reconnaître nos erreurs inévitables, de comprendre mieux les malades, et de faire à la psychiatrie des progrès analogues à ceux qu'ont accomplis les études de neurologie. C'est cette analyse psychologique qui sera le point de départ des méthodes de *psychothérapie*. . . ." (5)

(3) A. J. Balfour's Inaugural Address as President of the Brit. Assoc., August 1904 (*Nature* report, August 18, 1904). (4) Professor Arthur Schuster, Brit. Assoc. (*Nature* report, August 4, 1892). (5) M. Pierre Janet, "Qu'est-ce qu'une Névrose?" (*Revue Scientifique*, January 30, 1909).

“Faraday . . . was obliged to explain the phenomena to himself by means of a symbolism which he could understand, instead of adopting what had hitherto been the only tongue of the learned.” (6)

“Unfortunately we go on building with names when the things are altered or wasted away, as sometimes beavers pathetically persist in constructing dams and canals when the water has gradually dried up, or has changed its course. If we realise how a word may survive to oppress and mislead us, as other ghosts do, when the underlying thing has dissolved, we shall be more careful in setting up imposing names as we physicians are very prone to do, until we are sure that the thing is there; and in no case shall we let a name give an absolute value to temporary or developing notions.” (7)

“Ainsi la science n'est pas une œuvre de la nature, dont la conscience ne serait que le théâtre; ce n'est pas non plus une simple provision de recettes, dont l'utilité serait toute la raison d'être. C'est une activité déterminée, c'est l'activité humaine elle-même, en tant que raisonnable et intelligente. Il en est de la science comme des langues. Ainsi que l'a finement démontré M. Bréal, les langues ne sont pas des êtres qui auraient leur principe d'existence et d'évolution en dehors de l'esprit humain. L'esprit, l'intelligence et la volonté humaine, voilà la seule cause vraie du langage; et le langage ne saurait s'en détacher, parce qu'il n'y a de vie en lui que celle qu'il tient de cet esprit même.” (8)

“C'est qu'il est impossible de donner une définition sans énoncer une phrase, et difficile d'énoncer une phrase sans y mettre un nom de nombre, ou au moins le mot plusieurs, ou au moins un mot au pluriel. Et alors la pente est glissante et à chaque instant on risque de tomber dans la pétition de principe. . . . Vous donnez du nombre une définition subtile; puis, une fois cette définition donnée, vous n'y pensez plus; parce que, en réalité ce n'est pas elle qui vous a appris ce que c'était que la nombre, vous le saviez depuis longtemps, et quand le mot nombre se retrouve plus loin sous votre plume, vous y attachez le même sens que le premier venu; pour savoir quel est ce sens et s'il est bien le même dans telle phrase ou

(6) Clerk-Maxwell, *Scientific Papers*, vol. 2, p. 318. (7) Sir T. Clifford Allbutt on “Words and Things” (*The Lancet*, October 27, 1906). (8) Émile Boutroux, *Science et religion*, p. 279.

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dans telle autre, il faut voir comment vous avez été amené à parler de nombre et à introduire ce mot dans ces deux phrases.” (9)

“The indiscriminate confounding of all divergences from type into one heterogeneous heap under the name ‘Variation’ effectually concealed those features of order which the phenomena severally present, creating an enduring obstacle to the progress of evolutionary science. Specific normality and distinctness being regarded as an accidental product of exigency, it was thought safe to treat departures from such normality as comparable differences : all were ‘variations’ alike. . . . We might as well use one term to denote the differences between a bar of silver, a stick of lunar caustic, a shilling, or a teaspoon. No wonder that the ignorant tell us they can find no order in variation. This prodigious confusion, which has spread obscurity over every part of these inquiries, is traceable to the original misconception of the nature of specific difference, as a thing imposed and not inherent.” (10)

“Within the cell-body are many collections, often in the form of granules, of substances which have not the protoplasmic attributes. They constitute the ‘deuteroplasm’ of certain cytologists. But these enclosed substances may be as far removed from protoplasm as starch grains. It is absurd to use the termination ‘plasm’ for such well-defined products of cell activity as these. The subject is, unfortunately, obscured by conflicting terms. Nomenclatures which were invented with the object of giving definiteness to our ideas have served but to perplex them. The term ‘protoplasm’ should be reserved as a synonym for the substance which is most alive, the substance in which chemical change is most active, the substance which has in the highest degree a potentiality of growth. Anatomical distinctions are better expressed in anatomical terms. We shall treat of such distinctions when considering the organisation of the cell.” (11)

“No one can say what capacity living cells may have of taking substances from the blood, returning some of them, and excreting others. This unknown capacity leads to results which, when they do not appear to be in accordance with the laws of physics, are

(9) H. Poincaré, *Science et méthode*, pp. 166, 164-5. (10) Prof. W. Bateson, Brit. Assoc., August 1904 (*Nature* report, August 25, 1904). (11) Alex. Hill, *The Body at Work*, pp. 8-9.

commonly termed 'vital.' The term is a stumbling-block which has tripped up generations of physiologists." (12)

"Once upon a time there was a very bitter controversy as to the respective merits of Newton and Leibniz, in the discovery and elaboration of the infinitesimal method. Much of the dispute was due to the use of language appropriate only to the discrete aspects of quantity for the purpose of describing it when regarded as continuous." (13)

"The word 'instinct' is one of those unfortunate words which are supposed to be understood by all, words which are more fatal impediments to the advance of science than almost anything can be." (14)

"Malheureusement, nous sommes si habitués à éclaircir l'un par l'autre ces deux sens du même mot, à les apercevoir même l'un dans l'autre, que nous éprouvons une incroyable difficulté à les distinguer, ou tout au moins à exprimer cette distinction par le langage. . . . Nous éprouverions une surprise du même genre si, brisant les cadres du langage, nous nous efforcions de saisir nos idées elles-mêmes à l'état naturel . . . nous tombons inévitablement dans les erreurs de l'associationisme. . . . Aussi ne prennent-elles pas dans notre esprit la forme banale qu'elles revêtiront dès qu'on les en fera sortir pour les exprimer par des mots ; et bien que, chez d'autres esprits, elles portent le même nom, elles ne sont pas du tout la même chose." (15)

"Names lie nearest the surface of what we take for granted ; hence our difficulty in saying exactly what words, or ghosts of words, we have been using, and whether any." (16)

"I infer, therefore, that the pragmatic philosophy of religion, like most philosophies whose conclusions are interesting, turns on an unconscious play upon words. A common word—in this case, the word 'true'—is taken at the outset in an uncommon sense, but as the argument proceeds, the usual sense of the word gradually slips back, and the conclusions arrived at seem, therefore, quite

(12) Alex. Hill, *The Body at Work*, p. 205. (13) R. B. Haldane, *The Pathway to Reality*, Series I. p. 202. (14) J. Grote, *Exploratio Philosophica*, Part II. p. 3. (15) H. Bergson, *Essai sur les données immédiates de la conscience*, pp. 91, 101. (16) Prof. W. Mitchell, *Structure and Growth of the Mind*, pp. 372-3.

different from what they would be seen to be if the initial definition had been remembered." (17)

"No word has had more accusations of ambiguity, and consequently of unsuitability for scientific use, alleged against it than the word 'value.' Value in use, we are told, is one thing and value in exchange is quite another ; and that is unquestionably the case if we treat the phrases as museum specimens, if we put them each in its separate case and examine them there." (18)

"I avoid using the word 'soul' on purpose, because the endless confused controversy about it has rendered it, like many other words, unfit for use as a philosophical term, unless with constant accompanying definition." (19)

"The term 'Division,' which is the established designation of the procedure we have now to examine, is not happily chosen. We cannot appropriately speak of dividing a word, or the meaning of a word, for meanings are 'differentiated' rather than divided. The very term 'Division' (as also such other metaphorical expressions as 'parts,' 'joints,' etc.) seems almost to imply a physical division, a division of some individual thing into its component parts. The use of the word has the further disadvantage of prejudicing the interpretation to be put upon the process in its logical aspect." (20)

"It has clearly to be said that the definition of 'precocity' requires a little more careful consideration than it sometimes receives at the hands of those who have inquired into it, and that when we have carefully defined what we mean by 'precocity,' it is its absence rather than its presence which ought to astonish us in men of genius. . . . It is no doubt true that, in a vague use of the word, genius is very often indeed 'precocious' ; but it is evident that this statement is almost meaningless unless we use the word 'precocity' in a carefully defined manner." (21)

". . . tout homme qui réfléchit, est amené à faire en toutes choses, et sur laquelle repose, à vrai dire, toute vie, toute action :

(17) Bertrand Russell, *Philosophical Essays*, pp. 143-4. (18) W. W. Carlile, *Economic Method and Economic Fallacies*, p. 16. (19) J. Grote, *Exploratio Philosophica*, Part II. p. 3. (20) W. R. Boyce Gibson, *The Problem of Logic*, p. 40. (21) Havelock Ellis, *A Study of British Genius* pp. 136-7.

la distinction du principe et de l'application, de l'idée et de sa réalisation. Nous voulons avec notre pensée, nous réalisons avec les choses. Il s'ensuit qu'il y a, dans une action, dans une réalisation quelconque, quelque chose d'autre que la pensée, à savoir une forme matérielle, qui, si les conditions extérieures viennent à se modifier, devra nécessairement se modifier d'une manière correspondante, sous peine de changer de sens et de ne plus exprimer la même pensée. Pourquoi nos écrivains du XVI^e siècle ont-ils aujourd'hui besoin d'explication, sinon parce que la langue a changé? Pour dire aujourd'hui cela même qu'ils ont voulu dire, il faut souvent employer d'autres mots. Toute action, toute vie implique cette distinction, car la vie consiste à subsister au moyen du milieu dans lequel on se trouve; et quand ce milieu change notablement, l'être vivant est placé dans l'alternative, ou d'évoluer, ou de disparaître." (22)

"Before I go further, I must guard against misunderstanding by a preliminary definition of terms. The name Monism is currently used indifferently to describe either of two very different doctrines, and it sometimes happens that the same person employs the word in both senses in the course of the same argument." (23)

"The ideas of right and wrong conduct are . . . those with which ethics is generally supposed to be most concerned. This view, which is unduly narrow, is fostered by the use of the one word *good*, both for the sort of conduct which is *right*, and for the sort of things which ought to exist on account of their intrinsic value. This double use of the word *good* is very confusing, and tends greatly to obscure the distinction of ends and means. . . . The word 'right' is very ambiguous, and it is by no means easy to distinguish the various meanings which it has in common parlance. Owing to the variety of these meanings, adherence to any one necessarily involves us in apparent paradoxes when we use it in a context which suggests one of the other meanings. This is the usual result of precision of language; but so long as the paradoxes are merely verbal, they do not give rise to more than verbal objections." (24)

"In the exposition of mathematical thought the terms Number,

(22) Émile Boutroux, *Science et religion*, p. 243. (23) Prof. A. E. Taylor's contribution to Symposium on *Why Pluralism?* (Aristotelian Proceedings). (24) Bertrand Russell, *Philosophical Essays*, p. 16.

Quantity, Magnitude, and Measure, meet us at every turn. But while, in applied mathematics, writers who avoid looseness of terminology are careful to indicate, either by definition or by clear implication and example, the precise meaning which they attach to these terms, in pure mathematics it is a common if not invariable custom for writers to use these terms loosely, without any clear intimation of the shades of meaning intended, if any are intended." (25)

"What are purely descriptive principles in geometry? They are commonly understood to refer to qualitative relations, to exclude all reference to metrical relations. The investigation thus appears to start from, or to be founded upon, a contradiction. To establish the notion of distance upon principles which exclude this notion seems at first sight to be an absurdity. But it is only the phraseology which is absurd, because it does not express, in accordance with the usual conventions of language, the actual process of thought. The result of this violation of the conventions of expression is ambiguity in the doctrine itself. Hence the conflicting opinions which have arisen as to the significance of the theory." (26)

"First, I would draw attention to the simple yet pregnant facts, well established by the labours of philology, that the life of no single word is beyond the law of development—that finality in the significance of a word is never reached so long as that word continues to be used. Further, that the significance of a word depends ultimately not merely on the context, not merely even upon the whole treatise of which the context is a part, but finally on the whole of the rest of the language—and probably, in the last subtle analysis, it ends not even there. Now, if we remember that, ultimately, in a rigorously formal sense, definitions depend upon words, axioms depend upon definitions, and proof or reasoning upon axioms and definitions, it appears to be a simple and valid corollary that *axioms, definitions, and proofs never attain finality*. It may, indeed, be replied that this very argument—and, indeed, all arguments—assume implicitly the truth of the very axiom or principle the argument would question. But this objection,

(25) Hastings Berkeley, *Mysticism in Modern Mathematics*, pp. 60-61.
 (26) *Ibid.* p. 241.

ultimately analysed, is irrelevant, because the argument pretends to no higher degree of validity than the axioms upon which it ultimately rests. Whatever limitations may be discovered to apply to the one apply also to the other." (27)

"Europe had for centuries been filled with the noise of scholastic discussion over questions incomprehensible to ordinary sense, of which the staple was furnished by such terms as *substance, attribute, essence, existence, eternity*. And these terms were the established stock-in-trade, as it were, not only of philosophical language but of philosophical thought. Such as they were, these were the tools with which Spinoza had to work. Even if he could have conceived the notion of discarding them altogether and inventing new ones, which, however, was in his circumstances not possible, it was only by keeping them in use that he had any prospect of inducing students of philosophy to listen to him. But the powerful and subtle minds which had exercised themselves on these ideas had troubled themselves but little as to their relation to actual things and man's knowledge of them. It was assumed that the foundations had been settled once for all, while the flood of new ideas, unseen and irresistible, was in truth advancing to break them up. The cunningly wrought structure of mediæval philosophy was doomed; and now that it has crumbled away, philosophy goes houseless, though not despairing; for, after all, it is better to be a wanderer than to dwell in castles in the air.

"But meanwhile what was a man in Spinoza's place to do? The terms were there to his hand, still the only currency of scholars; the ideas for which they had been framed were dead or dying, and the great scientific conception of the unity and uniformity of the world, often seen as in visions, but now unveiled in all its power by Descartes, had already begun to spread abroad, subduing everything to its dominion. A sincere and unflinching eye could already see that in the end nothing would escape from it, not even the most secret recesses of human thought. Only in the light of this conquering idea could the old words live, if they were to live at all. If any vital truth lay hidden in them from of old, it would thus be brought out and bear its due fruit; and what new life was wanting must be breathed into them through the new conception of the

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nature of things. This, I believe, was in effect the task Spinoza took upon himself. It cannot be maintained that it was altogether a possible one ; and it is at least doubtful whether Spinoza himself was fully aware of its magnitude." (28)

"We find in all human sciences that those ideas which seem to be most simple are really the most difficult to grasp with certainty and express with accuracy. The clearest witness to this fact is borne by the oldest of the sciences, Geometry. No difficulty whatever is found in defining a parabola, or a circle, or a triangle. When we come to a straight line, still more when we speak of a line in general, we feel that it is not so easy to be satisfied. And if it occurs to us to ask the geometer what is the relation of his 'length without breadth' to the sensible phenomena of space, matter, and motion, we shall find ourselves on the verge of problems which are still too deep for all the resources of mathematics and metaphysics together." (29)

"No tolerably prepared candidate in an English or American law school will hesitate to define an estate in fee simple : on the other hand, the greater have been a lawyer's opportunities of knowledge, and the more time he has given to the study of legal principles, the greater will be his hesitation in face of the apparently simple question, What is Law ?" (30)

"The commissioners recommend that the word 'lunatic' in the ordinary medical certificate be deleted and replaced by the words 'mentally defective person.' So far as comprehensiveness goes this is admirable. Whether it is a sufficiently accurate term to merit universal acceptance is another matter. There will, however, be general agreement with the resolution that the word 'lunatic' shall be henceforth discontinued as a descriptive term, that 'asylums' shall be called 'hospitals,' that the Board of Commissioners in Lunacy shall be called 'The Board of Control,' and that the term 'mentally defective' shall be defined in the proposed Act as comprising 'persons of unsound mind,' mentally infirm persons, idiots, imbeciles, feeble-minded persons, moral imbeciles, epileptics, and inebriates who are mentally affected. It is only by such a radical change in nomenclature that the objects of including all these classes in one legal

(28) Sir F. Pollock, *Spinoza: His Life and Philosophy*, pp. 145-6
(29) Sir F. Pollock, *A First Book of Jurisprudence*, p. 3. (30) *Ibid.* p. 4.

category could be attained, though the definite term suggested may not, as has been hinted, be the most appropriate." (31).

"The distinction made by the use of the term 'imprisonment' to denote sentences of two years and under, and penal servitude to denote sentences of five years and upwards, no longer has any significance now that they are both carried out in the United Kingdom; and it is misleading, for both classes of prisoners are undergoing 'imprisonment,' and are equally in a condition of penal servitude. The use of the term 'hard labour' in imposing the sentence of imprisonment, which is not used in passing one of penal servitude, might also well be omitted, for any prisoner sentenced to imprisonment should be and is by law required to labour under specified conditions suitable to his health and his capacity; and, in fact, except the specific kind of labour called first-class hard labour, defined in the Prisons Act, 1865, as crank, treadwheel, and other like kind of labour, the term 'hard' has no particular meaning, and its employment in the sentence makes no practical difference." (32)

"Clause 6 of the Land Bill. Somehow or other this clause had got into a terrible mess. There was a general consensus of opinion as to what was wanted; indeed, strange to relate, Mr. Balfour, Colonel Waring, and Mr. Healy were for once in accord, and Mr. Morley was not prepared to offer any substantial objection. But the difficulty was to devise a form of words which could be inserted in the Bill and be generally intelligible, and every member had his own ideas on this subject." (33)

(31) Report of the Royal Commission on the Care and Control of the Feeble-Minded (*Nature*, September 17, 1908). (32) Sir E. du Cane on "Convict Prisons," quoted in *Review of Reviews*, September 1896, p. 275. (33) *Daily Graphic*, May 9, 1891.