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Square [brackets] enclose editorial explanations. Small $\cdot dots \cdot enclose material that has been added, but can be read as though it were part of the original text. Occasional$ **Ÿ**bullets are meant as aids to grasping the structure of a sentence or a thought. Four ellipses indicate the omission of a brief passage that seems to present more difficulty than it is worth.

This version contains some awkward repetitions of the word 'God'. They could be avoided through the use of pronouns, but *they* present us with an unattractive choice. Using 'he', 'him', 'his' etc. of God invites the reader, over and over again, to think of God as a person; while using 'it', 'itself' etc. pokes the reader in the ribs, over and over again, with reminders that God is *not* a person. The former choice misrepresents Spinoza's doctrine (his other name for God is 'Nature'), while the latter misrepresents his style. Writing in Latin, which lacks the distinction between personal and impersonal pronouns, he didn't have this problem.

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ETHICS DEMONSTRATED IN GEOMETRICAL ORDER

By Benedict Spinoza

Part II: The Nature and Origin of the Mind

I now move on to explain things that must necessarily follow from the essence of God, i.e. the essence of the infinite and eternal Being - not, indeed, all of them (for I have demonstrated ($^{I}16$) that infinitely many things must follow from it in infinitely many ways), but only those that can lead us by the hand, as it were, to the knowledge of the human mind and its highest blessedness.

DEFINITIONS

D1: By 'body' I understand a mode [= 'way of existing'] that in a certain and determinate way expresses God's essence insofar as God is considered as an extended thing (see corollary to $^{I}25$).

D2: I say that to the 'essence' of any thing belongs anything without which the thing can neither exist nor be conceived, and which can neither exist nor be conceived without the thing.

D3: By 'idea' I understand a concept that a mind forms because it is a thinking thing.

Explanation: I say 'concept' rather than 'perception' because the word 'perception' seems to indicate that the mind is *acted on* by the object, whereas 'concept' seems to express .not the mind's being *acted on* but. its *acting*.

D4: By 'adequate idea' I understand an idea which, considered in itself and without relation to an object, has all the properties or intrinsic marks of a true idea.

Explanation: I say 'intrinsic' to exclude the idea's agreement with its object, which is extrinsic.

D5: Duration is an indefinite continuation of existing.

Explanation: I say 'indefinite' because you can't work out how long a thing will last from its own nature, or from its efficient cause, because the cause implies the existence of the thing and not its non-existence.

D6: By 'reality' and 'perfection' I understand the same thing.

D7: By 'particular things' I understand things that are finite and have a determinate [here = 'limited'] existence. If a number of individuals work together in one process so that together they are all the cause of one effect, I consider them all as being to that extent one particular thing.

AXIOMS

A1: The essence of man does not involve necessary existence; whether this or that man exists or doesn't exist depends on the order of Nature .and not on the man's essence.

A2: Men think.

A3: Whenever there is a mental state such as love, desire, or anything else that can be called an 'affect' of the mind, the individual who has it must also have an idea of the thing that is loved, desired, etc. But the idea can occur without any other mental state, \cdot and thus without any corresponding affect \cdot .

A4: Each of us feels that a certain body is affected in many ways.

A5: We neither feel nor perceive any particular things except bodies and modes of thinking. See the postulates after **13**.

1: Thought is an attribute of God; that is, God is a thinking thing.

Particular thoughts are modes that express God's nature in a certain and determinate way (by corollary to $^{I}25$). Therefore (by $^{I}D5$) God has an attribute the concept of which is involved in all particular thoughts, and through which they are conceived. So thought is one of God's infinite attributes. . . .

Note on 1: [This note offers a second, rather obscure, defence of 1.]

2: Extension is an attribute of God; that is, God is an extended thing.

The demonstration of this proceeds in the same way as that of **1**.

3: In God there is necessarily an idea of ⁹God's essence and of ⁹everything that necessarily follows from God's essence.

God *can* think infinitely many things in infinitely many ways (by 1); that is God *can* form the idea of God's essence and of everything that necessarily follows from it (^I16 implies that these are the same thing). But whatever is in God's power necessarily exists (by ^I35); therefore, there such an idea must exist, and (by ^I15) it must be God that has it.

Note on 3: By 'God's power' ordinary people understand *God's free will* and God's power of decision over everything that exists, things which on that account are commonly thought to be contingent. For people say that God has the power of destroying all things and reducing them to nothing; and they often compare God's power with the power of kings.

But I have refuted this in the corollaries to ${}^{I}32$, and have shown in ${}^{I}16$ that God acts with the same necessity by which God understands God; that is, just as it follows from the necessity of the divine nature (everyone agrees about *this*) that God understands God, with the same necessity it also follows that God does infinitely many things in infinitely many ways. And then I have shown in ${}^{I}34$ that God's *power* is nothing but God's *active essence*. So we can no more conceive of God as not acting than we can conceive of God as not existing.

If it were all right to pursue these matters further, I could also show here that the power that ordinary people fictitiously ascribe to God is not only Ÿhuman (which shows that ordinary people conceive God as a man, or as like a man), but also Ÿinvolves *lack* of power. But I don't want to speak so often about the same topic. I do ask you to reflect repeatedly on what I have said about this in Part I, from ^I16 to the end; for you won't be able to command a clear view of what I am saying unless you are careful not to confuse God's power with the human power of kings.

4: God's idea, from which infinitely many things follow in infinitely many ways, must be unique.

 \dots God is unique (by the first corollary to ^I14). Therefore God's idea, from which infinitely many things follow in infinitely many modes, must be unique.

[Two points about 5: (1) The phrase 'intrinsic being of ideas' points to one side of a distinction between \ddot{V} an idea's nature considered just as a mental particular without reference to what it is *of* and \ddot{V} an idea's nature considered as a representation of something. In 5 Spinoza is talking about ideas considered not representatively but intrinsically, not in terms of what they represent but just as mental things or episodes. (2) What 5 means, at the bottom line, is that the causes of mentalistic facts or events must themselves be mentalistic; for instance, your idea of your father was in no way caused by your father.]

5: The intrinsic being of ideas can be caused by God only considered as a thinking thing, and not considered under any other attribute. That is to say, the efficient cause of an idea cannot be the \cdot non-mental thing it is *of*, and can only be \cdot something belonging to the realm of thought, i.e. God considered as a thinking thing.

This is evident from **3**...

Another way of demonstrating **5** is the following. The intrinsic being of an idea is (self-evidently) a mode \cdot or manner \cdot of thinking, that is (by the corollary to ¹25), a mode that expresses in a certain way God's nature *as a thinking thing*. And so (by ¹10) it Ÿdoesn't involve the concept of any other attribute of God, and consequently (by ¹A4) Ÿisn't an effect of any other attribute. So the intrinsic being of ideas admits God as its cause insofar as God is considered only as a thinking thing, etc..

6: The modes \cdot or special cases or instances \cdot of each attribute have God for their cause only considered under the attribute of which they are modes, and not considered under any other attribute.

Each attribute is conceived through itself, having no conceptual overlap with any other attribute (by ^I10). So the modes of each attribute involve the concept of their own attribute but not of any other; and so (by ^IA4) they have God for their cause only considered under the attribute of which they are modes, and not considered under any other attribute

Corollary: The intrinsic being of things that are *not* modes of thinking does not follow from the divine nature because God has first known the things, \cdot because that would mean that a mentalistic cause had a non-mentalistic effect \cdot ; rather, they follow from their own attributes in the same way, and by the same necessity, as I have shown that ideas follow from the attribute of thought. For example: Why are there any plants? Don't say 'Because God wanted, willed, or planned that there be plants', for that explains something material in terms of something mental. The existence of plants has to come from facts about the material realm - God considered as extended. This still involves causation by God, but not the mental causation of a personal God, as most people think it is.

[The extremely important 7 and its corollary seem to mean that there is a mentalistic reality which matches physical reality, event for event and causal chain for causal chain.] 7: The order and connection of ideas is the same as the order and connection of

things.

This is clear from ^IA4. For the idea of each thing caused depends on the knowledge of the cause of which it is the effect.

Corollary: God's power of thinking is equal to God's power of acting. That is, whatever follows **Ÿ**intrinsically from God's infinite nature follows **Ÿ**representatively in God from God's idea in the same order and with the same connection.

Note on 7: Before we proceed further, I should recall here what I showed in Part I, namely that \cdot any attribute - that is \cdot , whatever an unlimited intellect can perceive as constituting an essence of a substance - belongs to one substance only, and consequently that the thinking substance and the extended substance are one and the same substance, which is comprehended now under this attribute, now under that. So also a mode of extension and the idea of that mode are one and the same thing, but expressed in two ways....

For example, \dot{Y}_a coin existing in Nature and \ddot{Y} the idea of that coin (which is also in God, that is, which is also a part of Nature) are one and the same thing, which is thought or explained through different attributes. So whether we conceive Nature under the attribute of extension, or under thought, or under any other attribute, we shall find one and the same order, or one and the same connection of causes; that is, we shall find the same to random or parallel or analogous causal chains under all the attributes.

When I said that only as a thinking thing is God the **cause** of *the idea of a coin* (for example), and that only as an extended thing is God the **cause** of *the coin*, my point was that the intrinsic being of the idea of the coin can be **perceived** only through another mode of thinking as its proximate cause, and that mode again through another, and so on to

infinity. So long as things are **considered** as modes of thinking, we must **explain** the order of the whole of Nature - the entire connection of causes - through the attribute of thought alone. And insofar as they are **considered** as modes of extension, the order of the whole of Nature must be **explained** through the attribute of extension alone. I maintain the same thing concerning other attributes. [The bold type in this paragraph is not Spinoza's. It expresses a certain interpretation of the paragraph: namely, that Spinoza is explaining the notion of *cause* in terms of perceiving, considering, and explaining. He has just said that $\ddot{Y}a$ coin and the idea of the coin are 'one and the same thing'; now he reminds us that according to him \ddot{Y} what caused the coin can't belong to the same attribute as what caused the idea of the coin. His solution, according to the present interpretation, is that what can't flow from one attribute to another are explanations, conceptions, mental grasps. Even if a single thing is the coin only in physicalistic terms, and can **make sense of** a causal explanation of it *qua* idea only in mentalistic terms.]...

8: The ideas of particular things (or modes •or ways of being•) that don't exist must be comprehended in God's infinite idea in the same way that the essences of the particular things (or modes •or ways of being•) are contained in God's attributes.

This proposition is evident from 7, but is understood more clearly from the note on 7.

Corollary: So long as particular things exist only by being comprehended in God's attributes, the ideas of them exist only because God's infinite idea exists. And when a particular thing is said to exist for a certain period of time, the idea of it also exists for that period of time.

Note on 8: If you want me to explain this further by an example, I can't of course give one that adequately explains the point I am making, since it is unique. Still I shall do my best to illustrate the matter [Spinoza offers an unhelpful analogy drawn from geometry.]

9: The idea of an actually existing particular thing has God for a cause. But not God considered as an infinite being.

Rather,

God considered as having another idea of a particular thing which actually exists;

and the cause of this second idea is also God considered as having a third idea, and so on ·backwards· to infinity.

The idea of a particular thing that actually exists is a particular mode of thinking, and distinct from the others (by the corollary and note on 8), and so (by 6) has God for a cause only insofar as God is a thinking thing. But (by ¹28) it doesn't have God for a cause *just because God is a thinking thing* but *because God has another determinate mode of thinking*. And God is also the cause of this mode because God has a third mode of thinking, and so on \cdot backwards \cdot to infinity. But the order and connection of ideas (by 7) is the same as the order and connection of causes. So the cause of one particular idea is another idea, or God-as-having-another-idea; and of this also God is the cause because God is has a third, and so on \cdot backwards \cdot to infinity.

[In 9 and its demonstration this text speaks of God as 'having' this or that idea, whereas Spinoza speaks of God as *affectus* by this or that idea, which invites translation as 'affected by'. But he does not mean this causally; his use of the word is related to *affectio*, which simply means *state*. For God to be *affecteus* by a certain idea is just for God to be *in the state of having* that idea; hence the use here of 'have'. In Part III Spinoza often speaks of affects that a person may be *affectus* with; and there too, 'have' will be used.

Corollary: Whatever happens in the particular object of any idea, there is knowledge of it in God only insofar as God has the idea of the same object.

[Spinoza offers a demonstration of this corollary. By the 'object of' an idea he means the physical or bodily item that is matched or correlated with it in accordance with the parallelism doctrine of 7 and its corollary. 'x is the object of y' is synonymous with 'y is the idea of x'. The 'object of' notion will become important soon - in 12 and 13.]

10: The being of substance does not pertain to the essence of man; that is, substance does not constitute the form of man.

The being of substance involves necessary existence (by I7). So if the being of substance pertained to the essence of man, then . . . man would exist necessarily, which (by A1) is absurd.

Note on 10: This proposition also follows from $^{I}5$, which says that there are not two substances of the same nature. Since a number of *men* can exist, what constitutes the form of *man* is not the being of substance. This proposition is also obvious from the other properties of substance, namely that substance is by its nature infinite, immutable, indivisible, and so on.

Corollary: The essence of man is constituted by certain states of God's attributes - \cdot or, more precisely, certain states *of God* that fall under, or are special cases of, God's attributes.

The being of substance doesn't pertain to the essence of man (by 10). So (by ${}^{1}15$) it is something that is in God and can neither exist nor be conceived without God, or (by the corollary to ${}^{1}25$) it is a quality or mode that expresses God's nature in a certain and determinate way.

Note on 10 and its corollary: Of course everyone must concede that nothing can either exist or be conceived without God. For everyone agrees that God is the only cause of all things, both of their essence and of their existence. That is, God is the cause not only of things' coming into existence but also of their being \cdot what they are \cdot .

But many people say that if x can't exist or be conceived without y, then y pertains to the nature of x. If they follow through on this consistently (which they usually don't), they will be led to believe either \ddot{Y} that the nature of God pertains to the essence of created things, or \ddot{Y} that created things can be or be conceived without God.

I think they were led into this by neglecting the ·proper · order of philosophizing. They believed that the divine nature - which they should have contemplated before anything else, because it comes first both in knowledge and in nature - is last in the order of knowledge, and that the so-called 'objects of the senses' come first. That is why when they thought about natural things they paid no attention at all to the divine nature; and when later they turned their minds to the divine nature, they entirely ignored the first

fictions on which they had based their knowledge of natural things, because these could not assist knowledge of the divine nature. So it is no wonder that they have generally contradicted themselves.

No more of that. All I wanted here was to give a reason why I did not say that anything without which a thing can neither exist nor be conceived pertains to its nature namely, for the reason that particular things can neither exist nor be conceived without God, yet God doesn't pertain to their essence. Here is what I have said *does* constitute the essence of a thing: it is that which is given if the thing is given, and is taken away if the thing is taken away. In other words: x is the essence of y if x can neither exist nor be conceived without y, and vice versa.

11: The first thing that constitutes the actual being of a human mind is nothing but the idea of a particular thing which actually exists.

[Spinoza's demonstration of this is long and difficult, and not very helpful. The crucial point is this: Your mind is a detail in the mental side of Nature (= God); by 7 the whole of mentalistic reality runs parallel to the rest of reality, so that every mentalistic detail - every *idea* - is the idea *of* something to which it corresponds. So your mind is the idea *of* something to which it corresponds, and in **13** (with a hint in **12**) we shall see what that 'something' is.]

Corollary: Any human mind is a part of the infinite intellect of God. Therefore, when we say that a human mind perceives this or that, we are merely saying that God has this or that idea; not \dot{Y} God-as-infinite, but \ddot{Y} God-as-explained-through-the-nature-of-that-human-mind, or \ddot{Y} God-as-providing-the-essence-of-that-human-mind. And when we say that this or that idea is had by God-as-providing-the-nature-of-a-mind-together-with-x (where x is something other than that mind), then we are saying that that human mind perceives x only partially or inadequately.

Note on 11 and corollary: Here, no doubt, you will come to a halt and think of many things that will give you pause. I ask you to continue with me slowly, step by step, and to make no judgment on these matters until you have read through them all.

12: Whatever happens in the object of the idea constituting a human mind must be perceived by that human mind (which is to say that there must be an idea of that thing in the mind in question). So if the object of the idea constituting a human mind is a body, everything that happens in that body must be perceived by that mind.

Whatever happens in the object of any idea, the knowledge of it must (by the corollary to 9) be in God-as-having-the-idea-of-that-object, i.e. (by 11) it must be in God-as-constituting-the mind-of-some-thing....

Note on 12: This proposition is also evident, and more clearly understood, from the note on 7, which you should consult.

13: The object of the idea constituting a human mind is the ·corresponding· body, or a certain mode of extension that actually exists, and nothing else.

If the object of your mind were not your body, the ideas of the states of your body would (by the corollary to 9) not be in God-as-constituting-your-mind, but in God-

as-constituting-the mind-of-something-else; that is (by the corollary to **11**), the ideas of the states of your body would not be in your mind; but (by A4) you *do* have ideas of the states of your body. Therefore, the object of the idea that constitutes your human mind is your body, and (by **11**) it actually exists. [A second paragraph argues unconvincingly for the 'and nothing else' part of the proposition.]

Corollary: A man consists of a mind and a body, and the human body exists as we are aware of it. [This does not mean that it exists *because* we are aware of it, or *insofar as* we are aware of it. The Latin clearly implies that our awareness of our bodies in some way or to some extent represents them truthfully; and that is the meaning required for the only mention of this corollary in the rest of the work, namely in the note on **17**.]

Note on 13: From these \cdot propositions \cdot we understand not only *that* the human mind is united to the body, but also *what* that union of mind and body consists in. But no-one will be able to understand this adequately or clearly unless he first knows enough about the nature of our body. For the things I have shown up to here have been completely general and apply not only to man but to other individuals (though all individuals are to some degree alive). Of *each* thing there must be an idea in God, of which God is the cause in the same way as God causes the idea of the human body; so everything I have said \cdot so farabout the idea of the human body also holds for the idea of any thing.

Still, we can't deny that ideas differ among themselves, just as the objects of ideas do, and that one *idea* is more excellent and contains more reality than another *idea*, just as *the object of* the former is more excellent and contains more reality than *the object of* the latter. And so (I repeat) to determine how the human mind differs from the others, and how it excels them, we must know the nature of its object, that is, of the human body. I can't explain this here, nor do I need to for the things I want to demonstrate. But I shall make this general remark:

To the extent that a body is more capable than others of doing many things at once, or of being acted on in many ways at once, to that extent its mind is more capable than others of perceiving many things at once. And to the extent that the actions of a body depend more on itself alone, and less on input from other bodies, to that extent its mind is more capable of understanding clearly.

From this we can know \dot{Y} the excellence of one mind over the others, and also see \ddot{Y} why we have only a completely confused knowledge of our body, and \ddot{Y} many other things that I shall deduce in the following propositions. For this reason I have thought it worthwhile to explain and demonstrate these things more accurately. To do this I need first to premise a few things about the nature of bodies.

•THIS IS THE START OF THE PHYSICAL INTERLUDE

A1': All bodies either move or are at rest.

A2': Each body moves now more slowly, now more quickly.

L1: Bodies are distinguished from one another by differences of motion and rest, of speed and slowness, and not by differences of substance.

I suppose that the first part of this is self-evident. As for the second part: that bodies are not distinguished by differences of substance is evident both from $^{I}5$ and from $^{I}8$. But it is more clearly evident from what I said in the note on $^{I}15$.

L2: All bodies agree in certain things.

For all bodies agree in that they involve the concept of one and the same attribute (by D1), \cdot namely extension \cdot , and in that they can move more or less quickly and can be at rest.

L3: A body that moves or is at rest must be caused to move or stop moving by another body, which has also been caused to move or stop moving by another, and that again by another, and so on, to infinity.

[The demonstration of this relies, in a fairly obvious way, on ^I28 and 6.] **Corollary:** A body in motion moves until another body causes it to rest; and a body at rest remains at rest until another body causes it to move.

This is also self-evident. For when I suppose that body x is at rest, and don't attend to any other body in motion, all I can say about x is that it is at rest. If later on x moves, that of course couldn't have come about from the fact that it was at rest! So it must have come about through the intervention of some other body.

If on the other hand x is moving, then while we attend only to x we can affirm nothing about it except that it moves. If later on it is at rest, that of course also couldn't have come about from the motion it had. So it must have come about through some external cause.

A1'': *How* a body is affected by another body depends on the natures of each; so that one body may be moved differently according to differences in the nature of the bodies moving it. And conversely, different bodies may be moved differently by one and the same body.

A2'': When a body in motion collides with another that is at rest and can't give way, then it is reflected, so that it continues to move; and the reflected motion will make the same angle with the surface of the resting body as did the line of the motion leading to the collision.

This is enough about the simplest bodies, that are distinguished from one another only by motion and rest, speed and slowness. Now let us move up to composite bodies.

The Definition: When a number of bodies, whether of the same or of different size, are constrained by other bodies in such a way that

Ÿthey lie on one another, and

 \ddot{Y} if they move (at the same speed or different speeds) they communicate their motions to each other in a certain fixed manner,

I shall say that those bodies are 'united' with one another and that they all together compose one 'body' or 'individual', which is distinguished from others by \cdot the structure of this union of bodies.

A3'': The parts of an individual or composite body can be forced to change their relativepositions more or less easily depending on whether they lie on one another over a smaller or larger surface. So the bodies whose parts lie on one another over a large surface, I call 'hard'; those whose parts lie on one another over a small surface I call 'soft'; and those whose parts are in motion I call 'fluid'. [Spinoza next offers four lemmas about 'individuals', evidently thinking mainly about organisms. They can be seen as providing for the fact that an organism can (4) have a turnover of its constituent matter, e.g. by ingestion and excretion; (5) become larger or smaller; (6) move its limbs and change its posture; and (7) move from place to place.]

L4: When a body or individual loses some of its parts which are replaced by others of the same nature, the body or individual will retain its nature as before, with no change in its form.

Bodies are not distinguished by difference of substance; what constitutes the form of the individual consists in the union of the bodies that are its parts (by The Definition); and this union is retained even if a continual change of constituent bodies occurs. So the individual will retain its nature, as before, through such a change.

L5: If the parts composing an individual become larger or smaller, but in such a proportion that they all keep the same ratio of motion and rest to each other as before, then the individual will retain its nature, as before, without any change of form.

The demonstration of this is the same as that of L4.

L6: If certain bodies composing an individual are compelled to alter the direction of their motion, but in such a way that they continue their motions and communicate them to each other in the same ratio as before, the individual will retain its nature, without any change of form.

This is self-evident. For in this case the individual retains everything that I said in The Definition constitutes its form.

L7: Such an individual retains its nature so long as each part retains its motion and communicates it to the other parts as before, whether it as a whole moves or is at rest, and in whatever direction it moves.

This is also evident from The Definition.

Note on L4-7: Now we can see how a composite individual can be altered in many ways while still preserving its nature. So far we have been thinking of an individual that is composed only of *Ythe simplest bodies*, namely ones differing from one another only by motion and rest, speed and slowness. If we now turn to an individual composed of a number of *Y*individuals with different natures, we shall find that this \cdot too \cdot can be altered in a great many other ways while still preserving its nature. For since each part of it is composed of a number of \cdot simpler \cdot bodies, each part (by L7) can without any change of *its* nature move at varying speeds and consequently communicate its motion at varying speeds to the others.

If we now turn to a third kind of individual, composed of many individuals of the second kind, we shall find that it also can be altered in many other ways while still retaining its form. And if we carry this line of thought on to infinity, we shall easily grasp that the whole of Nature is one individual whose parts - that is, all bodies - vary in infinite ways without any change of the whole individual.

If my topic had been the body, I would have had to explain and demonstrate these things more fully. But as I explained my topic is something different - namely, the mind-

and I brought up these points only because they can help me to demonstrate things that are part of my proper topic.

POSTULATES

P1. A human body is composed of a great many individuals of different natures, each of which is highly composite.

P2. Some of the individuals of which a human body is composed are fluid, some soft, some hard.

P3. The individuals composing a human body are affected by external bodies in very many ways, and so, therefore, is the body as a whole.

P4. For a human body to be preserved, it needs a great many other bodies by which it is continually regenerated, so to speak.

P5. When a fluid part of a human body is acted on by an external body so that it frequently pushes against a soft part of the body, it changes its surface and impresses on the soft part certain traces of the external body.

P6. A human body can move and arrange external bodies in a great many ways.

•THIS IS THE END OF THE PHYSICAL INTERLUDE-

14: A human mind can perceive many things, and the more ways its body can be arranged the greater is its ability to perceive things [or: the greater is the number of things it can perceive].

A human body (by P3 and P6) is affected in a great many ways by external bodies, and is disposed to affect external bodies in a great many ways. But the human mind must perceive everything that happens in the human body (by **12**). So **14** follows.

15: The idea that constitutes the intrinsic being of a human mind is not simple, but is composed of a great many ideas.

The idea that constitutes the intrinsic being of a human mind is the idea of a body (by 13), which (by P1) is composed of a great many highly composite individuals. But (by the corollary to 8) there must be an idea in God of each individual composing the body. Therefore (by 7) the idea of a human body is composed of these many ideas of the parts composing the body.

16: The idea of any effect that external bodies have on a human body must involve the natures both of that human body and of the external bodies.

The ways in which a body is affected follow from the natures of both the affected body and the affecting body (by A1'' \cdot in the Physical Interlude \cdot). So the ideas of those effects will (by ^IA4) necessarily involve the nature of each body. And so **16** follows.

Corollary 1: A human mind perceives the nature of many bodies together with the nature of its own body.

Corollary 2: The ideas that we have of external bodies are more informative about the condition of our own body than of the nature of the external bodies. I have explained this by many examples in the Appendix of Part I.

17: If a human body is in a state that involves the nature of an external body, the corresponding human mind will regard that external body as actually existing, or as present to it, until the body is put into a state that excludes the existence or presence of that body.

This is obvious. For as long as the human body is in that state, the \cdot correspondinghuman mind (by 12) will perceive that state of the body, that is (by 16), it will have an idea that involves the nature of the external body, an idea that doesn't exclude but affirms the existence or presence of the external body. And so (by the first corollary to 16) the mind will regard the external body as actually existing, or as present, until it is put into a state etc..

Corollary: Even if the external bodies by which a human body was once affected neither exist nor are present, the \cdot corresponding \cdot mind will still be able to regard them as if they were present.

[Spinoza's demonstration of this - using materials from the Physical Interlude - is long and difficult. Its basic thrust is that an external body can leave in your body an imprint that is reflected in your mind, this imprint can remain even after the external body has gone away, and so its mental reflection can remain also - and it will consist in a belief that the body is still present to you.]

Note on 17: So we see how it can happen (as it often does) that we regard as \hat{Y} present things that \hat{Y} don't exist. This can happen from other causes also, but I am content here to have shown one cause through which I can explain the phenomenon as if I had shown it through its true cause. I don't in fact think I have wandered far from the true cause, because my 'postulates' contain hardly anything that isn't established by experience which we cannot doubt once we have shown that the human body exists as we are aware of it (see corollary to 13).

Furthermore from the corollary to **17** and the second corollary to **16** we clearly understand how \ddot{Y} the idea of Peter that constitutes the essence of Peter's mind differs from \ddot{Y} the idea of Peter that Paul has. The \ddot{Y} former directly expresses the essence of Peter's body, and it involves existence only so long as Peter exists; but the \ddot{Y} latter indicates the condition of Paul's body more than it does Peter's nature, so while Paul's body remains in that condition his mind will still regard Peter as present to itself even if Peter doesn't exist.

The states of the human body whose ideas present external bodies as present to us I shall - so as to stay with ordinary usage - call 'images' of the bodies, even if they don't reproduce the shapes of the bodies themselves. And when the mind regards bodies in this way I shall say that it 'imagines', and the states it is in when it imagines I shall call 'imaginings'.

As a start on understanding what error is, I ask you to note that the imaginings of the mind, considered in themselves, contain no error; what puts the mind into error is never just its imagining \cdot things that don't exist \cdot , but rather its lacking an idea that excludes the existence of the things that it imagines to be present to it. For if the mind Ÿimagines nonexistent things as present to it while at the same time Ÿknowing that those things don't

exist, it would regard this power of imagining not as a vice but as a virtue of its nature especially if this faculty of imagining depends only on its own nature, i.e. if the mind's faculty of imagining is free.

18: If a human body has once been affected by two or more bodies at the same time, then when the ·corresponding· mind subsequently imagines one of them it will immediately recollect the others also.

[Spinoza's rather enigmatic demonstration of this seems to come down to:- A mind will now imagine x only if the corresponding body is in its x-indicating state; but if that body was previously in an x-and-y-indicating state, that's the state it will be in *now* when it provides the physical basis for the mind to imagine x; so the mind's imagining x will bring with it an imagining or recollecting of y.]

Note on 18: From this we clearly understand what memory is. For it is nothing but a certain connection of ideas \ddot{Y} involving the nature of things outside the human body - a connection that is in the mind \ddot{Y} according to the order and connection of the states of the \cdot corresponding \cdot human body.

I say, first, that this connection is only of ideas that \hat{Y} involve the nature of things outside the human body, not of the ideas that \hat{Y} explain the nature of those things. For they are really (by **16**) ideas of states of the human body which involve both its nature and that of external bodies.

I say, second, that this connection happens according to the order and connection of the states of the human body in order to distinguish it from the connection of ideas which happens according to the order of the intellect, by which the mind perceives things through their first causes, and which is the same in all men. [This means. roughly, that the relevant 'connections' are not those laid down in fundamental physics but rather ones that track the history of the individual human body.]

From this we clearly understand why the mind immediately passes from the thought of one thing to the thought of another that is quite unlike the first: for example, from the thought of the word *pomum* a Roman will immediately pass to the thought of an *apple*, which has no similarity to that articulate sound; the two have nothing in common except that the body of the Roman has often been affected by these two at the same time, hearing the word *pomum* while he saw the fruit.

In this way each of us will pass from one thought to another according to how the images have come to be associated in the body. For example, a soldier who sees hoofprints in the sand will immediately think of a horse, then a horseman, then a war, and so on; while a farmer will think of a horse, then a plough, then a field. and so on. . . .

19: The only way in which a human mind knows the ·corresponding· human body - and the only way it knows that the body exists - is through ideas of the states of that body.

[Spinoza's demonstration of this is extraordinarily obscure and difficult. Omitted.]

20: There is also in God an idea of the human mind - i.e. knowledge of the human mind - which follows in God in the same way and is related to God in the same way as the idea (i.e. knowledge) of the human body.

Thought is an attribute of God (by 1), and so (by 3) there must be in God an idea both \ddot{Y} of thought \cdot in general \cdot and \ddot{Y} of every specific state of affairs that involves thought, and consequently (by 11) \ddot{Y} of each human mind also. Now, this idea (i.e. knowledge) of the mind is caused not simply by God's nature as an unlimited thinking thing, but rather by God considered as having some other idea of a particular thing (by 9). But the order and connection of ideas is the same as the order and connection of causes (by 7). Therefore, this idea (i.e. knowledge) of the mind follows in God and is related to God in the same way as the idea (i.e. knowledge) of the body.

21: This Ÿidea of the mind is united to the Ÿmind in the same way as the Ÿmind is united to the Ÿbody.

I have shown that what *unites* a mind to its body is the fact that the body is the *object of* the mind (see 12 and 13); and so by the same reasoning the idea of the mind must be united with its own object, i.e. with the mind itself, just as the mind is united with the body.

Note on 21: This proposition is understood far more clearly from what I said in the note on 7; for there I showed that a \ddot{Y} body and the \ddot{Y} idea of it (which by 13 is the ·corresponding· mind) are one and the same individual, which can be conceived ·as a mind· under the attribute of \ddot{Y} thought or ·as a body· under the attribute of \ddot{Y} extension. So the \ddot{Y} mind and the \ddot{Y} idea of it are one and the same thing, which is conceived under one and the same attribute, namely thought. The mind and the idea of it follow in God from the same power of thinking and by the same necessity. For the idea of the mind (i.e. the idea of an idea) is nothing but the form of the idea considered as a mode of thinking without relation to an object. For as soon as someone knows something, he thereby knows that he knows it, and at the same time knows that he knows that he knows, and so on, to infinity. But more on these matters later.

22: A human mind perceives not only Ÿthe states of the ·corresponding· body but also Ÿthe ideas of these states.

The *ideas of the ideas* of the states follow in God in the same way and are related to God in the same way as the *ideas* of the states (this is demonstrated in the same way as **20**). But the ideas of the states of a body are in the ·corresponding· human mind (by **12**), that is, they are (by the corollary to **11**) in God-as-constituting-the-essence-of-that- human-mind. So the ideas of these ideas will be in God insofar as God has the knowledge (i.e. the idea) of the human mind ·in question·, which is to say (by **21**) that they will be in that human mind itself, which for that reason perceives not only the states of the body but also the ideas of the states.

23: A mind knows itself only through perceiving the ideas of the states of the corresponding body.

[Like his demonstration of the related proposition **19**, Spinoza's demonstration of this is very hard to follow. His only significant subsequent use of it (demonstrating the corollary to **29**) helps to get across the main thrust of this proposition, which is as follows. A human mind is the mental counterpart of the corresponding human body; every state of the mind matches a corresponding state of the body; and a mind's knowledge of *itself* can only be its knowledge of *its particular states*, i.e. of the ideas of the states of its body. What this rejects is the thought that a mind might survey its whole self in a unitary global manner that was somehow above a mere survey of all the particular facts about its states. (**23** is also invoked in a marginal way in demonstrating **47**, and even more marginally in ^{III}**30** and ^{III}**53**.)]

24: A human mind does not involve adequate knowledge of the parts composing the ·corresponding· human body.

The parts composing a human body contribute to the essence of that body itself only insofar as they communicate their motions to one another in a certain fixed manner (see The Definition on page 33); they can be considered as individuals, without relation to the human body, but that aspect of them is irrelevant to the human body's being the body that it is. For (by P1) the parts of a human body are themselves highly composite individuals, whose parts (by L4) can be separated from the human body and .go their own way, communicating their motions (see A1" after L3) to other bodies in some other way, while the human body \cdot in questioncompletely preserves its own nature and form. So the idea (that is, the knowledge) of each part will be in God (by 3) insofar as God is considered to have another idea of a particular thing (by 9), a particular thing which is prior in the order of nature to the part itself (by 7). This holds for each part of the individual which is a human body. And so, the knowledge of each part composing a human body is in God insofar as God has a great many ideas of things, and not insofar as God has only the idea of the human body, i.e. (by 13), the idea that constitutes the nature of the human mind. And so, by (the corollary to 11) the human mind does not involve adequate knowledge of the parts composing the human body.

25: The idea of any state of a human body does not involve adequate knowledge of an external body.

I have shown (16) that the idea of a state of a human body involves the nature of an external body to the extent that the external body causes that human body to be in that state. But the \cdot adequate \cdot idea (or knowledge) of the external body [The rest of this demonstration is needlessly obscure. Its underlying point is clear enough. In Spinoza's usage - though not according to his official definition - an 'adequate' idea of x is an idea of x *and of its causes*. The causes of the tree I now see don't lie within my body; so the corresponding ideas of those causes are not in my mind; so any idea of the tree that I do have must be inadequate.]

26: The only way a human mind perceives any external body as actually existing is through the ideas of the states of its own body.

Insofar as a human body is affected by an external body in some way, to that extent the mind in question (by **16** and its first corollary) perceives the external body. But if a \ddot{Y} human body is not affected by an \ddot{Y} external body in any way, then (by **7**) the idea of that human body - that is (by **13**), the ·corresponding· \ddot{Y} human mind - is also not affected in any way by the \ddot{Y} idea of that body; which is to say that it does not perceive the existence of that external body in any way.

Corollary: Insofar as a human mind *imagines* an external body, it does not have adequate knowledge of it.

[Spinoza's demonstration of this appeals to 25 and 26.]

27: The idea of any state of a human body does not involve adequate knowledge of the human body itself.

Any idea of any state of a human body involves the nature of that body insofar as it is considered to be in a certain definite qualitative state (see **16**). But insofar as the human body is an individual which can be - \cdot and indeed *is* - in many other states, the idea of this one state \cdot must leave out the others, and thus cannot be adequate. See the demonstration of **25**.

28: The ideas of the states of a human body, insofar as they are related only to the ·corresponding· human mind, are not clear and distinct, but confused.

The ideas of the states of a human body involve the nature of external bodies as much as that of the human body (by **16**), and must involve the nature not only of that human body as a whole but also of its parts; for the states are (by P3) ways in which the parts of the human body and consequently the whole of it are affected. But (by **24** and **25**) adequate knowledge of external bodies and of the parts composing a human body is in God not insofar as God is considered as having the idea that constitutes the human mind, but insofar as God is considered as having other ideas. \cdot Or, in different words: adequate ideas of the external bodies and of the parts of the human body occur in the mental realm only as corresponding to those bodies and body-parts; so they don't occur in the mind corresponding to that human body. Therefore any ideas of a human body's states that occur in the corresponding mind \cdot are not adequate because they don't include ideas of all the causes of the states in question; and so they are like conclusions without premises, which as anyone can see is equivalent to saying that they are confused ideas.

Note on 28: In the same way we can demonstrate that the idea that constitutes the nature of a human mind is not, considered in itself alone, clear and distinct

29: The idea of the idea of any state of a human body does not involve adequate knowledge of the human mind.

The idea of a state of a human body (by 27) does not involve adequate knowledge of that body itself (meaning that it doesn't express the body's nature adequately), that is (by 13) it doesn't agree adequately with the nature of the mind; and so (by $^{I}A6$) the idea of this idea does not express the nature of the human mind adequately, or does not involve adequate knowledge of it.

Corollary: So long as a human mind perceives things from the common order of nature, it does not have an adequate but only a confused and mutilated knowledge of itself, of its own body, and of external bodies.

A mind knows itself only by perceiving ideas of the states of the \cdot correspondingbody (by 23). But (by 19) it perceives its own body only through ideas of that body's states and that is also how it perceives external bodies (by 26). So its having these ideas doesn't give it adequate knowledge either of itself (by 29) or of its own body (by 27) or of external bodies (by 25); such knowledge as it has of these is (by 28 and the note on it) mutilated and confused.

Note on 29: To spell this out a little: A mind has not an adequate but only a confused and mutilated knowledge of itself, of its own body, and of external bodies, so long as it perceives things from the common order of Nature, that is, so long as what happens in it is caused *from the outside* through chance encounters with things; but not when, regarding a number of things at once, it is caused *internally* to understand their agreements, differences, and oppositions. For when its set of mind is caused from within, it is regarding things clearly and distinctly, as I shall show below.

30: We can have only an entirely inadequate knowledge of the duration of our body.

Our body's duration depends neither on its essence (by A1), nor even on God's absolute nature (by $^{I}21$). But (by $^{I}28$) it is caused to exist and produce an effect by other causes that are also caused by others and so on to infinity. So the duration of our body depends on the common order of Nature and the constitution of things. But adequate knowledge of how things are constituted is in God considered as having the ideas of *everything*, and not in God considered only as having the idea of a human body (by the corollary to 9). So the knowledge of the duration of our body is quite inadequate in \ddot{Y} God insofar as God is considered to constitute only the nature of the human mind, which is to say (by the corollary to 11) that this knowledge is quite inadequate in \ddot{Y} our mind.

31: We can have only an entirely inadequate knowledge of the duration of particular things outside us.

Each particular thing, like the human body, must be caused by another particular thing to exist and produce effects in some definite way, and this again by another, and so to infinity (by $^{I}28$). But since (in 30) we have demonstrated from this common property of particular things that we have only a very inadequate knowledge of the duration of our body, we shall have to draw the same conclusion concerning the duration of particular things outside us, namely that we can have only a very inadequate knowledge of *their* duration.

Corollary: All particular things are contingent and destructible.

We can have no adequate knowledge of their duration (by **31**), and that is what we must understand by things' being 'contingent' and by their being 'destructible' (see the first note on $^{I}33$). For (by $^{I}29$) there is no contingency other than that.

32: All ideas, insofar as they are related to God, are true.

For all ideas that are in God agree entirely with their objects (by the corollary to 7), and so (by ${}^{I}A6$) they are all true.

33: There is nothing positive in ideas on account of which they are called false.

If you deny this, try to conceive a positive way of thinking that embodies the form of error, or falsity. This way of thinking cannot be *in* God (by **32**). But it can't either be or be conceived *outside* God either (by ^I**15**). So there can be nothing positive in ideas on account of which they are called false.

34: Every idea that in us is absolute (or adequate and perfect) is true.

When we say that there is in us an adequate and perfect idea, we are saying only that (by the corollary to 11) there is an adequate and perfect idea in God insofar as God constitutes the essence of our mind; so (by 32) we are saying only that such an idea is true.

35: Falsity consists in the lack of knowledge which inadequate (or mutilated and confused) ideas involve.

There is nothing positive in ideas that embodies the form of falsity (by **33**). Then what *can* falsity (or error) consist in? It can't consist merely in *lacking* something; for minds are said to err or to be deceived while bodies are not, \cdot yet anything relevant that minds lack is also lacked by bodies. Minds are said to be 'ignorant', while bodies are not; but falsity or error can't consist in merely *being ignorant* either; for ignorance and error are different. So it consists in the lack of knowledge that is involved in inadequate and confused ideas.

Note on 35: In the note on **17** I explained how error consists in the lack of knowledge. But to explain the matter more fully I shall give one or two examples: men are deceived in thinking themselves free - that is, they think that of their own free will they can either do a thing or refrain from doing it - an opinion which consists only in this, that *they are conscious of their actions and ignorant of the causes that make them act as they do*. So this - their not knowing any cause of their actions - is their idea of freedom! Of course they *say* that human actions 'depend on the will', but these are only words for which they have no idea \cdot and thus have no meaning \cdot . For nobody knows what 'the will' is, or how it moves the body....

Similarly, when we look at the sun, we imagine it as about 200 feet away from us, an error that doesn't consist simply in \ddot{Y} this imagining, but in \ddot{Y} our imagining it in this way while being ignorant of \ddot{Y} its true distance and of \ddot{Y} the cause of our imagining it as we do. •Don't think that the cause of our imagining is the fact that we don't know any better, i.e. don't know how far away the sun really is•. For even if we later come to know that it is more than 600 diameters of the earth away from us, we nevertheless *imagine* it - •we *picture* it• - as near. For we imagine the sun as so near not \ddot{Y} because we don't know its true distance but \ddot{Y} because the sun causes our body to be in a certain state.

36: Inadequate and confused ideas follow with the same necessity as adequate (or clear and distinct) ideas.

All ideas are in God (by $^{I}15$); and so far as their relation to God goes they are true (by 32) and adequate (by the corollary to 7). So the only way ideas can be inadequate or confused is in relation to some particular person's mind (see 24 and

28). So all ideas - both the adequate and the inadequate - follow with the same necessity (by the corollary to $\mathbf{6}$).

37: What is common to all things (on this see L2 in the physical interlude), and is equally in the part and in the whole, does not constitute the essence of any particular thing.

Try to conceive something (\cdot call it A \cdot) that is common to all things and is equally in the part and in the whole, and that *does* constitute the essence of some particular thing, call it B. Then (by D2) A can neither be nor be conceived without B. But this is contrary to the hypothesis \cdot that A is common to all etc. and that B is merely one particular thing \cdot . So A does not pertain to the essence of B and does not constitute the essence of any other particular thing either.

38: Things that are common to all, are equally in the part and in the whole, can only be conceived adequately.

[Spinoza's demonstration of this is hard to follow. What drives it seems to be this thought:- If A is something that is common to all bodies and is equally in the part of each body and in the whole, then my idea of A - though it is the mental counterpart only of a state of my body - won't have the kind of 'mutilation' and confusion that inadequate ideas have. That is because, although the over-all state of my body is mostly caused from the outside, the A-involving aspects of my bodily state are caused by the A-involving aspects of the bodies that are acting on mine; the A-ness holds without a bump or interruption clear through the causal transaction, introducing no 'mutilation' in my idea of A, which is therefore adequate.]

Corollary: Certain ideas or notions are common to all men. For (by L2 \cdot in the physical interlude \cdot) all bodies agree in certain things, which (by **38**) must be perceived adequately (that is, clearly and distinctly) by everyone.

39: If something is common to a human body and certain external bodies by which that human body is usually affected, and is equally in the part and in the whole of each of them, its idea will also be adequate in the ·corresponding· mind.

[Another difficult demonstration. Its basic thrust is almost exactly the same as that of the demonstration of **38**. The above statement of the latter serves equally for **39** except for the addition of one phrase at the start: 'If A is something that is common to all bodies *with which my body interacts* and is equally in the part of each body and in the whole, then \ldots '.]

Corollary: A mind is the more capable of perceiving many things adequately as its body has many things in common with other bodies.

40: Whatever ideas follow in the mind from ideas that are adequate in the mind are also adequate.

This is obvious. For when we say that an idea in a human mind follows from ideas that are adequate in it, we are saying only (by the corollary to **11**) that the cause of this idea is not \ddot{Y} God-considered-as-infinite or \ddot{Y} God-considered-as-involving-many-particular-things but just \ddot{Y} God-considered-as-including-the-essence-of-that-human-mind; so it must be adequate.

First note on 37-40: With this I have explained the cause of so-called 'common notions', which are the foundations of our reasoning.

But some axioms or notions result from other causes which it would be helpful to explain by my method. For my explanations would enable us to establish which notions are more useful than the others, and which are nearly useless; and then to show which are 'common', which are clear and distinct only to those who have no prejudices, and finally which have no good basis. Moreover, we could establish what is the origin of the so-called 'second notions' and thus of the axioms based on them, and other things I have thought about from time to time concerning these matters. But since I have set these aside for another treatise, and don't want to annoy you with too long a discussion, I have decided to pass over them here. ['Second notions' are concepts of concepts, corresponding to such general terms as 'genus', 'species', 'proposition' and so on.]

But not to omit anything it is necessary to know, I shall briefly add something about the source of the so-called 'transcendental' terms - I mean ones like 'being, 'thing' and 'something'. These terms arise from the fact that a human body, being limited, can form distinctly only a certain number of images at the same time (I have explained what an image is - especially that it is a *bodily* state - in the note on **17**). If that number is exceeded, the images will begin to be confused, and when the excess becomes big enough the images will all be completely confused with one another.

Since this is so, it is evident from the corollary to 17 and from 18 that a human mind will be able to imagine distinctly, at the same time, as many bodies as there can be \cdot distinct \cdot images formed at the same time in its body. But when the images in the body are completely confused, the mind will imagine all the bodies confusedly, running them all together, and treat them as though they all fall under one attribute, namely the 'attribute' of *being*, *thing*, etc. This also follows from the fact that images are not always equally vigorous, and from other such facts; but I needn't go into these here. For my purposes the one I have chosen is enough, for all the reasons come down to this: these \cdot 'transcendental' \cdot terms signify ideas that are highly confused.

Those notions they call 'universal', like *man*, *horse*, *dog*, etc., have arisen from similar causes. To take one example: So many images of *men* are formed at one time in a human body that they surpass the power of imagining, to the extent that the ·corresponding· mind can't imagine slight differences amongst the particular men (such as the colour and size of each one) or their determinate number, and imagines distinctly only what is common to them all in their effects on the body in question. For the body has been affected most forcefully by what is common ·to all the men·, since each particular ·man· has affected it ·by this property·. And the mind expresses this ·what-is-common· by the word 'man', and predicates it of countless particulars. . . .

But it should be noted that these ·'universal'· notions are not formed by all people in the same way, but vary from one person to another, depending on what the body ·of each person· has more often been affected by, and on what the mind ·of each· imagines or recollects more easily. For example, those who have more often been impressed by men's stature will understand by the word 'man' an animal that stands upright. But those who have generally focussed on something else will form another common image of men - e.g. that man is an animal capable of laughter, or a featherless biped, or a rational animal. And similarly with the others - each will form universal images of things according to the disposition of his body. Hence it is not surprising that so many controversies have arisen among the philosophers, who have wished to explain natural things by mere images of things.

Second note on 37-40: From I have said above, it is clear that we perceive many things and form universal notions:

1. from particular things which have been represented to us through the senses in a way that is mutilated, confused, and without order for the intellect (see corollary to **29**); for that reason I have been accustomed to call such perceptions \ddot{Y} knowledge from *random experience*;

2. from signs, e.g., from the fact that, having heard or read certain words, we recollect things and form certain ideas of them that are like them, through which we imagine the things (note on 18). These two ways of regarding things I shall from now on call 'knowledge of the first kind', 'opinion' or 'imagination';

3. from the fact that we have common notions and adequate ideas of the properties of things (see the corollary to **38**, and **39** and its corollary, and **40**). This I shall call 'reason' and 'the second kind of knowledge'.

4. In addition to these two kinds of knowledge, there is (as I shall show in what follows) a third kind, which I shall call 'intuitive knowledge'. This kind of knowing proceeds from \ddot{Y} adequate idea of the formal essence of certain attributes of God to \ddot{Y} adequate knowledge of the intrinsic essences of things.

I shall explain all these with one example. Suppose there are three numbers, and the problem is to find a fourth which is to the third as the second is to the first. Merchants don't hesitate to multiply the second by the third, and divide the product by the first, because [2] \ddot{V} they haven't yet forgotten what their teacher told them (without proving it), or because [1] \ddot{V} they have often found that this works with the simplest numbers, or [3] \ddot{V} from the force of Euclid's demonstration of proposition 7 in Book 7 - that is, from the common property of proportionals. But with the simplest numbers none of this is necessary. Given the numbers 1, 2, and 3, no-one fails [4] to see that the fourth proportional number is, and we see this much more clearly because we infer the fourth number from the ratio which we see *at a glance* the first number to have to the second. [In Spinoza's day, the term 'intuition' was often used for a kind of all-in-one-swoop inference, in contrast to the more long drawn out procedure of 'demonstration'.]

41: Knowledge of the first kind is the only cause of falsity, whereas knowledge of the second and of the third kind is necessarily true.

I said in the preceding note that all the ideas that are inadequate and confused pertain to knowledge of the first kind, and so (by **35**) this kind of knowledge is the only cause of falsity. Next, I have said that adequate ideas pertain to knowledge of the second and third kinds, and so (by **34**) this knowledge is necessarily true.

42: Knowledge of the second and third kinds, and not of the first kind, teaches us to distinguish the true from the false.

This proposition is self-evident, For someone who knows how to distinguish between the true and the false must have an adequate idea of the true and of the false, that is (second note on 42), he must know the true and the false by the second or third kind of knowledge.

43: He who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing.

[The difficult demonstration of 43 has this as its core: A true idea is equated with an adequate idea; when such an idea x occurs there must also be in that same mind an idea y of x; and y must (by 20) relate to the person's mind in exactly the same way as x does. So y must also be adequate in relation to that mind. Let Spinoza take over from there:] So someone who has an adequate idea, or (by 34) who knows a thing truly, must at the same time have an adequate idea or true knowledge of his own knowledge. That is (by a self-evidently correct equivalence), he must at the same time be certain.

Note on 43: In the note on 21 I have explained what an idea of an idea is, which may help you with the foregoing demonstration. But it should be noted that the demonstration wasn't really needed, because the truth of 43 is pretty obvious. No-one who has a true idea is unaware that a true idea involves the highest certainty; for to have a true idea means knowing a thing perfectly or in the best way. No-one can doubt this unless he thinks that an idea is something mute, like a picture on a tablet, and not a mode of thinking - namely, the very act of understanding. And I ask, who can know that he understands something unless he first understands it? That is, who can know that he is certain about something unless he is first certain about it? What can there be which is clearer and more certain than a true idea, to serve as a standard of truth? As the light makes both itself and the darkness plain, so truth is the standard both of itself and of falsehood.

Here are three questions that are sometimes asked:

(1) If a true idea is distinguished from a false one not intrinsically but only because it agrees with its object, so that a true idea has no more reality or perfection than a false one because 'true' marks it off not intrinsically but only through its relation to something else, does the man who has true ideas have any more reality or perfection than the one who has only false ideas?

(2) Why do men have false ideas?

(3) How can someone know for sure that he has ideas that agree with their objects?

To these questions I think I have already replied. (1) As regards the difference between a true and a false idea, it is established from **35** that the true is related to the false as existence is to nonexistence. (2) And the causes of falsity I have shown most clearly in the passage from **19** through the note on **35**. From this it is also clear how a man who has true ideas differs from one who has only false ideas. (3) As for 'How can someone know for sure that he has ideas that agree with their objects?', I have just shown more than adequately that this arises solely from his having an idea that *does* agree with its object - or that *truth is its own standard*. Furthermore, insofar as our mind perceives things truly it is part of the infinite intellect of God (by the corollary to **11**), so it is necessary that the mind's clear and distinct are true as that God's are.

44: It is of the nature of reason to regard things as necessary, not as contingent.

It is of the nature of reason to perceive things truly (by **41**), that is (by ^IA6), as they are in themselves, that is (by ^I**29**), not as contingent but as necessary.

First corollary: It depends only on the imagination that we regard things as contingent, both in respect to the past and in respect to the future.

Note on 44: I shall explain briefly how this happens. I have shown above (by 17 and its corollary) that even if a thing doesn't exist the mind still imagines it as present to itself unless causes occur that exclude its present existence. Next, I have shown (18) that if a human body has once been affected by two external bodies at the same time, then afterwards when the \cdot corresponding \cdot mind imagines one of them it will immediately recollect the other also - that is, will regard both as present to itself unless causes occur that exclude their present existence. Moreover, no-one doubts that our sense of *time* comes from the imagination, specifically from the fact that we imagine \cdot or experience-bodies as moving at various speeds.

Let us suppose, then, a child who saw Peter for the first time yesterday in the morning, saw Paul at noon, and saw Simon in the evening, and today again saw Peter in the morning. It is clear from **18** that as soon as he sees the morning light, he will immediately imagine the sun taking the same course through the sky as he saw the day yesterday; that is, he will imagine the whole day, and Peter together with the morning, Paul with noon, and Simon with the evening. That is, he will imagine the existence of Paul and of Simon with a relation to future time. On the other hand, if he sees Simon in the evening, he will relate Paul and Peter to the time past by imagining them together with past time. And the more often he has seen them in this same order the more uniformly he will do this.

But if it should happen that on some other evening he sees James instead of Simon, then on the following morning he will imagine the ·coming· evening time accompanied now by Simon, now by James, but not by both at once. (I am stipulating that he has seen them on different evenings, never both together.) So his imagination will vacillate and he will imagine now this one, now that one, with the future evening time. That is, he will regard neither of them as *certainly* future but both of them as *contingently* future.

And the imagination will vacillate in this way any time it imagines things that we regard as related to past time or to present time in this manner. So we shall imagine things as contingent in relation to present time as well as to past and future time.

Second corollary: It is of the nature of reason to perceive things as in a certain way eternal.

It is of the nature of reason to regard things as necessary and not as contingent (by **44**). And it perceives this necessity of things truly (by **41**), that is (by ^IA6), as it is in itself. But (by ^I16) this necessity of things is the very necessity of God's eternal nature. Therefore, it is of the nature of reason to regard things as in this way eternal.

Add to this that the foundations of reason are notions (by 38) of the qualities that are common to all, and (by 37) not of the essence of any particular thing. So they must be conceived without any relation to time but as in a certain way eternal.

[Spinoza wrote that it is of the nature of reason to perceive things *sub quadam aeternitatis specie*, which translates literally as 'under a certain species of eternity'. The difference between this and the rather free 'in a certain way eternal' seems not to affect the only subsequent use of this corollary, in the demonstration of $^{IV}62$.]

45: Each idea of each body, or of each particular thing that actually exists, necessarily involves an eternal and infinite essence of God.

The idea of a particular thing x that actually exists necessarily involves both the essence of x and its existence (by corollary to 8). But particular things (by ^I15) can't be conceived without God; indeed, (by 6) the idea of x has for a cause God-considered-as-A where A is the attribute under which x is a mode; so the idea of x must involve the concept of A (by ^IA4), that is (by ^IID6), must involve an eternal and infinite essence of God. For example, your mind involves *thought* and your body involves *extension*; each of those is an attribute, and thus an eternal and infinite essence of God.

Note on 45: By 'existence' here I don't mean *duration*, that is, existence conceived abstractly as a certain sort of quantity (·'How long will it exist?'·). Rather, I am speaking of the very nature of existence, which is attributed to particular things because infinitely many things follow from the eternal necessity of God's nature in infinitely many ways (see $^{1}16$) - the very existence of particular things insofar as they are in God. For even if each one is caused by another particular thing to exist in a certain way, still the force by which each one perseveres in existing follows from the eternal necessity of God's nature. Concerning this, see the corollary to $^{1}24$.

46: The knowledge of God's eternal and infinite essence which each idea involves is adequate and perfect.

The demonstration of **45** is universal: the idea of *anything*, whether thought of as a part or as a whole, involves God's eternal and infinite essence. So a source of knowledge of an eternal and infinite essence of God is common to all, and is equally in the part and in the whole. And so (by **38**) this knowledge will be adequate.

47: Any human mind has an adequate knowledge of God's eternal and infinite essence.

A human mind has ideas (by 22) from which it perceives as actually existing (by 23) itself, (by 19) its own body, and (by the first corollary to 16 and by 17) external bodies. So (by 45 and 46) it has an adequate knowledge of God's eternal and infinite essence.

Note on 47: From this we see that God's infinite essence and God's eternity are known to everyone. And since all things are in God and are conceived through God, it follows that we can deduce from this knowledge a great many things that we know adequately, and so can form that third kind of knowledge of which I spoke in the second note on **40** and of whose excellence and utility I shall speak in Part V.

Why do men have a less clear knowledge of God than of the common notions? It is because \ddot{Y} they cannot *imagine* God, as they can bodies, and \ddot{Y} they have joined the name 'God' to images of things that they are used to seeing. Men can hardly avoid this because they are *continually* affected by bodies.

Indeed, most errors consist only in our not rightly applying names to things. For when someone says 'The lines drawn from the centre of a circle to its circumference are unequal', he must (at least at that moment) be meaning by 'circle' something different from what mathematicians understand by it. Similarly, when men err in calculating they have certain numbers in their mind and different ones on the paper: attending only to what they have in mind, they really don't err, but they seem to do so because we think they have in their mind the numbers that are on the paper. If we didn't think this, we wouldn't believe that they were erring, because we distinguish mere verbal mishaps from downright error. Recently I heard someone exclaim 'My courtyard has just flown into my neighbour's hen!'; and although this was absurd I didn't think he was in error, because I had no doubt that what he meant was that his hen had flown into his neighbour's courtyard.

Most controversies have arisen from men's failure to explain their own mind, or to interpret the mind of someone else. For really, when they contradict one another most energetically they either have the same thoughts or they are thinking of different things, so that what each thinks are errors and absurdities in the other are not.

48: In the mind there is no absolute (that is, free) will; rather, the mind is caused to will this or that by a cause which is also caused by another, and this again by another, and so to infinity.

A mind is a certain and determinate mode of thinking (by 11), and so (by the second corollary to ^I17) it cannot be a free cause of its own actions, that is, it cannot have an absolute [= 'unconditioned'] ability to will or not will. Rather, when it wills it must be caused to do so (by ^I28) by a cause which is also caused by another, and this cause again by another, etc..

Note on 48: It can be shown in the same way that there is in the mind no absolute ability to understand, desire, love, etc. From this it follows that the \cdot so-called· 'faculties' of intellect, will, etc. are either Ÿcomplete fictions or merely Ÿmetaphysical beings - that is, Ÿuniversals that we customarily form from particulars. So the relation between

intellect and a particular idea, and between

will and a particular act of volition

is the same as that between

'stone-ness' and a particular pebble, and between

humanity (= humanness) and a particular man.

•The crucial point is that intellect, will, etc. are not *agents* or *causes* or anything like that; so crediting a man with having intellect is saying that *he thinks* or *has ideas*, and is not saying more than that. Analogously, to credit the thing in my hand with stone-ness is to say that it is a stone, and not say anything more.

I have explained the cause of men's thinking themselves free in the Appendix of Part I . But before I go on I should point out here that by 'will' I understand a capacity for \dot{Y} affirming and denying, and not $\cdot a$ capacity for $\cdot \ddot{Y}$ desiring. I take 'will' to be the faculty by which the mind affirms or denies something true or something false, and not the desire by which the mind wants a thing or avoids it.

Having demonstrated that these \cdot so-called 'faculties' are universal notions which aren't anything over and above the particulars from which we form the notions, we must now investigate whether the \ddot{Y} volitions themselves are anything over and above the mere \ddot{Y} ideas of things. Does a mind engage in any affirmation or negation other than what is involved in the idea itself just because it is an idea? (On this see **49** and also D3.) If it does,

then our thoughts - our ideas - are just *pictures*. Perhaps ideas *would* be just pictures if they were the bodily images that I introduced in the note on **17**. But it certainly isn't right to claim a pictorial status for them on *that* basis. For by 'ideas' I understand not the images that are formed at the back of the eye (and, if you like, in the middle of the brain), but concepts of thought.

49: In a mind no volition - that is, no affirmation or negation - occurs except that which the idea involves just because it is an idea.

In a mind (by **48**) there is no absolute faculty of willing and not willing, but only particular volitions - this and that affirmation, this and that negation. Let us take the example of some particular volition, say a mode of thinking by which a mind affirms that the three angles of a triangle are equal to two right angles.

This affirmation involves the concept - the idea - of the triangle; so the volition can't \ddot{Y} be conceived without the idea of the triangle. (For to say that A must involve the concept of B is the same as to say that A can't be conceived without B.) Further, this affirmation (by A3) can't \ddot{Y} exist without the idea of the triangle. Therefore, this affirmation can *neither be nor be conceived* without the idea of the triangle.

Furthermore, this idea of the triangle must involve this same affirmation, namely that its three angles equal two right angles. So conversely, this idea of the triangle also can *neither be nor be conceived* without this affirmation.

So (by D2) this affirmation belongs to the essence of the idea of the triangle, and is nothing over and above that essence. And this demonstration didn't bring in any special features of the example, so what it shows concerning this volition (or affirmation) applies to every volition, namely that it is nothing over and above the idea.

Corollary: The will and the intellect are one and the same.

Will and intellect are nothing apart from the particular volitions and ideas themselves (by **48** and the note on it). But the particular volitions and ideas are one and the same (by **49**). Therefore the will and the intellect are one and the same.

Note on 49 (•which is the conclusion of Part II•): By this I have removed what is commonly maintained to be the cause of error. Moreover, I have shown in 35 and its note that falsity consists only in the lack of knowledge that mutilated and confused ideas involve. So a false idea, just because it is false, does not involve certainty. When we say that a man stands by some false ideas and doesn't doubt them, we aren't saying that he \ddot{Y} is certain, but only that he \ddot{Y} doesn't doubt, or that his false ideas stay with him because nothing causes him to doubt them. On this, see the note on 44.

Therefore, however stubbornly a man may cling to something false, I shall still never say that he is certain of it. For by 'certainty' I understand something positive (see **43** and its note), not the mere absence of doubt. But by 'lack of certainty' I do understand falsity.

However, to explain the preceding proposition more fully, I should \dot{Y} give you some warnings,. Then I must \ddot{Y} reply to the objections that can be made against this doctrine of mine; and finally, to remove every uneasiness, I thought it worthwhile to \ddot{Y} indicate some of the doctrine's advantages. I say 'some' of them, because the most important ones will be better understood from what I shall say in Part V [not included here].

·Some warnings·

I begin, therefore, by warning you to distinguish accurately \hat{Y} between an idea or concept of the mind and the images of things that we imagine, and \hat{Y} between ideas and the words by which we signify things. Many people either completely confuse these three - ideas, images, and words - or don't distinguish them accurately enough or carefully enough; and that has left them completely ignorant of this doctrine concerning the will. But one *needs* to know it, both for the sake of philosophical theory and in order to arrange one's life wisely.

Indeed, those who think that ideas consist in images that are formed in us through encounters with external bodies are convinced that the ideas of things of which we can't form a similar image are not ideas but only fictions that we make up through a free choice of the will. They look on ideas, that is, as dumb pictures on a panel; and being in the grip of this prejudice they don't see that an idea, just because it is an idea, involves an affirmation or negation.

And then those who confuse words with ideas, or with the affirmations that ideas involve, think that they can \ddot{Y} will something contrary to what they are aware of, when really they only \ddot{Y} affirm or deny with words something contrary to what they are aware of. [This seems to mean: they think that can see that P yet *decide to disbelieve* that P, when really they only *say* that not-P.] But you can easily put these prejudices aside if you will attend to the nature of thought, which doesn't in any way involve the concept of extension. You will then understand clearly that an idea (since it is a way of thinking) is not to be identified with either an image or a series of words; for the essence of words and of images is constituted purely by bodily events, which don't at all involve the concept of thought....

•Four objections•

(1) The first objection comes from people who think it clear that the will extends more widely than the intellect, and so is different from the intellect. Why do they think the will extends more widely than the intellect? They say that it is because they know by experience that their actual faculty of assenting (that is, affirming and denying) are sufficient to enable them to assent to countless thoughts which they don't yet have, but that to *have* ·some of · those thoughts they do require a greater faculty of understanding than they actually possess. ·Some enlargements of our stock of propositional thoughts will require a greater understanding than we have; but when such enlargement has occurred, we will be able to say *yes* or *no* without needing any enlargement of our abilities of that sort ·. In short: the will is distinguished from the intellect because the intellect is limited and the will is not.

(2) It can be objected against me that experience seems to teach us most clearly that we can *suspend* our judgment so as not to affirm or deny thoughts that we have in our minds. This also seems to be confirmed from the fact that no-one is said to be deceived just because of some thought that he has, but only if he assents or dissents. Someone who feigns a winged horse - \cdot that is, merely entertains the thought of a winged horse - does not thereby affirm that there is a winged horse, and is not deceived in entertaining that thought. Thus, experience makes it utterly clear that the will, or faculty of assenting, is free and is different from the faculty of understanding.

(3) It can be objected that one affirmation (it seems) doesn't contain more reality than another: we don't (it seems) require a greater power to affirm of something true that it is true than to affirm of something false that it is true. But with ideas it is different, for we perceive that one idea has more reality - that is, more perfection - than another. As some objects are more excellent than others, so also some ideas of objects are more perfect than others. This also seems to establish a difference between the will and the intellect.

(4) It can be objected that if man doesn't act from freedom of the will, what will happen if he is in a state of equilibrium, like Buridan's ass? [The ass was equidistant between food and drink, and equally in need of each, so that it couldn't choose between them.] Will he die of hunger and of thirst? If I concede that he will, I would seem to be thinking of an ass or a statue of a man, not a real man. But if I deny that he will die of hunger and thirst, then \cdot I am admitting that he will *determine himself*, and thus that he has the capacity for going where he wants and doing what he wants.

Perhaps other objections can also be made. But I don't have to burden you with everything that anyone may dream up; so I shall confine myself to these four, replying to them as briefly as I can.

·Four replies·

(1) I grant that the will extends more widely than the intellect, if by 'intellect' the objector refers only to clear and distinct ideas. But I deny that the will extends more widely than \cdot 'intellect' in the sense of our capacity for having thoughts. And indeed, I do not see why Ÿour capacity for willing should be called unlimited when Ÿour capacity for sensing is not. For just as the former will enable us to affirm endlessly many things (one after another, for we can't affirm so many things all at once), so also the latter enables us to sense (that is, to perceive) endlessly many bodies one after another.

If the objectors say that there are infinitely many things that we can't perceive, I reply that since we can't reach those things by any thought we can't reach them by our faculty of willing either. 'But if God wanted to bring it about that we did have those thoughts,' they say, 'he would have to increase our faculty of perceiving, but not our faculty of willing.' [The rest of this paragraph is expanded from Spinoza's extremely compressed formulation.] This line of thought is based on the old mistake of thinking of a 'faculty' as some kind of agent or cause or mechanism. I have shown that 'the will' is not a concrete thing of any kind but a universal being or idea, something that gathers together all the particular volitions by expressing what is common to them all. Understood properly, then, the will is in a trivial way infinite: it is a universal that applies to any and all of the infinitely many actual and possible particular acts of volition! But that is not the kind of infinity the objectors had in mind, as can be seen from looking at the other half of their objection - the one about 'intellect'. They say that for us to understand things that we now don't understand our *intellect* would have to be enlarged; whereas actually what would be needed is for us to have ideas that we don't now have. In employing that enlarged stock of ideas, we would still be *thinking*; that is, our activity with them would fall under the universal idea of *intellect* just as our present thinking activities do; so it would be the same intellect as we now have. In short, in the only sense in which the will 'is infinite', the intellect 'is infinite' too.

(2) I reply to the second objection by denying that we have a free power of suspending judgment. For when we say that someone 'suspends judgment', all we are

To understand this clearly, let us conceive a child imagining a winged horse while not perceiving anything else. Since this imagining involves the existence of the horse (by the corollary to 17), and the child doesn't perceive anything else that excludes the existence of the horse, he will necessarily think the horse is there in front of him. And he won't be able to doubt its existence, though he won't be *certain* of it.

judgment is really a perception, not an act of free will.

We find this daily in our dreams, and I don't think anyone believes that while he is dreaming he has a free power of suspending judgment about the things he dreams, and of bringing it about that he doesn't dream the things he dreams he sees. Yet it does sometimes happen that even in dreams we 'suspend judgment' - namely, when we dream that we dream.

Next, I agree that no-one is deceived just because of what he perceives; that is, I agree that the imaginings of the mind in themselves involve no error. But I deny that a man affirms nothing in perceiving. For what is *perceiving a winged horse* other than *affirming wings of the horse*? If a mind perceived a winged horse and nothing else, it would regard the horse as present to it, and would have no cause for doubting its existence, and no ability to dissent from the proposition that there is a winged horse on the scene. The mind can't dissent from that proposition unless either **Y**its imagining of the winged horse is joined to an idea that excludes the existence of that horse or **Y**the mind perceives that its idea of a winged horse is inadequate. And then it will be *compelled* to **Y**deny the horse's existence (in the former case) or to **Y**doubt it (in the latter).

(3) I think that the third objection is answered by something I have already said, namely that 'the will' is something universal - merely a way of referring to something that is common to all ideas, namely affirmation - so that its complete essence must be in each idea, and in this way must be the same in all. But that holds only when 'the will' is thus conceived abstractly, \cdot so that saying 'The will is the same in every idea' is just saying that 'Every idea involves an affirmation' \cdot . The will's being the same in every idea, understood in *this* way, doesn't imply that there are no differences between the affirmations involved in different ideas; for in fact particular affirmation differ from one another as much as the ideas themselves do. For example, the affirmation involved in the idea of a circle differs from the affirmation involved in the idea of the circle differs from the idea of the triangle.

Next, I flatly deny that \ddot{Y} affirming of what is true that it is true requires as much power of thinking as does \ddot{Y} affirming of what is false that it is true. Looked at just in terms of the mind, these two activities are related to one another as existence is to nonexistence. For there is nothing positive in ideas that constitutes the form of falsity (see **35** and its note, and the note on **47**). So the thing to note here, above all, is how easily we are deceived when we confuse universals with particulars, and beings of reason and abstractions with real beings.

(4) As far as the fourth objection is concerned, I say that I agree entirely that a man placed in such an equilibrium - experiencing nothing but thirst and hunger, with food and drink equally distant from him - will die of hunger and thirst. If the objectors ask me whether such a man shouldn't be thought an ass rather than a man, I say that I don't know - just as I don't know how highly we should esteem one who hangs himself, or children, fools, and madmen, etc.

·Four advantages of the doctrine·

It remains now to indicate how much knowledge of this doctrine is to our advantage in life. We shall see this easily from the following \cdot four \cdot considerations. The doctrine is good for us because:

(1) It teaches that we act only from God's command, that we share in the divine nature, and that the more perfect our actions are and the more thoroughly we understand God the more thoroughly we share in the divine nature. This doctrine, then, as well as giving us complete peace of mind, also teaches us what our greatest happiness or blessedness consists in - namely, in the knowledge of God alone, which leads us to do only the things that love and morality advise. This shows clearly how far people stray from the true valuation of virtue when they expect to be honoured by God with the greatest rewards for their virtue and best actions, this ·attitude· being the greatest bondage - as if virtue itself and the service of God were not happiness itself, and the greatest freedom!

(2) It teaches us how we must conduct ourselves concerning matters of luck, or things that are not in our power - that is, things that don't follow \cdot solely \cdot from our nature, \cdot and thus depend at least in part on events external to us \cdot . What it teaches is that we must expect and bear calmly both good luck and bad. For everything that happens follows from God's eternal decree with the same necessity as it follows from the essence of a triangle that its three angles are equal to two right angles.

(3) This doctrine contributes to communal life by teaching us not to hate, to disesteem, to mock, to be angry at, or to envy *anyone*, and also by teaching that each of us should be content with what he has, and should be helpful to his neighbour, not from softhearted compassion or favouritism or superstition, but from the guidance of reason, as the time and occasion demand. I shall show this in Part IV [not included here].

(4) Finally, this doctrine also contributes greatly to the common society by teaching how citizens are to be governed and led, not so that they may be slaves, but so that they may freely do what is best.

That completes what I had decided to treat in this note, and brings Part II to an end. In it I think I have explained the nature and properties of the human mind in enough detail, and as clearly as the difficulty of the subject allows, and that I have set out doctrines from which we can infer many excellent things which are highly useful and necessary to know, as will be established partly in what follows.