

Correspondence

Baruch Spinoza

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[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported between brackets in normal-sized type.—Many of the letters have somewhat ornate salutations (e.g. ‘Most excellent Sir, and dearest friend’) and/or signings-off (e.g. ‘Farewell, special friend, and remember me, who am your most devoted. . .’); these are omitted except when there’s a special reason not to.—For a helpful and thoughtful presentation of the letters, see Edwin Curley (ed), *The Collected Works of Spinoza*, vol. 1 for letters 1–28, vol. 2 for letters 29–84. **The editorial notes in the present version derive mostly from those two volumes, the material in vol. 2 having been generously made available by Curley, in advance of its publication, to the preparer of the version.**

First launched: May 2014

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Glossary

affect: A feeling, emotion, attitude, obsession; in Spinoza's usage always a damaging one, but not so on page 66, where the word is used by someone else.

affection: state, quality.

Collegiant: A Dutch sect of Quaker-like dissenters who were persecuted by the dominant Calvinist clergy. Spinoza attended some of their meetings.

deist: Someone who believes there is a God (opposite of 'atheist'), but whose theology is *thin* compared with Christianity—e.g. the deist doesn't think of God as intervening in the world.

eminently: This is a scholastic technical term meaning 'in a higher form'. To say that God has (say) perception 'eminently' is to say that he has perception in some higher form that doesn't involve his straightforwardly, in the ordinary sense, *perceiving* anything. The term is used by Boxel in letter 55, and mocked by Spinoza in 56

fatal: This word is used in connection with the idea of something's being absolutely and utterly bound to happen—the idea of this as somehow laid down in advance.

magistrate: In this work, as in general in early modern times, 'a magistrate' is anyone with an official role in government; and 'the magistrate' is the ruler.

parhelia: Two bright patches flanking the sun, sometimes called 'false suns'.

philosophy: In this correspondence the word usually points more to natural science than to what we would call 'philosophy' these days.

positive: This occurs where the Latin has *positivus*, which in letters 50 and 54 is contrasted with 'negative'. But in fact the main sense of *positivus*—except for one that is irrelevant here—contrasts not with 'negative' but with 'comparative'. The English 'positive' also is a grammatical technical term with that meaning: good-better-best, positive-comparative-superlative. Some of the letters involve Spinoza's view that 'sin is not something positive'; this goes with his saying that what we call 'sin' is really a **privation**. In his and others' usage a privation in *x* is **(i)** a lack of something that **(ii)** *x* ought to have or is normal or natural for things like *x* to have. Now, the statement that a privation is not something 'positive' could mean that

- (i)** a privation is a lack, a case of *not* having something—the concept of privation is *negative*; or that
- (ii)** a privation in *x* is *x*'s lacking something that it *ought* to have; our notion of what *x* ought to have comes from our comparing *x* with other things that we regard as being of the same kind—the concept of privation is *comparative*.

In letters 19–20, 23–24, and 36 sense **(ii)** seems at least as fitting as sense **(i)**, though it could be that both are at work. Those five letters were originally written in Dutch, and *positivus* translates one or other of two different Dutch words; but there's reason to think that in each case the writer was thinking in terms of the standard scholarly language, Latin.

principle: In just two places in the correspondence, 'principle' is used in a sense, once common but now obsolete, in which 'principle' means 'source', 'cause', 'driver', 'energizer', or the like.

salutary: Usually it means ‘conducive to health’, but a secondary meaning, ‘conducive to salvation’, is what’s in play here.

Schools: A standard label for departments of philosophy (including physics) that were pretty entirely under Aristotle’s influence.

vivid and clear: The Latin phrase
clarus et distinctus

is translated here by the phrase
‘vivid and clear’.

The more usual translation for it and (in Descartes’s French works) for the French phrase

clair et distinct

has been ‘clear and distinct’; but this is demonstrably wrong for Descartes’s French and Latin. He only once takes the phrase apart to explain it:

‘I call a perception *claram* when it is present and accessible to the attentive mind—just as we say that we see something *clare* when it is present to the eye’s gaze and stimulates it with a sufficient degree

of strength and accessibility. I call a perception *distinctam* if, as well as being *clara*, it is so sharply separated from all other perceptions that every part of it is *clarum*. . . . A perception can be *clara* without being *distincta* but not vice versa. When someone feels an intense pain, his perception of it is *clarissima*, but it isn’t always *distincta* because people often get this perception muddled with something else. (*Principles of Philosophy* 1:45–6)

Of course he is not saying anything as stupid as that intense pain is always *clear*! His point is that pain is vivid, up-front, not shady or obscure. And for an idea to be *distincta* is for every nook and cranny of it to be vivid; which is not a bad way of saying that it is in our sense ‘clear’.—It’s reasonable to think that this also holds for Spinoza’s use of the phrase. The most common use of *clarus* is as meaning ‘bright’ or ‘vivid’ or the like, as in *clara lux* = ‘broad daylight’, though it can also mean ‘clear’ in our sense. But if Spinoza or anyone else used it in that sense in the phrase *clarus et distinctus*, then what is there left for ‘distinctus’ to mean?

letters 1–16: written in 1661–1663

1. from Oldenburg, 26.viii.1661:

When I visited you recently in your retreat at Rijnsburg I found it so difficult to tear myself away from your side that now that I'm back in England I hasten to reunite myself with you as far as I can by correspondence. Knowledge of things of enduring importance, combined with your kindness and graciousness, . . . must win for themselves the love of any honourable and liberally educated man. Let us then come together in unfeigned friendship, cultivating that friendship carefully with every kind of good will and service. What I in my weakness can provide you may consider yours. As for your gifts of mind, let me claim a share in them because that won't involve any loss to you.

In Rijnsburg we talked about God, about infinite extension and thought, about the difference and agreement of these attributes, about how the human soul is united with the body, and about the principles of Descartes's and Bacon's philosophy. But we spoke then as if through a grill, and dealt very briefly with matters of great importance which are now tormenting me; so I now want, on the strength of the friendship we have entered into, to engage you in discussion, and cordially ask you to explain to me more fully your views on the subjects I have mentioned.

I especially want to ask:

- What do you regard as the true distinction between extension and thought?
- What defects do you find in the philosophy of Descartes and Bacon, and how do you think they can be replaced by sounder views?

The more frankly you write to me on these and similar

matters, the more closely you will bind me to you, and strongly oblige me to serve you in return if I can.

[Oldenburg refers to a forthcoming work by Boyle, 'an English nobleman of exceptional learning', which] treats of the nature of air and its elasticity, proved by forty-three experiments; of fluidity, solidity and the like. As soon as it has been printed, I shall see that it is delivered to you. . . .

2. to Oldenburg, ix.1661:

[Spinoza opens with an expression of pleasure at this friendship, and an elaborate declaration that Oldenburg under-rates himself and over-rates Spinoza, who will be the beneficiary in this exchange. But he will address Oldenburg's questions because it would seem unfriendly not to.]

I shall begin, then, by speaking briefly about

·D₁· *God*, whom I define as a Being consisting of infinite attributes, each of which is infinite, or supremely perfect in its kind.

Here it should be noted that

·D₂· By *attribute* I understand whatever is conceived through itself and in itself, so that its concept does not involve the concept of another thing.

For example, extension is conceived through itself and in itself, but motion is not. For it is conceived in something else and its concept involves extension.

That D₁ is a true definition of *God* is clear from the fact that ·D_{1a}· by 'God' we understand 'a being that is supremely perfect and absolutely infinite'. Moreover, it is easy to demonstrate from this definition that such a being exists; but this is not the place to give the demonstration. [It is not

clear whether Spinoza is referring here to D_1 or D_{1a} ; those labels for them are not his, and he says nothing to acknowledge that they are different.] But what I do have to show here, to answer satisfactorily your first question about the true distinction between extension and thought are the following:

• P_1 • Two substances cannot exist in nature unless they differ in their whole essence [i.e. there can't be two substances with something in common];

• P_2 • A substance is not something that can be *produced*; it is of its essence to exist [so that it couldn't be non-existent for a while and then be caused to exist];

• P_3 • Every substance must be infinite, or supremely perfect in its kind.

Once I have demonstrated these, then if you attend to the definition of *God* you'll easily see what I am aiming at, so there's no need to speak more openly about these matters. But I can think of no better way of demonstrating these things clearly and briefly than to prove them in the geometric manner and subject them to your understanding. So I send them separately with this letter and await your judgment regarding them. [We don't have that enclosure. For a fine discussion of what it probably contained, see Curley p. 166 n6.]

You ask next what errors I find in the philosophy of Descartes and of Bacon. I'm not given to exposing the errors of others, but I do want to comply with your wishes. Their greatest error is **(1)** to have wandered so far from knowledge of the first cause and origin of all things. Also **(2)** they didn't know the true nature of the human mind, and **(3)** they never grasped the true cause of error. . . . That they have wandered from knowledge of the first cause and of the human mind can easily be inferred from the truth of P_1 - P_3 ; so I restrict myself to showing the wrongness of **(3)** their view about the cause of error.

I shan't say much about Bacon, who speaks quite confusedly about this, and merely *says* things without *proving* anything much. He supposes that errors occur because:

(1) In addition to the deceptiveness of the senses, the human intellect is deceived simply by its own nature; the stories it tells about things are based on the analogy of its own nature, not the analogy of the universe; so that it is like an uneven mirror that mixes its own nature with the nature of things ·it is supposed to be reflecting·. [Bacon, *New Organon* I.41.]

(2) The human intellect is inherently inclined to abstractions, and takes fleeting things to be constant, etc. [I.51.]

(3) The human intellect is unquiet; it can't stand still. [I.48]

The other causes ·of error· that he assigns all come down to the one that Descartes gives:

(4) The human will is free and wider than the intellect, or—as Bacon himself says, more confusedly (I.49)—the intellect is not a dry [here = 'uncontaminated'] light, but is fueled by the will.

(Notice that Bacon often takes the intellect to be the mind; Descartes doesn't.)

Disregarding the other ·alleged· causes ·of error· as being of no importance, I shall show that **(4)** is wrong. To see its wrongness Bacon and Descartes only needed to attend to the fact that

- the will differs from this or that volition in the same way as
- whiteness differs from this or that white thing, or
- humanity differs from this or that man.

So the will couldn't cause this or that volition any more than humanity could cause Peter and Paul! Thus, Descartes's thesis that

errors are caused by the will, and are free is wrong because •according to Descartes our errors are particular volitions, so that ·like every event· they have to have external causes and are as those causes determine them to be, and anyway •the will is only a being of reason, so that it can't possibly be a cause of anything. This is what I promised to demonstrate.

3. from Oldenburg, 27.ix.1661:

I have received your very learned letter, and read it through with great pleasure. I approve of your geometric style of proof, but I'm having trouble following the things you teach so exactly; no doubt it's due to my stupidity. Please let me give you evidence of my slowness by putting some problems to you and asking you to solve them.

(1) Do you understand clearly and without doubt that your definition of *God* is all you need to demonstrate that such a being exists? When I reflect that definitions contain only our mind's concepts, and that our mind conceives many things that don't exist and is fruitful in multiplying and increasing things once they have been conceived, I don't see how I can infer God's existence from my concept of him. From the mental collection of all the perfections I find in men, animals, plants, minerals, etc. I can form a conception of some one substance that really has all those excellences; indeed my mind can multiply and increase them to infinity, so that it can conjure up in itself a totally perfect and excellent being. But the existence of such a being doesn't follow from this.

(2) Are you certain that body is not limited by thought or thought by body? It is ·generally regarded as· still an open question whether thought is •a corporeal motion or •some spiritual act entirely different from the corporeal.

(3) Do you regard the axioms you communicated to me as indemonstrable principles, known by the light of Nature and requiring no proof? Perhaps the first of them is of that kind, but I don't see how the other three can be so regarded. The second supposes that nothing exists in Nature except substances and accidents, but many people hold that time and place are neither substance nor accident. As for your third axiom—things that have different attributes have nothing in common with one another—I'm so far from conceiving this clearly that the whole universe of things seems to prove its contrary. For all the things we know differ from one another in some respects and agree in others. And the fourth axiom—If things have nothing in common with one another, one can't be the cause of the other—is not so evident to my dull intellect that it doesn't need more light shed on it. Surely God has nothing in common with created things, yet nearly all of us regard him as their cause.

Since I don't find these axioms to be beyond any shadow of a doubt, you'll easily guess that ·for me· the propositions you have built on them are shaky. And the longer I think about them the more doubts come flooding in. Regarding the first: I regard two men as two substances each of which has the attribute *capacity to reason*; from which I conclude that there are two substances with the same attribute. Regarding the second—that a substance can't be produced, even by another substance—I don't see how this can be true, because nothing can be its own cause. This proposition sets up every substance as its own cause, making them all independent of one another—making them so many gods. In this way it denies the first cause of all things.

Frankly, I can't grasp this unless you do me the favour of •revealing to me, more straightforwardly and fully, your opinion about this lofty matter, and •teaching me what is the origin and production of substances, things' dependence on

one another, and their subordination to one another. I beg you, by the friendship we have entered into, to deal openly and confidently with me in this matter. You can be absolutely confident that everything you choose to share with me will be safe, and that I'll take care that it doesn't become known to your harm or disadvantage.

In our philosophical group we energetically devote ourselves to making experiments and observations, and are much occupied with putting together a history of the mechanical arts. [This was an informal group of scientists which, soon after this, was officially incorporated as the Royal Society.] For we regard it as settled that •the forms and qualities of things can best be explained on mechanical principles, that •all Nature's effects are produced by various combinations of motion, shape, and texture, and that •there's no need for us to seek a refuge for our ignorance in inexplicable 'forms' and 'occult qualities'.

I shall pass along to you the book I promised as soon as your Dutch ambassadors here send a messenger to The Hague (as they often do), or as soon as some other friend to whom I can safely entrust it goes that way.

Please excuse my prolixity and frankness; in particular, I ask you to take in good part, as friends do, the objections I have freely put to you without any glossing over or courtly refinements.

4. to Oldenburg, x.1661:

While I was preparing to go to Amsterdam for a week or two I received your very welcome letter and saw your objections to the three propositions I sent you. I'll try to satisfy you just on those points, omitting the rest for lack of time.

(1) I don't say that from the definition of **any thing** the thing's existence follows; it follows only (as I demonstrated

in the note I attached to the three propositions) from the definition or idea of **some attribute**, i.e. of a thing that is conceived through itself and in itself. (I explained this clearly in relation to the definition of God.) In the note just mentioned, I stated the reason for this difference—stating it clearly enough for a philosopher, who is supposed to know the difference between a fiction and a vivid [see Glossary] and clear concept, and the truth of the axiom that *every definition, or vivid and clear idea, is true*. Once these things are noted, I don't see what more is lacking for the solution to the first problem.

(2) You seem to concede that if thought doesn't pertain to the nature of extension then extension won't be limited by thought. . . . But if someone says that extension is limited not by extension but by thought, isn't that the same as saying that extension is infinite not •absolutely but only •considered as extension?. . . .

But, you say, perhaps thought is a corporeal act. I don't think that it is; but even if you think this, you won't deny that extension considered as extension is not thought; and that's all I need for my definition and demonstration of my third proposition.

(3) You say that the axioms I proposed ought not to be counted as known by the light of Nature and requiring no proof. I have no quarrel with that. But you also doubt their truth; indeed you seem to want to show that their contrary is more likely. So please attend to the definitions I gave of *substance* and *accident*, from which all these •axioms• are derived:

substance: what is conceived through itself and in itself, i.e. something whose concept does not involve the concept of another thing;

modification or *accident*: what is in another thing and is conceived through that other thing.

From this it is clear that:

(A1) substance is by nature prior to its accidents, for without it they can't be or be conceived.

(A2) Except for substances and accidents, nothing exists in reality (i.e. outside the intellect),

because whatever exists is conceived either through itself or through something else, and its concept either does or does not involve the concept of something else.

(A3) Things that have different attributes have nothing in common with one another,

for I have explained that an attribute is that whose concept doesn't involve the concept of another thing.

(A4) If two things have nothing in common with one another, one cannot be the cause of the other,

for since there would be nothing in the effect that it had in common with the cause, whatever the effect had it would have *from nothing*.

As for your contention that God has nothing in common with created things etc., I have maintained the complete opposite of this in my definition of *God* as a being consisting of infinite attributes, of which each is infinite, i.e. supremely perfect in its kind.

As for your objection to the first proposition, please consider this: men are not created, but only generated, and their bodies already existed before, though formed differently. It may indeed be inferred, as I cheerfully acknowledge, that if one part of matter were annihilated the whole of extension would also vanish at the same time. [For an explanation of that astonishing statement, see section 6 of www.earlymoderntexts.com/jfb/spinmet.pdf.] Also, the second proposition doesn't make many gods, but only one, consisting of infinite attributes.

5. from Oldenburg, 21.x.1661:

Here is the little book I promised you. Do let me know your judgment of it, particularly regarding the experiments he [Boyle] has included on nitre, and on fluidity and solidity.

Thank you for your learned second letter, which I received yesterday. I'm sorry, though, that your trip to Amsterdam prevented you from answering all my doubts. I beg you to send me what you then omitted as soon as you have time. Your letter illuminated much for me, but not enough to dispel all the darkness—which I believe *will* be dispelled when you instruct me clearly and vividly regarding the true and first origin of things. As long as I'm not clear about how and by what cause and things have come into existence, and by what connection they depend on the first cause (if there is any first cause), everything I hear and read seems to be thrown into confusion. So *please* hold out a torch for me in this, and don't doubt my loyalty and gratitude.

6. to Oldenburg, iv.1662:

[Throughout this letter Boyle is usually referred to as *vir clarissimus* = 'the very distinguished man' or by some other such phrase. In this version the name alone will be used.]

I have received Boyle's book [the Latin translation of *Certain Physiological Essays*] and read as much of it as time allowed. Thank you for this gift. I see that I was not wrong to conjecture. . . . that you would trouble yourself so only about matters of great importance. You ask for my judgment of what he has written; and I shall provide it, as far as my modest capacities allow, by noting certain things which seem to me obscure or inadequately demonstrated. But because of my other occupations I have not yet been able to read through—let alone examine—everything in the book.

·ON BOYLE'S EXPERIMENT WITH NITRE·

[The experiment was meant to •support the thesis that all physical events are explainable in terms of the shapes, sizes, and movements of colliding bits of matter, and thus to •count against the rival view that each material kind of stuff has a 'form' which somehow dictates its properties. In this experiment he processed some nitre so as to divide it into two portions of stuff each with properties different from those of nitre; he then recombined them to form nitre, which had the properties that it had originally. This is what you'd expect if Nature worked the way Boyle thought it does, and shows up the non-empirical and almost mystical 'forms' as having no work to do. In what follows, '[A]' etc. are to aid in connecting this letter with Boyle's replies (via Oldenburg, letter 11, page 13.)

[**[A]**] Several pages of this letter are devoted to criticising Boyle's accounts of what was going on at different stages in his experiment; and to describing experiments with nitre that Spinoza has conducted, with results that he says confirm his rival account of what was happening in Boyle's laboratory. (He isn't challenging the basic mechanistic approach to physics, and hasn't the faintest interest in 'forms'.) The present version will by-pass all this and proceed to parts of the letter that are of more philosophical interest.]

If I'd had the opportunity to experiment further, I would have added other things that might make the matter completely clear. But because I am entirely occupied with other matters, please let me put this off till another time and proceed to the other things to be noted.

[**[B]**] In a passing remark about the shape of the particles of nitre, Boyle finds fault with modern writers for having misrepresented it. I don't know whether he means Descartes also, but if he does he may be criticising Descartes because of what others have said. Descartes wasn't speaking of particles that can be seen with the naked eye. . . . But perhaps Boyle

is referring to some of those chemists who admit nothing but what they can see with their eyes or touch with their hands. . . .

[**[C]**] Boyle tries to show that all the tangible qualities depend only on motion, shape, and the other mechanical states. Since he doesn't present these demonstrations as mathematical, there's no need to examine whether they are completely convincing. Anyway, I don't know why he strives so anxiously to infer this from his experiment, since it has already been more than adequately demonstrated by Bacon and later by Descartes. And I don't see that this experiment offers us more illuminating evidence than others that are readily enough available.

[**[D]**] In the course of his experiment Boyle had noted changes relating to 'secondary qualities' (as he called them)—heat, sound, colour, taste—explaining each in mechanistic terms. Spinoza remarks that there are much more ordinary events that serve as well as Boyle's fancy experiment to illustrate how movements of particles of matter can produce such changes. He adds:] So I would judge all these things to be superfluous. I say this because I fear that others, who love Boyle less than they should, may judge him wrongly.

[Then further discussion of Boyle's experiment in relation to Spinoza's, and further remarks about the explanation of secondary qualities.]

·ON BOYLE'S DISCUSSION OF FLUIDITY·

Boyle writes: 'It is manifest enough that ·fluidity and firmness [= 'solidity']· are to be reckoned among the most general states of ·physical things·. . . ., there being hardly any distinct portion of matter in the world that is not either •fluid or else •stable or consistent.' [This version follows Curley in filling in Spinoza's fragmentary quotations from Boyle.] I would think

that notions derived from ordinary usage—ones that explain Nature not as it is in itself but as it is •related to human sense-perception—ought not to be counted among the chief kinds, or to be mixed (not to say confused) with pure notions that explain Nature as it is •in itself. Of the latter kind are motion, rest, and their laws; of the former are visible, invisible, hot, cold, and—to come right out with it—fluid and solid, etc.

Boyle writes: ‘The first is the smallness of the bodies that compose it, for certainly in larger. . . . parcels of matter, besides the greater inequalities or roughnesses that are usual upon their surfaces, and may hinder the easy sliding of those bodies along one another, . . . the bulk itself is apt to make them so heavy that they can’t be agitated by the power of those causes (whatever they be) that make the minute parts of fluid bodies move so freely up and down among themselves. . . .’

[In this passage Boyle is opposing the theory of fluidity of the Epicureans, who held that fluid bodies are composed of smooth, round atoms that can easily be separated from one another. He allows that this might be correct for some liquids, but that for others it is wrong. He suggests three conditions of fluidity: **(i)** smallness of the component particles, **(ii)** the existence of empty spaces or ‘some yielding matter’ around the component particles, and most importantly **(iii)** the motion of the component particles.—note based on Curley.]

Even small bodies can have surfaces that are uneven and rough. Hence if large bodies moved in such a way that the proportion of their motion to their bulk is the same as that between the motion and bulk of tiny bodies, they too would have to be called ‘fluid’, if that word hadn’t been taken over from ordinary usage to apply only to moved bodies whose smallness and intervals escape human sense perception. So dividing bodies into ‘fluid’ and ‘solid’ is on a par with dividing them into ‘visible’ and ‘invisible’.

In the same section: ‘It would hardly be believed how much the smallness of parts can contribute to their being easily moved and kept moving if we couldn’t confirm it by chemical experiments.’ No-one will ever be able to ‘confirm’ this by chemical or any other experiments, but only by demonstration and computation. It’s by reasoning and calculation that we divide bodies to infinity, and consequently also the forces required to move them. But we can never ‘confirm’ this by experiments; •the infinite divisibility of bodies is not an experimental question, so neither is the calculation that effective forces may be indefinitely small.

[Spinoza now discusses in some detail the experiments that Boyle says confirm that fluidity is mainly due to the smallness of particles; in each case, Spinoza says that other interpretations of the results are better. At one point he addresses this statement by Boyle:

‘It is not altogether absurd to question the thesis that there is a portion of matter consisting of parts so minute and so agitated—and consequently so easy to be either crumbled into yet smaller parts, or squeezed into any shape as occasion requires—that they can incessantly change places among themselves, and thereby constitute a most fluid body without any vacua or receptacles or yielding matter around them.

This was aimed at Descartes. Spinoza responds that it is absurd to question that thesis:] The affirmative must be maintained unless we are willing instead •to embark on an infinite regress or •to grant (what is the height of absurdity) that there is a vacuum.

[Spinoza offers counter-examples to some of Boyle’s statements about what kinds of surface repel water and what kinds don’t. Concerning ‘the feathers of ducks, swans and other waterfowl’, Boyle writes: ‘Since nature has designed them both for flying and for swimming, she makes their

feathers of such a texture that they don't. . . .admit water, which if admitted would make them unfit for flying.' Spinoza comments sharply:] He seeks the cause in the purpose.

[Boyle's experiments to show that the 'insensible parts of visible liquors can be every way agitated' without our seeing their motion are superfluous, Spinoza says, citing everyday experiences that show the same thing well enough. In this vein:] We can infer from the sundial and the sun's shadow that motion is often too slow for us to see it, and from a lighted piece of tinder moved swiftly in a circle that it is often too fast for us to see it. In the latter case we imagine that the fiery part is at rest at every point on the circumference which it describes by its motion. I would state the causes of this if I didn't judge it superfluous.

Finally, let me say in passing that to understand the nature of a fluid in general it suffices to know that we can move our hand in it in all directions without any resistance, with a motion proportionate to the fluid. This is evident enough to those who attend sufficiently to notions that explain Nature •as it is in itself rather than •as it is related to human sense perception. Not that on that account I scorn this history as useless. [Boyle labels this part of his work as a 'history of fluidity and firmness', using 'history' in Bacon's sense—a collection of experimental data relating to some phenomenon.] On the contrary, if this were done concerning each fluid, as accurately and reliably as possible, I would judge it very useful for understanding their special differences. . . .

·ON BOYLE'S DISCUSSION OF SOLIDITY·

[Boyle writes: 'If two bodies are at rest against one another, it seems consonant to the universal laws of Nature that they should continue in that state of rest until some force capable to overpower their resistance puts them out

of it.' Spinoza remarks:] This is Descartes's demonstration, and I can't see that Boyle brings to light any genuine demonstration drawn from his experiments or observations. . . .

[Boyle argues that the pressure of the air is a probable explanation of the fact that smooth bodies will stick together 'upon bare juxtaposition or contact', e.g. if one piece of flat glass is placed against another, parallel to the ground, the lower piece won't drop down though it will easily slide. The part of all this that Spinoza comments on is Boyle's experiment designed to measure the pressure of the air. He offers a refinement of it designed, he says, to 'obtain, as far as possible the ratio between the pressure of the air along a line parallel to the horizon and that along a line perpendicular to the horizon.' He evidently doesn't realise that these two pressures are the same, though this had been shown by Pascal.]

. . . .As for your first questions, when I look through my replies I don't see that I have omitted anything. If I happen to have put something obscurely (as I often do for lack of words), please indicate it to me, and I'll do my best to explain it more clearly.

You now ask about •how things came into existence and •by what connection they depend on the first cause. I have composed a whole short work devoted to this matter and also to the emendation of the intellect. [Curley has a long interesting note on the difficult question of how the work Spinoza refers to here relates to any of his works that we know.] I am engaged in transcribing and emending it, but sometimes I set it aside because I don't yet have any definite plan regarding its publication. I'm naturally afraid that the theologians of our time may be offended and with their usual hatred attack me, who absolutely dread quarrels.

. . . .What does the work contain that might offend the preachers? Well, I say ·in it· that I regard as created

things many ‘attributes’ that they—and everyone, so far as I know—attribute to God. Conversely, other things that they because of their prejudices regard as created I contend are attributes of God, and they have misunderstood this. Also, I don’t separate God from Nature as everyone known to me has done. So I look for your advice on this matter, regarding you as a most faithful friend whose honesty it would be wrong to doubt.

7. from Oldenburg, vii.1662:

It is many weeks since I received your very welcome letter with its learned comments on Boyle’s book. He joins me in thanking you for the reflections you have shared with us. He would have indicated this sooner if he hadn’t hoped soon to be relieved of the mass of business that now burdens him, so that he could send you his answer along with his thanks. But he finds that so far his hope has been in vain; he has been so distracted by public and by private business that for now he can only •convey his gratitude to you and •put off until another time his opinion regarding your notes.

Moreover, two opponents [Hobbes and Franciscus Linus] have attacked him in print and he considers himself bound to reply to them as soon as possible. Those writings are aimed not at his treatise on nitre but at another book of his, concerning the pneumatic experiments through which he proves that air is elastic. As soon as he has freed himself from this work, he will disclose his thoughts regarding your objections; and in the meantime he asks you not to take this delay amiss.

The group of philosophers I had mentioned to you has now, by our King’s favour, been converted into ‘the Royal Society’, protected by a public charter that grants it special privileges. There is great hope that it will be endowed with

the necessary income.

I strongly advise you not to grudge scholars what you have learnedly arrived at—in philosophy and in theology—through the acuteness of your understanding. Let it be published, whatever rumblings there may be among the foolish theologians. Your Republic is very free, and gives great freedom for philosophising. And your own prudence will tell you to express your concepts and opinions as moderately as possible. For the rest, leave the outcome to fate.

Come, then, excellent sir, banish all fear of arousing the pygmies of our time. We have appeased ignorant triflers for long enough. Let us set full sail for true knowledge, and penetrate Nature’s mysteries more deeply than anyone yet has. Among your people, I think, your meditations can be published with impunity, and you shouldn’t fear giving offence to the wise. If you find your patrons and supporters to be wise—and I *promise* that you will!—why should you fear an ignorant self-appointed censor? I won’t leave you in peace until I prevail on you; I won’t—so far as it’s up to me—allow your very important thoughts to be concealed in eternal silence. *Please* tell me, as soon as you conveniently can, what decision you take concerning this.

Things may happen here that will be worth your knowing. Certainly the Society I have mentioned will now press on more vigorously with its work, and perhaps—if peace continues in this land—it will contribute to the learned world with distinction.

8. from de Vries, 24.ii.1663:

For some time now I have been anxious to visit you, but the weather and the long winter have prevented me. Sometimes I complain about my lot because the distance between us keeps us apart for so long. Your companion Casarius is

very lucky to be able to live under the same roof with you, and to talk with you about important matters at breakfast, at dinner, and on your walks. But though our bodies are so far apart, you have often been present in my mind, especially when I meditate on your writings and hold them in my hands. But since not everything is clear enough to the members of our Amsterdam Spinoza study group—which is why we have begun meeting again—and so that you won't think I have forgotten you, I am writing this letter.

As for our group, it is arranged in this way: at each meeting, one of us (we take turns) presents some portion of your work: reads it through, explains it according to his own conceptions, and then proves everything following the sequence and order of your propositions. When it happens that he can't satisfy the others, we make a note of it and decide to write to you. We hope that you'll make it clearer to us if you can, so that under your guidance we can defend the truth against those who are superstitiously religious and Christian, and stand against the attacks of the whole world.

When we first read through and explained the definitions, they didn't all seem clear to us, and it turned out that we didn't agree about the nature of definition. In your absence we consulted a certain author, a mathematician named Borelli. When he discusses the nature of *definition*, *axiom* and *postulate*, he also introduces the opinions of others. His own opinion is this:

'Definitions are used in a demonstration as premises. So they have to be known *evidently*; if they aren't, they can't provide scientific knowledge, i.e. very evident knowledge.'

And elsewhere:

'The basis for a construction—or the essential, first and best known property of a subject—must be chosen not rashly but with the greatest care. If the

construction or the property named is impossible, then a scientific definition won't result. For example, if someone were to say: "Let two straight lines enclosing a space be called 'figurals'," this would be a definition of a nonbeing, and would be impossible. So ignorance rather than knowledge would be deduced from it.

'Next, if the construction or property named is indeed possible and true but is unknown to us or doubtful, then it won't be a good definition; for conclusions drawn from what is unknown and doubtful will also be uncertain and doubtful. They will produce suspicion or opinion, but not certain knowledge.'

Tacquet seems to disagree with this opinion, for (as you know) he maintains that one can proceed directly from a false proposition to a true conclusion.

But Clavius, whose opinion Borelli also introduces, thinks that

'Definitions are invented technical terms, and there's no need to give a reason why a thing is defined in this way or that. All that is needed is this: never assert that the thing defined agrees with something unless one has first demonstrated that the definition given agrees with it.'

So Borelli maintains that the definition of a subject must consist of a property or construction that is first, essential, best known to us, and true; whereas for Clavius it doesn't matter whether it is first or best known or true, as long as the thing we have defined isn't asserted to agree with something unless we have first demonstrated that it does. We prefer Borelli's opinion, but we don't know which of the two you agree with, or whether you agree with neither. Definitions are among the things that drive demonstrations, and there is so much disagreement about what a definition *is*; with that not resolved, it is hard to evaluate demonstrations. So if

we aren't making too much trouble for you, and if you have the time, we would be glad to have your opinion about this matter and also about what the distinction is between axioms and definitions. Borelli thinks that the difference is purely verbal, but I believe that you maintain that there's more to it than that.

Next, the third definition—the definitions of *substance* and *attribute*—is not sufficiently clear to us. As an example, I reported what you said to me at The Hague, namely that

a thing can be considered either •as it is in itself or
•as it is related to something else; for example, the intellect can be considered either •under thought or
•as consisting of ideas.

But we don't see clearly what this distinction would be. We think that if we conceive thought rightly, we must comprehend it in relation to ideas, since if all ideas were removed from it that would destroy thought itself. So since the example is not clear enough to us, the thing itself still remains somewhat obscure, and we require further explanation.

Finally, at the beginning of the note to proposition 10 you write:

From these ·propositions· it is evident that although two attributes may be conceived to be really distinct (i.e. one may be conceived without the aid of the other), they don't on that account constitute two beings or two different substances. The reason is that it is of the nature of a substance that all of its attributes (I mean each of them) should be conceived through themselves, since they have always been in it together.

In this way you seem to suppose that the nature of substance is so constituted that it can have more than one attribute, which you haven't yet demonstrated, unless you depend on the definition of an absolutely infinite substance, or God. Otherwise, if I should say that each substance has

only one attribute, and if I had the idea of two attributes, I could rightly conclude that, where there are two different attributes, there are two different substances. We ask you for a clearer explanation of this too.

Next, I thank you very much for your writings, which Balling passed on to me and which have given me great joy—particularly the note to proposition 28. If I can help you here ·in Amsterdam· with anything that is in my power, I am at your service—you have only to let me know. I have entered an anatomy course, and am about half-way through. When it is finished, I shall begin chemistry, and following your advice go through the whole medical course. I break off now, and await your reply.

9. to deVries, iii.1663:

I have received your letter, which I had long looked for, and I thank you very much for it and for your feeling toward me. The length of your absence has been no less burdensome to me than to you. Meanwhile, however, I'm glad you and our friends are helped by the results of my burning the midnight oil. This enables me to speak to all of you while we are far apart.

There is no need for you to envy Casarius. No-one is more troublesome to me, and there is no-one with whom I have to be more on my guard. So I warn you and all our friends not to communicate my views to him until he has grown up; he is still childish and unstable, more anxious for novelty than for truth. But I hope that in a few years he will correct these youthful faults. Indeed, as far as I can judge from his native ability, I am almost certain that he will. So his talent induces me to like him.

As for the questions proposed in your group (which is very sensibly organised), I see that you are in these perplexities

because you don't distinguish

(1) a definition that serves to explain a thing whose essence only is sought from

(2) a definition which is proposed only to be examined.

It's only (1) that there's doubt about, because it has a determinate object, and so it ought to be true, whereas (2) does not require this.

For example, if someone asks me for a description of Solomon's temple, I ought to give him a true description of the temple, unless I want merely to chatter along. But if I have constructed in my mind a temple that I want to build, and if I infer from its description that I must buy land of such-and-such a kind and so many thousand stones and other materials, will anyone in his right mind tell me that I have drawn a bad conclusion because my definition was false (i.e. that I haven't conceived what I have conceived)? Will anyone require me to *prove* my definition (i.e. to prove that I have conceived what I have conceived)? Surely this is trifling.

So a definition either (1) explains a thing as it is outside the intellect—and then it ought to be true, and differs from a proposition or axiom only in that a definition is concerned solely with things' essences or affections [see Glossary], whereas an axiom or proposition extends more widely, to eternal truths as well; or else it (2) explains a thing as we do or can conceive it, and then it differs from an axiom or proposition in that *all* it needs is to be conceived—it doesn't have to be conceived as true, so the only way it can be bad is by not being conceived.

To help you understand this, I shall take Borelli's example. Suppose someone says 'Let two straight lines enclosing a space be called "figurals".' If he understands by 'straight line' what everyone understands by 'curved line', then his

definition will be a good one, provided he sticks to it. . . . But if by 'straight line' he understands what we commonly understand, the thing is completely inconceivable. So it is no definition. Borelli, whose opinion you are inclined to embrace, confuses these things completely.

Here's another example, the one you bring up at the end. If I say that each substance has only one attribute, that is a proposition and requires a demonstration. But if I say 'By "substance" I understand what consists of one attribute only', that will be a good definition, provided I stick to it and don't then apply the label 'substance' to beings consisting of more attributes than one.

You say that I haven't demonstrated that a substance (or being) can have more attributes than one. Perhaps you have neglected to pay attention to my demonstrations. I gave two. (a) Nothing is more evident to us than that we conceive each being under some attribute, and that the more reality or being a being has the more attributes must be attributed to it; so an absolutely infinite being must be defined, etc. (b) The more attributes I attribute to a being the more I am compelled to attribute existence to it; i.e. the more I conceive it as true. It would be quite the contrary if I had feigned a Chimæra, or something like that. (I regard (b) as the better of the two arguments.)

You report that you don't conceive thought except in relation to ideas, because if you remove the ideas you destroy thought. I believe this happens to you because when you 'remove the ideas' you are putting aside all your thoughts and concepts, leaving yourself with nothing to think of. But as far as the thing itself is concerned, I think I have demonstrated clearly and evidently enough that the intellect, though infinite, is not *thought* but a *mode of thought*, not absolutely basic but one level up. [Spinoza expresses this by saying that intellect pertains not to *natura naturans*

but to *natura naturata*, medieval technical terms that he revived in the *Ethics* and used in the correspondence just this once.]

But I don't see what this has to do with understanding the third definition, or why there should be a problem about that. Unless I'm mistaken, the definition I gave you was this:

By 'substance' I understand what is in itself and is conceived through itself, i.e. whose concept does not involve the concept of another thing. I understand the same by 'attribute', except that it is called 'attribute' in relation to the intellect, which attributes such and such a definite nature to substance.

This definition explains clearly enough what I wish to understand by 'substance' or 'attribute'.

You want me to explain by an example how a single thing can be designated by two names (though this isn't necessary). Well, I offer two: **(i)** By 'Israel' I understand the third patriarch; I understand the same by 'Jacob', the name he was given because he had seized his brother's heel. **(ii)** By 'flat' I mean what reflects all rays of light without any change; I understand the same by 'white' except that it is called 'white' in relation to a man looking at the flat surface.

With this I think I have answered your questions. I'll now wait to hear your judgment. If there's still something that you find to be not well or clearly enough demonstrated, don't hesitate to point it out to me.

10. to deVries, iii(?).1663:

You ask me whether we need experience to know whether any definition of an attribute is true. I reply that we need experience only for things that can't be inferred from the definition of the thing—e.g. the existence of modes (for this can't be inferred from the definition of the thing). We don't need experience for things whose existence is not

distinguished from their essence, and therefore is inferred from their definition. Indeed experience *can't* come in here, because experience doesn't teach any essences of things; the most it can do is to affect *which* essences of things our minds think about. So since the existence of the attributes doesn't differ from their essence, we won't be able to grasp it by any experience.

You ask, next, whether even things or their affections are eternal truths. I say certainly. If you should ask why I don't *call* them 'eternal truths', I answer, to distinguish them (as everyone generally does) from ones that don't explain any thing or affection of a thing—e.g. *Nothing comes from nothing*. Propositions like that are called 'absolutely eternal truths', meaning that they have no place outside the mind, etc.

11. from Oldenburg, 3.iv.1663:

I could offer many excuses for my long silence to you, but I'll confine myself to two chief ones: •Boyle's ill health and •the pressures of my own affairs. The former prevented Boyle from answering your comments on nitre more quickly; the latter have kept me so busy for many months that I have hardly been my own master, so that I couldn't discharge the duty I confess I owe you. I rejoice that both obstacles have been removed, for a while at least, enabling me to renew my correspondence with my great friend. . . .

Before I deal with the matters that particularly concern you and me, let me take care of what is due to you in Boyle's name. He has received with his usual kindness the notes you assembled on his *Certain Physiological Essays*, and thanks you very much for your examination of it. He wants me to advise you that his purpose was not so much •to present a truly philosophic and perfect analysis of nitre as •to show that the common doctrine of 'substantial forms

and qualities' accepted in the Schools [see Glossary] rests on a weak foundation, and that what they call the 'specific differences' of things all come down to the size, motion, rest, and position of the parts.

Having noted this first, our author then says that his experiment with nitre was more than enough to show that the whole body of nitre was resolved by chemical analysis into parts differing from one another and from the whole, but that afterwards it was reunited out of the same parts and so reconstituted that only a little of the original weight was lacking. He adds that he has shown *that* the thing occurs thus, but has not discussed *how* it occurs, which seems to be the subject of your conjecture. He hasn't reached any conclusions about *how*, because that was beyond his purpose.

[A] Despite that disclaimer, Boyle rejects things Spinoza says about what is going on in the experiments with nitre. Notable in all this is the following:] Boyle doesn't see that any phenomena prove the necessity of 'very fine matter'; he says that you assume it simply from the hypothesis that vacuum is impossible.

[B] You think that the noble author is criticising Descartes, but he believes that it's you who are at fault here. He says he hadn't referred to Descartes at all, but to Gassendi and others who ascribe a cylindrical shape to the particles of nitre when it is really prismatic. And he was speaking only about visible shapes.

[C] To your comments on sections 13–18 he replies only that he wrote these things primarily to show the usefulness of chemistry for confirming the mechanical principles of philosophy, and that he hadn't found these matters treated so clearly by others. Our Boyle is one of those whose trust in reason is not so great that they have no need for the phenomena to agree with their reason.

[D] He says that there is a great difference between •readily available experiments (where we don't know what Nature contributes and what things intervene) and •experiments where it is definitely known what things are brought in. ['Boyle here shows the sophistication about experiments that made him a great scientist. But it is ironic that he did not in fact grasp the contribution made to his experiment by the coal he used to heat the nitre.'—note by Curley]. . . .

[Responding to an implied criticism that isn't included in the present version of letter 6 (with the passing remark that 'none of the other things touch him'), Boyle is said to reply] that he has used the Epicurean principles that hold that motion is innate in the particles because he had to use *some* hypothesis to explain the phenomenon. He doesn't on that account *accept* it; he merely uses it to support his own opinion against the chemists and the Schools, by showing that the matter *can* be well explained on the hypothesis in question. . . .

There hasn't yet been time for the author to consider your comments on fluidity and solidity. I'm sending you these things I have recorded, so as not to be deprived any longer of correspondence with you. *Please* take in good part what I pass on to you in this disjointed and mutilated way; attribute its defects to my haste rather than to the renowned Boyle's ability. I have put it together more from informal conversation than from any written out and methodical reply from him. No doubt I missed many things he said—things perhaps more substantial and more neatly put than those I have here recalled. So I take all the blame on myself, and absolve the author entirely!

I proceed now to things between you and me. First, have you finished that little work of such great importance in which you treat of •things' coming into existence, •their dependence on the first cause, and •the emendation of our

intellect. I am sure that to men who are really learned and wise nothing will be more pleasant or more welcome than a treatise of that kind. A man of your talent and understanding must look to *that* rather than to what pleases the theologians of our age and fashion, for they have an eye more to their own interests than to truth. . . . I urge you not to begrudge or deny us your writings on these matters. And if something of greater importance than I foresee prevents you from publishing that work, I beg you to give me a summary of it in your letters. If you do me this service, you will find me a grateful friend.

Boyle is soon to publish other works, which I shall send you by way of payment! [In 1663 Boyle published his *Considerations touching the usefulness of experimental natural philosophy, and experiments and considerations upon colours.*] And I'll add some other things that will describe the whole purpose of our Royal Society, to whose council I belong (with twenty others) and whose secretary I am (with one other). . . .

12. to Meyer, 20.iv.1663:

·ON THE NATURE OF THE INFINITE·

I have received your two letters—of 11.i and 26.iii. Both were very welcome to me, especially when I learned from them that all is well with you and that you often think of me. [After several sentences expressing his devotion to Meyer, Spinoza winds up:] You ask me to tell you what I have discovered about the infinite, which I shall most gladly do.

Everyone has always found the problem of the infinite very difficult, indeed insoluble. That's because they haven't distinguished

- what is infinite as a consequence of its own nature, i.e. by the force of its definition,

from

- what has no bounds not by the force of its essence but by the force of its cause.

And also because they haven't distinguished

- what is called 'infinite' because it has no limits

from

- that whose parts we can't explain or equate with any number, though we know its maximum and minimum.

Finally, they haven't distinguished

- what we can only understand, but not imagine

from

- what we can also imagine.

If people had attended to these distinctions, they would never have been swamped by difficulties. For then they would have understood clearly •what kind of infinite can't be divided into any parts, i.e. can't *have* parts, and •what kind of infinite can be divided into parts without contradiction. They would also have understood what kind of infinite can be conceived to be greater than another infinite without any contradiction, and what kind cannot be so conceived. This will be clear from what I am about to say. But first let me briefly explain these four ·concepts·: substance, mode, eternity, and duration.

The points I want you to consider about **substance** are: **(i)** that existence pertains to its essence, i.e. that from its essence and definition alone it follows that it exists. . . .; **(ii)** (following from **(i)**) that substance is not one of many, but that there exists only one of the same nature; and finally **(iii)** that every substance can be understood only as infinite.

I call the affections [see Glossary] of substance **modes**. Their definition, not being the definition of substance, can't involve existence. Although they exist, therefore, we can conceive them as not existing. From this it follows that when we attend only to the essence of modes, and not to the order of the whole of Nature, we cannot infer from the fact that they

exist now that they will exist later or that they won't, or that they did exist earlier or that they didn't. It's clear from this that we conceive the existence of substance to be entirely different from the existence of modes.

The difference between **eternity** and **duration** arises from this. It's only of modes that we can explain the existence by duration. But we can explain the existence of substance by eternity, i.e. the infinite enjoyment of existing. . . .

From all this it is clear that when we attend only to the essence of modes (as we often do) and not to the order of Nature, we can determine their existence and duration as we please, conceiving it as greater or less and divide it into parts—without this doing any harm to our concept of them. But since we can conceive eternity and substance only as infinite, we can't perform any of these operations on them without destroying our concept of them.

So those who hold that extended substance is put together of parts, i.e. bodies, that are really distinct from one another are talking utter nonsense. It's like putting together many circles in an attempt to create a square or a triangle or something else completely different in its essence. That hotch-potch of arguments by which philosophers commonly try to show that extended substance is finite shakes itself to pieces, because they all suppose that corporeal substance is composed of parts. It's like those who convince themselves that a line is composed of points and can then find many arguments to show that a line is not infinitely divisible!

You may ask 'Why do we have this natural inclination to divide extended substance?' I reply that we conceive quantity

- (1) in the imagination with the aid of the senses, conceiving it abstractly, superficially; or
- (2) in the intellect alone, conceiving it as substance.

So if we attend to quantity (1) as it is in the imagination, which is what we do most often and most easily, we find it

to be divisible, finite, composed of parts, and one of many. But if we attend to it (2) as it is in the intellect, and perceive the thing as it is in itself, which is very difficult, then we find it to be infinite, indivisible and unique, as I have already demonstrated to you well enough.

When we conceive quantity abstracted from substance, we can mark off quantities in any way we please; and when we separate duration from the way it flows from eternal things, we can mark off durations in any way we please; and so we come by **time** and **measure**—time to determine duration and measure to determine quantity—making both easier to imagine. When we separate the affections of substance from substance itself, and put them into classes so as to make them easier to imagine, we come by **number**, which we employ in counting them.

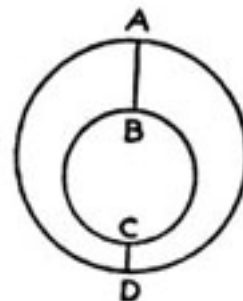
You can see clearly from this that measure, time, and number are nothing but modes of thinking, or rather of imagining. So it's no wonder that those who have tried to understand the course of Nature by such notions—misunderstanding them too!—have worked themselves into tangles that they couldn't undo; they had to *break* out, accepting the most absurd absurdities. There are many things—such as substance, eternity, etc.—that we can't grasp by the imagination but only by the intellect; so anyone who tries to explain such things by notions of this kind, which are only aids for the imagination, will accomplish nothing. . . .

And if the modes of substance themselves are confused with such beings of reason, such aids to the imagination, they can't be be rightly understood either. For when we do this we separate them from •substance and from •how they flow from eternity, without which they can't be rightly understood.

Here is an example. When someone has conceived •duration abstractly, and by confusing it with •time begun to divide it into parts, he'll never understand how an hour can pass. For an hour to pass, its first half must pass; before that, the first quarter; and so on backwards. So if you subtract half from the remainder in this way, to infinity, you'll never reach the end of the hour. This has led many who didn't routinely distinguish •beings of reason from •real beings to go so far as to maintain that duration is composed of moments. In their desire to avoid Charybdis, they have run into Scylla, for composing duration out of moments is on a par with composing number by adding noughts.

This makes it obvious enough that number, measure, and time can't be infinite because they are only aids to the imagination. . . . So it's clear why many who confused these three with the things themselves—i.e. with affections, quantity and duration—because they were ignorant of the true nature of things denied an actual infinite. But let the mathematicians judge how wretchedly these people have reasoned—such arguments have never deterred the mathematicians from the things they perceived clearly and distinctly. For not only have they discovered many things that can't be explained by any number—which shows clearly that numbers can't determine all things—they also know many things that cannot be equated with any number, but exceed every number that can be given. But they don't infer that such things exceed every number because of how many parts they have but because the nature of the thing can't admit number without a plain contradiction.

For example, all the inequalities of the space between two circles, A and B, and all the variations that the matter moving in it must undergo, exceed every number.



That is not inferred from the excessive size of the intervening space. For however small a portion of it we take the inequalities of this small portion will still exceed every number. Nor is it inferred from our not knowing its maximum and minimum. In many cases that *is* the basis for a conclusion about infinity, but not in this example, where we know that AB is the maximum and CD is the minimum. Instead it is inferred simply from the fact that the nature of the space between two non-concentric circles doesn't admit of numerical treatment. To determine all those inequalities by some definite number we'll have to bring it about that a circle is not a circle!

Similarly, to return to our theme, if someone tried to determine all the motions of matter there have been up to now by reducing them and their duration to a definite number and time, he would in fact be trying to deprive corporeal substance. . . .of its affections and bring it about that it doesn't have the nature that it does have. I don't think it is necessary for me to demonstrate this and the other things I have touched on in this letter, though I could.

From everything I have been saying it is clear that

- some things are infinite by their nature and can't possibly be conceived to be finite, that
- others are infinite by the force of the cause in which

they inhere, though when they are conceived abstractly they can be divided into parts and regarded as finite, and that

•yet others are called ‘infinite’—or if you prefer, ‘indefinite’—because they can’t be equated with any number though they can be conceived to be greater or lesser.

·Regarding this last category·: if things can’t be equated with a number, it doesn’t follow that they must be equal. This is obvious enough from the two-circles example and from many others.

So there you have it: I have set out briefly the causes of the errors and confusions that have arisen concerning the problem of the infinite, and I think my explanations also solve—or at least provide the basis for easy solutions of—any problem about the infinite that I haven’t touched on here. So I don’t regard it as worthwhile to detain you any longer with these matters.

But I’d like to mention in passing that the more recent Aristotelians have, as I think, misunderstood the demonstration by which the ancients tried to prove God’s existence. As I find it in a certain Jew, Rab Chasdai, it runs as follows:

If there is an infinite regress of causes, then all things that are will also have been caused; but something that has been caused doesn’t exist necessarily by the force of its own nature; so there is nothing in Nature to whose essence it pertains to exist necessarily.

But the conclusion is absurd, so the premise is also. Thus, the force of this argument doesn’t lie in the impossibility of there being an actual infinite or an infinite regress of causes, but only in the supposition that things that don’t exist necessarily by their own nature are not determined to exist by something that *does* necessarily exist by its own nature.

Because time forces me to hasten, I would now pass to your second letter, but it will be easier for me to answer the things contained in it when you are good enough to visit me. So please come as soon as possible, for the time of my moving approaches rapidly. . . .

12a. to Meyer, 26.vii.1663:

[This letter wasn’t discovered until 1974, so it didn’t get a number in the standard edition of the correspondence.]

Yesterday I received your very welcome letter in which you ask me three questions.

(i) In part 1, chapter 2 of *Metaphysical Thoughts* have you correctly indicated all the propositions, etc. that are cited there from part 1 of the *Principles*? Yes, everything you have indicated in chapter 2 of the work you have indicated correctly. But in chapter 1 you have indicated the note to proposition 4, and I would prefer you to have indicated the note to proposition 15, where I explicitly discuss all modes of thinking. Also, on the next page you have written in the margin ‘why negations are not ideas’—in this ‘negations’ should be replaced by ‘beings of reason’, for I am speaking of beings of reason in general.

(ii) Shouldn’t the statement in part 2 that the son of God is the father himself be deleted? I think that this statement follows very clearly from the axiom *Things that agree in a third thing agree with one another*. But this matter is of no importance to me, so if you think this can offend certain theologians, do what seems best to you.

(iii) Shouldn’t my statement that I don’t know what the theologians mean by ‘personality’ be changed? What theologians mean by the term personality escapes me, but not what philologists understand by it. Anyway, you have the manuscript. Change whatever you think should be changed.

13. to Oldenburg, 27.vii.1663:

At last I have received the letter I had long desired from you, and also have an opportunity to answer it. First let me sketch what prevented me from writing to you earlier.

When I moved my furniture here [Voorburg] in April, I went to Amsterdam, where some friends asked me to make them a copy of •my treatise in which I give a geometrical demonstration of Part 2 of Descartes's *Principles*, and of •the main points treated in metaphysics. I had dictated this to a certain young man [Casearius] to whom I didn't want to teach my own opinions openly. Then they asked me to prepare Part 1 also by the same method, . . . and I immediately undertook to do this and finished it in two weeks. I delivered it to my friends who eventually asked me to let them publish the whole work. They easily won my agreement, on condition that one of them would, with me beside him, provide it with a more elegant style and add a short preface warning readers that

I didn't acknowledge all the opinions contained in this treatise as my own, since many things in it were the very opposite of what I held,

and illustrating this by one or two examples. One of my friends to whom I have entrusted the publishing of this little book promised to do all this, and that is why I stayed on for a while in Amsterdam. Since I returned to this village where I am now living I have hardly been my own master because of the friends who have been kind enough to visit me.

Now at last, dearest friend, I have some time to myself to tell you these things, and to tell you why I am letting this treatise see the light of day. It's with the thought that the book may induce some who hold high positions in my country to want to see other things I have written—things I acknowledge as my own—so that they would see to it that I can publish without running any risks. If this happens, I'm

sure I'll publish certain things immediately. If not, I shall be silent rather than flouting the wishes of my country by forcing my opinions on men and making them hostile to me. Please, dear friend, be willing to wait for that. Then you will have either the printed treatise itself or a summary of it, as you request. And if you would like to have a copy or two of the work now in the press, I'll get them to you as soon as I find a convenient way to do so.

I turn now to your letter, and thank you and Boyle for the kindness and generosity you have clearly shown me. . . . I am grateful to Boyle for being so good as to reply to my notes, even if he does so in passing and as if doing something else. My notes are not so important that this most learned gentleman should waste in replying to them the time he can spend on higher thoughts.

I didn't enter my head that this most learned gentleman had no other object in his treatise on nitre than to show the weak foundations of that childish and frivolous doctrine of 'substantial forms and qualities'. I had persuaded myself that he wanted to explain the nature of nitre to us, showing it to be a heterogeneous body with fixed and volatile parts. So I wanted by my explanation to show—and I think I did show more than adequately—that we can easily explain all the phenomena of nitre (or anyway all the ones I know) while regarding it as homogeneous and not heterogeneous. [From there Spinoza goes through Boyle's responses to his comments, contending in each case that the comment was reasonable given Spinoza's understanding of what this was all about. What follows are a few excerpts from the letter, ones that are of more general interest.]

. . . .When I said that the particles of nitre in the larger passages are surrounded by a finer matter, I inferred that from the impossibility of a vacuum, as Boyle notes. But I don't know why he calls the impossibility of a vacuum a

'hypothesis'; it follows very clearly from the fact that *nothing has no properties*. And I'm surprised that Boyle doubts this, because he seems to maintain that there are no real accidents. If there were quantity without substance, wouldn't that be a real accident?

[In case you need help with that extremely compressed passage: An 'accident' is a property; and a 'real accident' = 'thing-like accident' (from Latin *res* = 'thing'), if there were such an item, would be a property-instance that existed independently of anything's *having* it. Now, Spinoza is following Descartes in assuming that if there were a *vacuum* it would be a *nothing*; if a vacuum had a size and shape those would be properties of that nothing, i.e. properties that aren't properties of anything, i.e. real accidents.]

In the fifth section I thought Boyle was criticising Descartes, which he has certainly done elsewhere (of course without denigrating Descartes in any way). Perhaps other readers of Descartes's *Principles* and Boyle's writings will make the same mistake if they aren't expressly warned.

...Boyle says he has not found these things to be so clearly taught and discussed in others. Perhaps he has something that I can't see to allege against the reasonings of Bacon and Descartes by which he thinks he can refute them. I don't recount their reasonings here because I don't think Boyle is unfamiliar with them. But I will say this: they too wanted the phenomena to agree with their reason; if they sometimes erred, they were men, and I think nothing human was alien to them.

He says that there's a great difference between •the experiments (the readily available and doubtful ones I cited) in which we don't know what Nature contributes and what things intervene, and •those in which it is established with certainty what things are contributed. But I don't yet see that Boyle has explained to us the nature of the things used in this matter, the calx of nitre and its spirit. These seem

just as obscure as those I have adduced, ordinary lime and water. I grant that wood is *more* composite than nitre; but when I don't know the nature of either, or how heat arises in each, what does that matter?

...I shouldn't detain you any longer on these matters. If I have been burdensome, despite trying to be as brief as possible, I beg you to overlook it and to take in good part what is said freely and sincerely by a friend. I thought it would be unwise, now that I'm writing to you again, to be completely silent on these matters. To praise to you things that didn't please me much would be sheer flattery, and I don't think anything is more harmful in friendships than that. So I decided to state my views as frankly as possible, and thought nothing would be more welcome to philosophers than that.

But if it seems to you more advisable to consign these thoughts to the fire rather than passing them on to Boyle, do as you please, provided you believe me to be very devoted and loving to you and to him. I am sorry my slender means prevent me from showing this otherwise than by words.

14. from Oldenburg, 10.viii.1663:

I must tell you how glad I was to receive your letter of 27.vii, especially since it •gives evidence of your well-being and •makes me more certain of your friendship towards me. If that were not enough, you report that you have entrusted to the press your *Parts 1 and 2 of Descartes's 'Principles', demonstrated in the Geometric style*, and generously offer me one or two copies of it. I accept the gift willingly. Please send the Treatise now in the press via Serrarius of Amsterdam. I have instructed him to receive such a package and forward it to me by a friend traveling in this direction.

For the rest, permit me to tell you that I bear impatiently your continued suppression of those writings you acknowledge as your own, especially in a Republic so free that there you are permitted to think what you will and say what you think. I wish you would break through those barriers, particularly since you can conceal your name, and so put yourself beyond any chance of danger.

Boyle has gone away. As soon as he is back in London I shall communicate to him that part of your letter that concerns him and tell you his opinion of your views as soon as I have obtained it. I think you have already seen his *The Sceptical Chemist*, which for some time now has been published in Latin and distributed abroad. It contains many chemico-physical paradoxes, and subjects the so-called 'hypostatic principles' of the spagyrist to a severe examination. [That is, he severely criticises the emphasis that a certain sect of alchemists place on the principles [see Glossary] salt, sulphur, and mercury.]

Recently he has published another booklet that may not yet have reached your booksellers. So I send it to you enclosed with this letter, and ask you cordially to take this little gift in good part. As you will see, this booklet contains a defence of the elastic power of air against Franciscus Linus who tries to explain the phenomena Boyle recounts in his *New Physico-mechanical Experiments* by a certain little thread which escapes the intellect as much as it does all sense perception! Read this booklet, weigh it, and tell me what you think.

Our Royal Society is vigorously pursuing its goal with all its power, keeping itself within the bounds of experiments and observations, and not getting tangled in disputations.

Recently an excellent experiment has been performed which greatly distresses those who affirm a vacuum, but very much pleases those who deny one. It proceeds as follows.

[He describes in detail an experiment involving glass jars, water, and a vacuum pump. The account is long and not very interesting, and how it supposed to encourage those who say there is no vacuum is unclear. We can spare ourselves all this, because it is a scientific dead end. [In a note on this passage Curley writes: 'Experiments of this perplexing kind were much discussed at the time (Huygens had performed one). Most of them depended on the then unknown properties of surface tension and capillarity.']]

I had meant to add more here, but friends and business call me away. I can't conclude this letter without urging you once again to publish your own meditations. I shall never stop exhorting you until you agree! Meanwhile, if you were willing to share with me some of the main results, how much would I love you! how closely I would judge myself to be bound to you! May everything prosper with you. . . .

15. to Meyer, 3.viii.1661:

The preface you sent me by our friend de Vries I return to you by him. As you will see, I have noted a few things in the margin, but a few others I thought it better to tell you of by letter.

First, when you tell the readers about the occasion on which I composed the first part, I wish you would also tell them, somewhere, that I composed it within two weeks. That will warn them not to think that I have set these things out so clearly that they couldn't be explained more clearly, so that they won't be held up by a word or two if occasionally they find something obscure.

Second, please point out to them that •I demonstrate many things differently from how Descartes did, not to correct Descartes but to retain my own order better and not increase the number of axioms so much; and that for the same reason •I demonstrate many things that Descartes

asserts without any demonstration, and have had to add others that Descartes omitted.

Finally, my dear friend, I ask you most urgently to omit—to delete entirely—what you have written at the end against that petty man [We don't know who that is]. Many reasons incline me to ask this of you, but I shall mention only one. I want everyone to find it easy to believe that these things are published for the benefit of everyone, that in publishing this little book your only wish is to spread the truth, that you are taking the greatest care to make it pleasing to everyone, that you are generously and with good will inviting men to study the true philosophy, and are aiming at the advantage of all. Everyone will easily believe this when he sees that no-one is injured and that nothing is put forward that could be offensive to anyone. If afterwards, however, that man wants to show his malice, *then* you'll be able to portray his life and character, and not without approval. Please wait until then. . . .

Our friend de Vries had promised to take this with him, but because he doesn't know when he will return to you I'm sending it by someone else. With it I enclose part of the note to proposition 27 of part 2, for you to give to the printer so that it can be set again. What I am sending you here must be printed again, and 14 or 15 lines must be added. These can easily be inserted.

16. from Oldenburg, 4.viii.1663:

Only a few days have passed since I sent you a letter by the ordinary post. In it I mentioned a booklet by Boyle that I wanted to send you; and now, sooner than I had expected, someone has turned up who can take it. So receive now what I couldn't send then, together with the courteous greetings of Boyle, who has now returned to London from the country.

He asks you to consult the Preface to his experiments on nitre, to understand the real goal he had set himself in that work: to show that the teachings of a more solid philosophy that is now appearing again can be illustrated by clear experiments, and that these experiments can be explained very well without the 'forms', 'qualities' and futile 'elements' of the Schools.

[Boyle welcomed the revival of Epicureanism by writers like Gassendi. The atomists disagreed with the Cartesians 'about the notion of body in general, and consequently about the possibility of a true vacuum, as also about the origin of motion, and the indefinite divisibility of matter', but Boyle thought that because they agreed 'in deducing all the phenomena of nature from matter and local motion. . . ., they might be thought to agree in the main'. Hence, Oldenburg's stress below on the basic agreement between Boyle and Spinoza.—note derived from Curley] But he did not at all take it on himself to teach the nature of nitre or even to reject what anyone can maintain about the homogeneity of matter and about the differences of bodies arising only from motion, shape, etc. He says he had only wished to show that the various textures of bodies produce their various differences, that from these proceed quite different effects. . . . I shouldn't think there is any fundamental difference between you and Boyle here. . . .

With regard to the reasoning you use to overthrow a vacuum, Boyle says he is familiar with it and has seen it before, but is not at all satisfied with it. He says there will be an opportunity to speak about this elsewhere. . . .

He asks that you consider carefully whether you have made a proper comparison between ice and water on the one hand, and nitre and its spirit on the other. Ice is resolved only into water, and when the odourless ice becomes water again it remains odourless. But spirit of nitre and the fixed salt of nitre are found to have different qualities, as the printed Treatise abundantly teaches.

I gathered these and similar things from conversation about this with our illustrious author, though I'm sure that with my weak memory I recollect them to his disadvantage rather than to his credit. Since the two of you agree on the main point, I don't want to go on about this. I would rather encourage you both to unite your abilities in cultivating a genuine and solid philosophy. May I advise you especially to continue to establish the principles of things by the acuteness of your mathematical understanding, as I constantly urge Boyle to confirm and illustrate this philosophy by experiments and observations, repeatedly and accurately made.

You see what I am striving for. I know that in this kingdom our native philosophers will not shirk their experimental duty; and I'm equally sure that you in your country will zealously do your part, however much the mob of philosophers or theologians may snarl, and whatever accusations they may make. I have already urged you to this many times, so I restrain myself now so as not to become tedious.

But I do ask this much: please be so kind as to send me as quickly as possible anything that you have already had printed, whether it is your commentary on Descartes or what you have produced from the resources of your own intellect. You will bind me that much more closely to you. . . .

letters 17–33: written in 1664–1665

17. to Balling, 20.vii.1664:

Your letter of 26.vi has reached me safely. It has caused me no little sadness and anxiety, though that has greatly decreased as I consider the prudence and strength of character with which you scorn the blows of fortune—or rather of opinion—when they attack you with their strongest weapons. For all that, my anxiety increases daily, so I implore you to take the trouble to write to me at length.

As for the omens you mention—that when your child was still healthy you heard groans like those he made later when he was ill, shortly before he died—I should think that this was not a true groan but only your imagination. You report that when you sat up and set yourself to listen, you didn't hear them as clearly as before, or as afterwards when you went back to sleep. Surely this shows that those groans were only sheer imagination: when it was unfettered and free, your imagination was able to present certain groans more effectively and vividly than when you sat up to focus your hearing in one direction.

I can confirm this, and at the same time explain it, by something that happened to me last winter in Rijnsburg. One morning, as the sky was already growing light, I woke from a very deep dream to find that the images that had come to me in my dream remained before my eyes as vividly as if the things had been true—especially ·the image· of a black, scabby Brazilian whom I had never seen before. This image mostly disappeared when I diverted myself by fixing my eyes on a book or some other object; but as soon as I turned them away from that object without fixing them attentively on anything else, the same image of the same

black man appeared to me with the same vividness; and so it went, on and off, until the image gradually disappeared from my visual field.

I contend that what happened to me in my internal sense of vision is what happened to you in hearing; but the causes were different in such a way that yours was an omen and mine wasn't. You'll understand this clearly from what follows.

The effects of the imagination arise from the constitution either of the body or of the mind. To avoid being tedious, I'll prove this here by experience alone. We find by experience that

- fevers and other bodily changes are causes of madness, and that
- people whose blood is thick imagine nothing but quarrels, troubles, killings, and the like.

Experience shows us that the imagination can also be determined by the constitution of the soul alone: it follows the intellect's traces in everything it does, linking its images and words in the order the intellect gives them in its demonstrations; so that we can hardly understand anything unless the imagination picks up its traces and forms an image from them

So none of the effects of the imagination that come from corporeal causes can ever be omens of future things, because their causes don't involve any future things. But the effects of the imagination—i.e. the images—that have their origin in the constitution of the mind *can* be omens of a future thing, because the mind can be confusedly aware of something that hasn't yet happened; so it can imagine it as firmly and vividly as if something of that kind were present.

To take an example like yours: A father so loves his son that they are, as it were, one and the same. According to what I have demonstrated elsewhere, there must be in thought an idea of the son's essence, its affections, and its consequences. Because of this, and because the father's union with his son makesd him a part of the son, the father's soul must necessarily participate in the son's ideal essence, its affections, and consequences (as I have demonstrated elsewhere at greater length).

Next, since the father's soul participates ideally in things that follow from the son's essence, he can sometimes imagine something of what follows from that essence as vividly as if it were present to him, especially if

- (i) the event that will happen to the son in the course of his life will be remarkable;
- (ii) it will be of a kind that can be imagined very easily;
- (iii) the time when this event will happen is not very remote; and
- (iv) his body is well constituted as regards health, and also free of all cares and troubles that disturb the senses externally.

It can also help if we think of things that for the most part arouse ideas like these. For example, if while we are speaking with a certain man we hear groans, it will generally happen that when we think again of that same man those groans will come into our memory.

This, dear friend, is my opinion about the problem you raise. I have deliberately kept this letter short so as to get you to write back to me at the first opportunity!

18. from van Blijenbergh, 12.xii.1664:

[Van Blijenbergh writes in a repetitive way. In this version, many repetitions are omitted without the use of ellipses to signal the omissions.]

Sir and unknown friend, I have now had the honour of reading through, frequently and attentively, your recently published treatise together with its appendix. [This refers to *Parts 1 and 2 of Descartes's 'Principles' and Metaphysical Thoughts.*] It would be more proper for me to tell •others about the great solidity that I have found there and the satisfaction I have received from this reading; but I can't refrain from telling •you that the more often I go through it attentively, the more it pleases me; I keep finding things that I hadn't noticed before. However, having no wish to seem a flatterer, I don't want to marvel too much at the author in this letter. I know what price in toil the gods exact for what they give.

You may wonder who this unknown person is who takes such a liberty in writing to you. He is someone who. . .

- . . . , driven only by a desire for pure truth in this short life, tries to plant his feet firmly in knowledge as far as the human intellect allows,
- . . . has no other goal in his search for truth than *truth*,
- . . . seeks to acquire through his studies neither honour nor riches but only •truth and •the peace of mind arising from it,
- . . . among all truths and sciences, takes pleasure in none more than in those of metaphysics (or at least in parts of it), and
- . . . finds his whole life's pleasure in devoting what free time he has to the study of it.

. . . In brief, he is someone whom you'll be able to know better if you are willing to oblige him so much as to help open and pierce through his tangled thoughts.

But to return to your treatise. Along with many things

that were very palatable to me I have also found some that didn't go down easily. Not knowing you, it wouldn't be right for me to object to them, especially given that I don't know how you feel about objections. So I send this letter ahead, to ask whether on these winter evenings you will have the time and the disposition to answer the difficulties I still find in your book.

Of course I don't want this to hinder you in your more necessary and more enjoyable pursuits, because what I want above all else is what you promised in your book, namely a fuller publication of your own views. . . .

So as to give this letter some content, . . . I shall present just one difficulty here. In both works you generally maintain—as your own opinion or to explain Descartes, whose philosophy you were teaching—the following:

Creation and preservation are one and the same thing; and this is so clear in itself that it is a fundamental axiom for anyone who has thought about it. God has created not only substances, but also the events in substances. For example, God not only •makes the soul exist longer and persevere in its state by his immediate willing or activity but also •stands in the same relation to the doings of the soul. Thus God is the cause not only of the soul's substance but also of the soul's every doing or trying.

From this it also seems to follow that either •there is no evil in what the soul does or tries or •there is such evil and God himself is the immediate doer of it. For example, Adam's soul wants to eat the forbidden fruit. According to the [indented] proposition above, that will of Adam's happens through God's influence—God brings it about not only that Adam wills but that he wills in this way—so that either •Adam's forbidden act is not evil in itself or else •God himself seems to do what we call 'evil'.

I don't see that you or Descartes solve this problem by saying that evil is a nonbeing, with which God does not concur. For in that case where did the will to eat come from? or the Devil's will to pride? As you rightly note, the will is not something different from the soul—it is this or that doing or trying of the soul. So there's as much need for God's concurrence for the one doing as for the other.

Next, every determination of our will was known to God from eternity (unless we ascribe an imperfection—namely, ignorance—to God). But how did God know those determinations except from his decrees? So his decrees are causes of our determinations, and it seems again to follow that either the evil will is not evil or that God causes that evil immediately.

The theologians' distinction between •the act and •the evil adhering to the act is irrelevant here, because God has decreed not only that Adam shall eat but also that he shall eat in such-and-such a way that is contrary to the command.

That is only one of the things I cannot penetrate in your treatise. . . . I expect from your penetrating judgment and diligence a reply that will satisfy me, and I hope to show you in the future how much you will thereby put me under obligation to you.

Be assured that I ask these things only from a desire for the truth, not from any other interest. I am a free person, not dependent on any profession, supporting myself by honest trade and devoting my spare time to these matters. . . .

19. to van Blijenbergh, 1.i.1665:

I didn't receive your letter of the 12.xii (enclosed with another of 21.xii) until 26.xii, while I was at Schiedam. From it I learned of your great love for the truth, which is the sole

object of all your inclinations. Since I too aim at nothing else, this made me resolve •to agree to answer, as best I can, the questions you send now and will send, and also •to do everything on my part to bring us to a closer acquaintance and genuine friendship.

Of the things outside my power, there's none I value more than being allowed the honour of entering into a pact of friendship with people who sincerely love the truth; for I believe that such people are the only things outside our power that we can love tranquilly. Because their love for one another is based on the love each has for knowledge of the truth, it's as impossible to destroy it as not to embrace the truth once it has been perceived. Moreover, it is the greatest and most pleasant thing that can be found among things outside our power, because nothing but truth can completely unite different opinions and minds. You don't need me to go on about this; I have said this much only to show you how pleasant it is (and will be) to be given the opportunity to show my ready service.

To seize the moment, I shall try to answer your question, which turns on this:

It seems clearly to follow from •God's providence (which doesn't differ from his will) and from •his concurrence and continuous creation of things, that either there are no sins and no evil or God does those sins and that evil.

But you don't explain what you mean by 'evil'. As far as I can see from the example of Adam's determinate will, it appears that what you mean by 'evil' is *the will itself, considered as acting contrary to God's prohibition*. I agree that it would be a great absurdity to maintain either •that God himself produced things that were contrary to his will or •that they would be good despite being contrary to his will. But for myself I can't accept **(i)** that sins and evil are something

positive [see Glossary], much less **(ii)** that something might exist or happen contrary to God's will. On the contrary, I say that **(i)** sin is not something positive and also that **(ii)** when we say that we sin against God we're speaking inaccurately, or in a human way, as we do when we say that men make God angry.

For regarding **(i)**, we know that whatever exists, considered in itself and without relation to anything else, has a perfection that extends as far as the thing's essence does; for that's all essence is—•perfection•. Take your example of Adam's decision (or determinate will) to eat the forbidden fruit. That decision (or determinate will), considered only in itself, involves as much perfection as it expresses of essence. We can understand this from the fact that we can't conceive any imperfection in things except by considering others that have more essence. So we can't find any imperfection in Adam's decision if we consider it in itself, without comparing it with others that are more perfect. . . . Indeed, we can compare it with infinitely many other things—stones, logs, etc.—that are much more *imperfect* by comparison. And in fact everyone accepts this, for the things we detest in men we admire and enjoy animals—the warring of bees, the jealousy of doves, etc. We hate these things in men, but we judge animals more perfect because of them. From which it follows that sins, because they indicate nothing but imperfection, can't consist in something that expresses essence, as Adam's decision or its execution do.

As for **(ii)**, we can't say that Adam's will was in conflict with God's will, and was therefore evil because it was displeasing to God. Apart from the fact that it would imply a great imperfection in God if

- something happened contrary to his will, or
- he wanted something he didn't get, or
- his nature were so limited that, like his creatures,

he had sympathy with some things and antipathy for others

—apart from all that, it would be completely contrary to the nature of God’s will. His will doesn’t differ from his intellect, so it’s as impossible for something to happen contrary to his will as it would be for something to happen contrary to his intellect. That is, something that happened contrary to his will would have to conflict with his intellect—like a square circle!

So because Adam’s decision •considered in itself was not evil, and wasn’t strictly speaking contrary to God’s will, it follows that God *can* be its cause—indeed, according to the reasoning you call attention to, he *must* be—but not •considered as evil, for the evil that was in it was only a privation [see Glossary] of a more perfect state which Adam’s act deprived him of. [In a difficult passage Spinoza says, in effect, the following. The concept of *privation* is comparative; saying that Adam was ‘deprived’ of some perfection is merely saying that he comes out on the lower end of a comparison that *we* choose to make. What happens is that we have a general concept to cover all the individual things of some kind (e.g. all that have the shape of man), we think of them all as being equally capable of the highest perfection that we can square with such a concept; and when we find one whose acts are contrary to that highest perfection we say he is ‘deprived’ of it and is deviating from his nature. We wouldn’t do this if we hadn’t brought him under such a definition—such a concept—and fictitiously ascribed such a ‘nature’ to him. But ‘privation’ has no place in God’s thinking, because he doesn’t know things abstractly, doesn’t make such general definitions, attributing no more essence to things than the divine intellect and power endow give them. By this, in my opinion, the problem is completely solved.

But to make the path smooth and to remove every objection, I must still deal with these two difficulties:

(1) Why does Scripture say that God wants the godless to repent, and why did he forbid Adam to eat of the tree when he had decided the opposite?

(2) From what I say it seems to follow that the godless, with their pride, greed, despair, etc. serve God as well as the pious do, with their legitimate self-esteem, patience, love, etc. because they also follow God’s will.

(1) Scripture is intended mainly to serve ordinary people, so it continually speaks in a human fashion; the people can’t understand high matters. And that, I believe, is why all the things God has revealed to the prophets to be necessary for salvation are written in the manner of laws. And in this way the prophets wrote a whole parable:

First, because God had revealed the means to salvation and destruction, and was the cause of them, they represented him as a king and lawgiver. The means, which are nothing but causes, they called ‘laws’ and wrote in the manner of laws. •Salvation and •destruction, which are nothing but effects that follow from the means, they represented as •reward and •punishment.

The prophets ordered their words in terms of this parable rather than according to the truth. Throughout they represented God as a man—now angry, now merciful, now longing for the future, now seized by jealousy and suspicion, even deceived by the devil. So the philosophers and those who are above the law—i.e. who follow virtue not as a law but from love, because it is the best thing—should not be shocked by such words.

So the ‘prohibition’ to Adam consisted only in God’s revealing to Adam that *eating fruit from that tree caused death*, just as he reveals to us through the natural intellect

that poison is deadly to us. Why did he reveal that to him? To make him that much more perfect in knowledge. Asking 'Why didn't God also give him a more perfect will?' is as absurd as asking why he didn't give the circle all the properties of the sphere! This follows clearly from what is said above; I have also demonstrated it in the note to proposition 15 of *Descartes's 'Principles'*.

(2) It is indeed true that the godless express God's will in their fashion. But that doesn't make them comparable with the pious, because the more perfection a thing has, the more it has of godliness and the more it expresses God's perfection. So since the pious have inestimably more perfection than the godless, their virtue can't be compared with that of the godless. They lack the love of God that comes from knowledge of God and through which alone we are said—putting this in terms that *we* can understand—to be 'servants of God'. Because the godless don't know God they are nothing but a tool in the hand of the master, a tool that serves unknowingly and is consumed in serving; whereas the pious serve knowingly, and become more perfect by serving.

That is all that I can now say in answer to your question. I wish for nothing more than that it may satisfy you. But if you still find some difficulty, please feel free to let me know it, to see whether I can remove it. . . . I want nothing more than to know the reasons for it, so that the truth may finally become evident.

I wish that I could write you in the language in which I was raised [probably Spanish; this letter is written in Dutch]. Perhaps I could express my thoughts better. Please excuse it, correct the mistakes yourself, and consider me your devoted friend and servant. . . .

20. from van Blijenbergh, 16.i.1665:

When I first received your letter and read through it quickly, I intended not only to reply immediately, but also to criticise many things in it. But the more I read it, the less I found to object to in it. My pleasure in reading it was as great as my longing to see it had been.

I want to ask you to resolve certain other difficulties; but first I should tell you that I have two general rules according to which I always try to philosophise:

- the I-rule: the vivid and clear conception of my intellect, and
- the W-rule: the revealed word, or will, of God.

According to the I-rule I strive to be a lover of truth, according to the W-rule a Christian philosopher. Whenever my natural knowledge cannot—or cannot *easily*—be reconciled with God's word, this word has so much authority with me that I look with suspicion at the conceptions I have imagined to be clear, rather than putting them above and against the truth I think I find prescribed to me in that holy book. [He goes on at length about his relying on God's word because it comes from 'God, the highest and most perfect'.]

If I now judged your letter only by the guidance of my I-rule, I would have to grant a great many things (as I do, too) and admire your penetrating conceptions. But the W-rule causes me to differ more from you. Within the limits imposed by a letter I shall examine your conceptions under the guidance of each of these rules. [The W-rule comes into play on page 33.]

[A] Guided by the I-rule I have asked whether your doctrines

- that creation and preservation are one and the same, and
- that God makes not only things but also the motions and modes of things,

don't seem to imply

•that there is no evil or •that God himself does evil.

Either way, we seem to be caught in a contradiction; so I had recourse to you, who should be the best interpreter of your own conceptions.

In reply you say that you persist in holding that nothing can happen contrary to God's will. But then to the problem of whether God does evil, you say that sin is nothing positive [see Glossary], and also that we can only very improperly be said to sin against God. And in *Metaphysical Thoughts* you say that 'there is no absolute evil' and that this is self-evident. But any thing x, considered in itself and without relation to any other thing, involves perfection, which always extends as far as x's essence. So it clearly follows that because sins denote nothing but imperfections, they can't consist in something that expresses essence. [He continues with a longish and rather tangled repetition of things said in the previous letter, emerging with this:] If nothing happens contrary to God's will, and if only as much happens as essence has been given for, in what conceivable way can there be an evil, which you call the privation of a better state? How can anyone lose a more perfect state through an act determined by and dependent on God? It seems to me that you must maintain that either •there is an evil or •there can be no privation of a better state; because it seems to me to be a contradiction ·to deny both of these, i.e.· to say that •there is no evil and •there is privation of a better state.

You will say that this evil state still contains much good. But I still ask: That man whose imprudent act caused the privation of a more perfect state, and consequently is now less than he was before—can't he be called evil?

To escape the above reasoning, since some difficulties still seem to remain concerning it, you say that there is indeed evil, and that there was indeed evil in Adam, but that it is

not something positive, and is said only in relation to our intellect and not in relation to God's; and that this evil is a privation in relation to us, but a negation in relation to God. [The Glossary entry on positive/privation points to two ways of understanding this passage.][Van Blijenbergh is relying here, and in his next two quotations, on the note to proposition 15 of Part 1 of *Descartes's 'Principles'*.]

But let us look into two questions. **(a)** If what we call 'evil' is evil only in relation to us, does that mean that it isn't really evil? **(b)** Is it right to say that evil, on your account of what it is, is only a negation in relation to God?

(a) Granted that there's no evil in being less perfect than some other being; I can't have more perfection than God gave me. But if *through my own misdeed* I am now less perfect than I was before, then I must judge myself to be more evil than I was before. For I was brought to this state not by the creator but by myself. As you acknowledge, I had enough power to restrain myself from error.

(b) To answer this we must see how you conceive of man and make him dependent on God before all error, and how you conceive of the same man after error.

You describe him as having, before error, no more essence than the divine intellect and power gave him; which seems to mean that a man can't have more or less •perfection than God has endowed him with •essence. That makes him dependent on God in the way the elements, stones, and plants are. But if that is your opinion, I can't understand what is meant by this:

'Now, since the will is free to determine itself, it follows that we do have the power to contain our faculty of assenting within the limits of the intellect, and so can bring it about that we do not fall into error.'

Making the will •so free that it can restrain itself from error and also •so dependent on God that it can manifest neither

more nor less perfection than God has given it essence—doesn't this seem to be a contradiction?

And speaking of the man after his error you say that he has deprived himself of a more perfect state by a too hasty deed, namely by not restraining his will within the limits of his intellect. But it seems to me that here (as also in *Descartes's 'Principles'*) you ought to have shown in more detail the whole scope of this privation: what the man had before the privation and what he retained after the loss of that perfect condition (as you call it). You say what we have lost, but not what we have retained: 'So the whole imperfection of error will consist solely in the privation of the best liberty, and this is called error.' Let us examine both of these things you say—i.e. about the man before error and the man after error.

You hold that between our willings and our understandings there is an **order** such that we must not will things without first having a clear understanding of them. You affirm also that we have the power to keep our will within the limits of our intellect, and that if we do so we shall never err.

If you are right about all this, then the **order** in question must have been impressed on us by God. And it would be a contradiction in God if he impressed that order on us without wanting us to *have to* keep to it. And if we must practice the order placed in us, someone who lets his will go beyond the limits of his intellect must be someone to whom God didn't give enough power to conform to the order. . . .

Next point: if God has given us so much essence that we can maintain that order, as you say we can, and if we always produce as much perfection as we have essence, how can it be possible for us to transgress that order? How does it happen that we don't always restrain the will within the limits of the intellect?

[He now repeats all that at great length in slightly different words, and mixes in with it a question about how how we can •be utterly dependent on God for our existence and conduct while also •having free will.]

It seems to me now clear that evil, i.e. being deprived of a better state, can't be a negation in relation to God. [He takes 'x is a negation in relation to God' to imply that God doesn't know about x, and protests at length against the idea of God's not knowing about Adam's loss of perfection. He uses a good example:] God concurs with my act of procreation with my wife, for that is something positive, and consequently he has a clear knowledge of it. But there is evil involved in that act if contrary to my promise and oath I perform it with another woman. In the latter case, what would be negative in relation to God? Not my act of procreation in itself, because. . . . God concurs with that. So the evil that goes with the act must be only my performing it with a woman with whom such an act is not allowed. But is it really conceivable that God should know our actions, and concur with them, yet not know whom we engage with in those actions?

Consider the act of killing. The act itself. . . . is something God concurs with. What he doesn't know is •the evil associated with the act, namely• its effect of bringing about the destruction of one of God's creatures—as if he didn't know his own effects! (I fear that here I must be misunderstanding you, for you strike me as intellectually too sharp to commit such a grave error.)

Perhaps you'll reply that all those acts are simply good, with nothing evil about them. But then I cannot grasp what it is that you call evil, on which the privation of a more perfect state follows. Also the whole world would then be put in an eternal and lasting confusion, and we men would be made like the beasts.

You also reject the usual definition of *man*, but want to ascribe to each man only as much perfection of action as God has given him. But then why don't you maintain that the godless serve God with their acts as well as the godly do? Neither can perform actions more perfect than they have been given essence for. I don't think you answer this question well when you say [page 29]:

The more perfection a thing has, the more it has of godliness and the more it expresses God's perfection. So since the pious have inestimably more perfection than the godless, their virtue cannot be compared with that of the godless. . . because the godless, like a tool in the hand of the master, serve unknowingly and are consumed in serving. The pious, on the other hand, serve knowingly and become more perfect by their service.

But it's true of both that *that's the best they can do*—the godly display more perfection than the others because they have been given more essence than the others. . . . Why shouldn't those who do less, but still as much as God desires of them, please God as well as the godly?

You hold that

- when we imprudently do something that brings evil we become less perfect,

and also, it seems, that

- when we restrain our will within the limits of our intellect we become more perfect by serving.

Thus, •we are so dependent on God that we can't do either more or less than we have been given essence for, i.e. than God has willed; and yet •we can become worse through imprudence or better through prudence. This seems to me to involve a contradiction

On your account of man, it seems, the godless serve God with their actions as much as the godly do with theirs.

And in this way, we are made as dependent on God as the elements, plants, stones, etc. What use is our intellect to us? What use, then, is that power of restraining our will within the limits of our understanding? Why has that order been impressed on us?

Consider what we deprive ourselves of on your account of who we are and how we act. We deprive ourselves of

- anxious and serious meditation aimed at making ourselves perfect according to
- the rule of God's perfection and
- the order he has impressed on us;
- prayer and aspiration toward God, by which we have so often felt that we received extraordinary strength;
- all religion, and all the hope and the satisfaction that await us from prayer and religion.

For surely if God has no knowledge of evil, it is hardly credible that he will punish it. What reason do I have for not committing all sorts of knavery if I can get away with it? Why not enrich myself through abominable means?

You will say: because we must love virtue for its own sake. But how can I love virtue if that much essence and perfection hasn't been given to me? If I can get as much satisfaction from evil as from good, why should I make the effort to restrain my will within the limits of the intellect? Why not do what my passions lead me to? Why not secretly kill the man who gets in my way? See what an opening we give to all the godless, and to godlessness! We make ourselves like logs, and all our actions just like the movements of a clock.

Still working with my I-rule [see page 29], I want to discuss two other things you say in proposition 15 of Part 1 of *Descartes's 'Principles'*.

(a) You say that 'we can retain the power of willing and judging within the limits of the intellect'. But if that were true, then surely at least *one* man would be found whose conduct showed that he had that power. In fact, everyone

can find in himself that however hard he tried he can't reach that goal. Anyone who questions this should examine himself and see how often his passions master his reason, even when he exerts the greatest force against them.

But you will say:

If by suspending judgment and keeping my will within the limits of my intellect I can •once bring it about that I do not err, then why couldn't I •always achieve this when I work that hard at it?

I reply that if I put all my effort into it I can cover two leagues in an hour, but I can't do that always. Similarly with great diligence I can refrain from error once at least, but I don't have enough power to do that always. The first man, proceeding from the hand of that perfect craftsman, did have that power; but (and in this I agree with you) by under-using it or misusing it he lost it.

The whole essence of holy Scripture seems to me to consist in this, which is why we ought to hold it in very high esteem. It teaches us what our natural intellect so clearly establishes: we fell from our initial perfection because of our imprudence. What is more necessary than to reform that fall as much as possible? That is also the sole aim of holy Scripture, to bring fallen man back to God.

(b) You say that 'understanding things vividly and clearly is contrary to the nature of man'; from which you finally conclude that it is far better to •assent to things even if they are confused, and to be free, than to •always remain indifferent, which is the lowest degree of freedom. [Van Blijenbergh attacks this on the grounds that suspension of judgment when confused is •sure to be what God wants and also •what Descartes urged in his *Meditations*.]

[B] Guided by the W-rule [see page 29] I differ from you more than I do when I examine your views by the I-rule. It seems to me (tell me if I'm wrong) that you don't ascribe to

holy Scripture the infallible truth and godliness that I believe to be in it. You do say you believe that God has revealed the things to the prophets in holy Scripture, but if he did so in the imperfect way that you attribute to him, that would involve a contradiction in God. If he revealed his word and will to men, he did so for a certain purpose that he was open about. If the prophets had contrived a parable from the word they received, then either

- God willed that they should depart from his meaning in this way; in which case God was the cause of that error, and willed something contradictory; or
- God did not will it, in which case the prophets would not have been able to do it.

[He produces mild variations on this theme, for example:] If the prophets feigned a parable from the word given them, i.e. gave it a meaning other than the one God has willed that they should give it, God would surely tell them about it.

Also, I see very little evidence that God would have revealed his word in the way you maintain, i.e. that he would have revealed only salvation and destruction and decreed certain means to those ends, and that salvation and destruction are merely the effects of the means he decreed. If the prophets had received God's word in that sense, what reason would they have had to give it another sense? Anyway, why should we accept your view about this matter rather than that of the prophets—i.e. rather than accepting what the prophets said as accurately and literally presenting God's word? If you reply that otherwise that word would involve many imperfections and contradictions, I say: so you say! Who knows which opinion would involve fewer imperfections if they were both spread out and looked at fairly? Anyway, that supremely perfect being knew very well how much the people could understand, and therefore what the best way was to instruct them.

What can give an upright intellect more pleasure in this life than the contemplation of that perfect Deity? . . . I have nothing in my life that I would want to exchange for that pleasure. But I am deeply saddened when I see that my finite intellect lacks so much. I soothe that sadness with my hope—which is dearer to me than life—that I shall exist again and continue to exist, and shall contemplate this Deity more perfectly than I do today. When I consider this short and fleeting life in which I see that my death may occur at any moment, if I had to believe that I would have an end, and be cut off from that holy and glorious contemplation, I would be more miserable than any of the creatures who don't know that they will end. Before my death my fear of death would make me wretched, and after my death I would entirely cease to be and hence be wretched because I would be separated from that divine contemplation.

Your opinions seem to imply that when I come to an end here I will come to an end for eternity. Against this, God's word and will fortify me with his inner witness in my soul that after this life I shall, in a more perfect state, enjoy myself in the contemplation of that most perfect Deity of all. [He goes on in rapturous terms about how much that hope does for his happiness, whether or not what he hopes for will actually happen. After then speaking of his intense wish for it to happen, i.e. to have an after-life in which he can 'continue contemplating that perfect Deity', he says something that Spinoza will pick up on sharply on page 41:] If only I get that, it is a matter of indifference to me what men believe here, what they persuade one another of, and whether it is something founded on our natural intellect and can be grasped. . . .

But your view that our service is not pleasing to God would abolish those hopes. I cannot grasp why, if God takes no pleasure in our service and praise (if I may speak of him

in so human a way), why he should produce us and preserve us. But if I mistake your view in this, then please explain how.

I have delayed myself, and perhaps also you, too long with this. Seeing that my time and paper are running out, I shall end. . . .

I have busied myself recently with reflection on some of God's attributes. Your *Metaphysical Thoughts* has given me no little help with these. Indeed I have only paraphrased your views, which seem to me nothing short of demonstrations. So I am astonished to read in Meyer's preface that this is not •your opinion but •what you were obliged to teach your student whom you had promised to teach Descartes's philosophy. He says that you have a completely different view both of God and of the soul, particularly of the soul's will. I also read in that preface that you will shortly publish these *Metaphysical Thoughts* in an expanded form. I long to see that, and your published account of your own thoughts, for I expect something special from them. But it is not my custom to praise someone to his face.

This is written in sincere friendship, as your letter requests, so that we may discover the truth. Forgive me for having written more than I intended to. If I receive an answer to this, you will oblige me very much. As for being allowed to write in the language you were brought up in, I cannot refuse you, so long as it is Latin or French. But I ask to receive the answer to this letter in Dutch. I have understood your meaning in it very well, and perhaps in Latin I would not understand it so clearly. . . .

In your reply I would like to be somewhat more fully informed what you really understand by a negation in God.

21. to van Blijenbergh, 29.i.1665:

When I read your first letter, I thought our opinions nearly agreed. But from the second, which I received on 21.i, I see that I was quite mistaken, and that we disagree not only about the things ultimately to be derived from first principles, but also about the first principles themselves. I hardly believe that we can instruct one another with our letters because I see that no demonstration, however logically sound it may be, has weight with you unless it agrees with sacred Scripture as interpreted by you or by theologians known to you. If you believe that

God speaks more clearly and effectively through sacred Scripture than through the light of the natural intellect, which he has also granted us and (with his divine wisdom) continually preserves, strong and uncorrupted,

then you have powerful reasons for bending your intellect to the opinions you attribute to sacred Scripture. I myself could hardly do otherwise.

But as for myself, I clearly and straightforwardly confess that *I don't understand sacred Scripture*, though I have spent several years on it. And I am well aware that when I have found a solid demonstration I can't get into a thought-frame where I have doubts about it. So I am completely satisfied with what the intellect shows me, and entertain no suspicion that I have been deceived in it, or that Sacred Scripture can contradict it (even though I do not investigate it). For the truth does not contradict the truth, as I have already indicated clearly in *Metaphysical Thoughts*. (I can't cite the chapter because I don't have the book here with me in the country.) And even if I found that the fruits I have gathered from the natural intellect were false, they would still make me happy, because I enjoy them and seek to pass my life, not

in sorrow and sighing, but in peace, joy, and cheerfulness. By so doing, I climb a step higher. Meanwhile I recognise something that gives me the greatest satisfaction and peace of mind: that all things happen as they do by the power and immutable decree of a supremely perfect Being.

But to return to your letter, I am sincerely grateful to you for revealing at the outset your manner of philosophising. But I don't thank you for attributing to me the things you want to draw from my letter. What occasion did my letter give you for ascribing to me the opinions •that men are like beasts, •that they die and perish as beasts do, •that our works are displeasing to God, etc.? (On this last point we may differ very much, for you seem to think that God takes pleasure in our works, as someone who is pleased that things have turned out as he wished.) In fact I have said quite clearly that the pious honour God, and love God, and by continually knowing him become more perfect. Is this to make them like beasts? or to say that they perish like beasts? or to say that their works do not please God?

If you had read my letter more attentively you would have seen clearly that our disagreement is located in this alone:

my view: God **as God**—i.e. absolutely, ascribing no human attributes to him—gives to the pious the perfections they receive;

your view: God does this **as a judge**,

That is why you defend the impious, because in accordance with God's decree they do whatever they can, and serve God as much as the pious do. But that doesn't follow from my view, because I don't introduce God as a judge. So I value works by their quality, and not by the power of the workman; and ·I hold that· the wages that follow the work do so as necessarily as it follows from the nature of a triangle that its three angles equal two right angles. This will be understood by anyone who is aware that our highest

blessedness consists in love toward God, and that this love flows necessarily from the knowledge of God that is so greatly commended to us. Moreover, it's easy to prove this if one attends to the nature of God's decree, as I explained in the *Metaphysical Thoughts*. But it can't possibly be understood by someone who confuses the divine nature with human nature.

I had intended to end this letter here, so as not to bother you with matters that serve only for joking and laughter, but are of no use (as is clear from the devoted addition at the end of your letter). But not to reject your request entirely, I'll explain the terms 'negation' and 'privation', and will also briefly explain some things that are needed to clarify the meaning of my preceding letter.

Privation is not the act of depriving but only the pure and simple lack, which in itself is *nothing*. Indeed, it is only a being of reason—a way of thinking—in which we compare things with one another. We say that a blind man is deprived of sight because we easily imagine him as seeing, by comparing •him with others who do see or •his present state with his past state when he did see. When we consider this man in of these ways we say that seeing 'pertains to his nature', and so we say that he is 'deprived' of it. But when we consider God's decree and *his* nature, we can no more say that this man is 'deprived of vision' than we can say this of a stone. For at that time vision no more pertains to that man without contradiction than it does to the stone, since nothing more pertains to that man—nothing more is *his*—than what the Divine intellect and will attribute to him. So God is no more the cause of his not seeing than of the stone's not seeing, which is a pure negation.

Similarly, considering a man who is led by an appetite for sensual pleasure we compare his present appetite with •that which the pious have or with •that which he had at some

earlier time. We say that this man has been 'deprived' of a better appetite because we judge that at this time •when he is pursuing sensual pleasure• an appetite for virtue belongs to him. We can't do this if we attend to the nature of the Divine decree and intellect; for looked at in thnat way the better appetite no more pertains to that man's nature at that time than it does to the nature of the Devil, or of a stone. That is why, in that regard, the better appetite is not a privation but a negation—•not something the man is deprived of, but merely something he doesn't have•.

So privation is nothing but denying that a thing has something that we judge to pertain to its nature, and negation nothing but denying that a thing has something because it doesn't pertain to its nature. So clearly Adam's appetite for earthly things was evil only in relation to our intellect, but not in relation to God's. God knew the past and present of Adam, but that •contrast• didn't lead him to think of Adam as 'deprived' of the past state, i.e. to think that the past state pertained to his nature. If he had, he'd have been understanding something contrary to his will, i.e. contrary to his own intellect.

If you had perceived this properly, and also seen that I do *not* accept the 'freedom' that Descartes ascribes to the mind, . . . you wouldn't have found even the least contradiction in my words. But I see that I'd have done better in my first letter to reply in Descartes's words, by saying that

we can't know how our freedom. . . is compatible with God's providence and freedom, so that we can find no contradiction between God's creation and our freedom because we have no grasp of how God created things or (what is the same) how he preserves them.

(I did say this at various places in the *Metaphysical Thoughts*.) But I thought. . . that if I didn't reply with my own opinion I would be sinning against the duty of the friendship

that I was offering from the heart. But these things are of no importance.

Nevertheless, because I see that you don't yet understand Descartes's meaning, I ask you to attend to these two things:

(1) Neither Descartes nor I ever said that it pertains to our nature to contain our will within the limits of the intellect, but only that God has given us a determinate intellect and an indeterminate will, though we don't know why he created us; moreover, an indeterminate or perfect will of that kind not only makes us more perfect, but also is quite necessary for us, as I shall say in what follows.

(2) Our freedom doesn't consist in •contingency or in a certain •indifference, but in a manner of affirming and denying; so that the *less* indifferently we affirm or deny a thing, the *more* free we are. For example, if God's nature is known to us then

affirming that God exists follows necessarily from our nature,

just as

having three angles equal two right angles follows from the nature of a triangle.

But we are never more free than when we affirm something in such a way. Because this necessity is nothing but God's decree (as I show in the *Metaphysical Thoughts*), we can to some extent understand how we do something freely and are the cause of it although we do this necessarily and from God's decree. I say that we can understand this to some extent when we affirm something that we perceive vividly and clearly. But when we assert something that we don't grasp vividly and clearly, i.e. when we allow our will to wander beyond the limits of our intellect, then

•we can't in that way perceive that necessity and God's decrees, but

•we can •perceive• our freedom,

which our will always involves. . . . If we then struggle to reconcile •our freedom with •God's decree and continuous creation, we're confusing what we understand vividly and clearly with what we do not understand; so our struggle is in vain. It is enough for us, then, that we know that •we are free, that •this is possible for us despite God's decree, and that •we are the cause of evil (because no act can be called evil except in relation to our freedom).

These are the things that concern Descartes, which I mention to demonstrate that his position on this involves no contradiction. Now I turn to the things that concern me.

The chief advantage that comes from my opinion is •that accepting it leads to• our intellect's offering mind and body to God, free of any superstition. I do not deny that prayers are quite useful to us. •I'm not equipped to say anything about that• because my intellect is too weak to determine all the means God has to lead men to love him, i.e. to salvation. So this opinion of mine is far from being harmful; on the contrary, it is the only means of attaining the highest degree of blessedness for those who aren't in the grip of prejudice or childish superstition.

You say that I make men like elements, plants, and stones by making them so dependent on God, which shows well enough that you understand my opinion very perversely and confuse things that concern the intellect with ones that concern the imagination. If you perceived with a pure intellect what it is to depend on God, you certainly wouldn't think that things' dependence on God makes them dead, corporeal, and imperfect. Who has ever dared to speak so vilely of the supremely perfect Being? On the contrary, you would grasp that things are perfect •to the extent that they depend on God and •because they depend on God. So get our best understanding of this dependence and necessary-operation-through-God's-decree when we focus not on logs

and plants but on the most intelligible and perfect created things. . . .

I can't hide my astonishment at your asking: 'If God doesn't punish transgressions, what reason do I have for not committing all sorts of knavery?' (We're talking here about punishment of the kind a judge inflicts, not the kind of punishment that the transgression automatically brings with it.) Well, someone who abstains from knavery only through fear of punishment (I hope this isn't you!) does not in any way act from love and does not at all esteem virtue. As for myself, I try to abstain from those things because they are outright contrary to my individual nature, and make me wander from the knowledge and love of God.

Next, if you had •attended a little to human nature, •perceived the nature of God's decree as I explain it in the *Metaphysical Thoughts*, and •known how things ought to be deduced before one arrives at a conclusion, you wouldn't have said so boldly that my opinion makes us like logs, etc. Nor would you have attributed so many absurdities to me.

Winding up your application of your I-rule [see page 32] you say there are two things you cannot perceive. To the first I reply that Descartes provides all you need for drawing your conclusion: attend to your own nature and you'll find by experience that you can suspend your judgment. If you say that you don't find by experience that you have so much power over reason today that you can always continue this, Descartes would regard that as on a par with saying that you can't see today that as long as you exist you will always be a thinking thing. . . . That certainly involves a contradiction.

Regarding the second point, I agree with Descartes that if we couldn't extend our will beyond the limits of our very limited intellect, we would be very wretched: it wouldn't be in our power •to eat a piece of bread, •to take a step, •to *not* take a step; for all things are uncertain and full of danger.

Passing now to your W-rule [see page 33], I say that I think I don't attribute to Scripture the **truth** that you believe to be in it, but that I ascribe as much **authority** to it as you do, if not more; and that I am much more careful than others are not to attribute to it certain childish and absurd opinions. No-one can do this unless he either understands philosophy well or has divine revelations. So I'm not much moved by the explanations that ordinary theologians give of Scripture, especially if they are based on always taking Scripture absolutely literally. Except for the Socinians, I have never seen a theologian so dense that he didn't see that sacred Scripture often speaks of God in a human way and expresses its meaning in parables.

As for the contradiction you strive—in vain, I think—to show, I don't think you are giving 'parable' its common meaning. Who ever heard that someone who expresses his conceptions in parables 'departs from his own meaning'? When Micaiah said to King Ahab [1 *Kings* 22:19–22] that he had seen God sitting on his throne, with the heavenly hosts standing on his right and his left, and that God asked them who would deceive Ahab, that was certainly a parable by which the prophet expressed well enough the main thing he was supposed to reveal in God's name on that occasion (which was not an occasion for teaching lofty doctrines of theology). . . .

So also when the other prophets revealed God's word to the people, by God's command, they did it with parables—not as the means God demanded, but just as the best means of leading the people to the primary goal of Scripture. According to what Christ himself taught [*Matthew* 22:37–40], that goal consists in loving God before all else, and one's neighbour as oneself. Lofty speculations, I believe, have nothing to do with Scripture. I haven't—and I *couldn't*—learn any eternal attributes of God from sacred Scripture. . . .

The rest of your letter—•where you say ‘Finally that supremely perfect Being knew very well how much the people could understand’, •what you bring up against the example of the poison, and finally •what concerns the *Metaphysical Thoughts* and what follows—none of this is relevant to the present problem.

Meyer’s preface •shows what Descartes would still have to prove if he were to construct a real demonstration of free will, and •adds that I favour the contrary opinion, and how I favour it. In its proper time perhaps I shall show this, but not now.

I haven’t thought about my work on Descartes. . . .since it was published in Dutch. The reason for this would take too long to tell. So nothing more remains to be said.

22. from van Blijenbergh, 19.ii.1665:

I received your letter of 28.i in good time, but occupations other than those of study have prevented me from answering before now. And since your letter was interlarded with touchy reproofs, I hardly knew what to think of it. In your first letter you firmly and heartily offered me your friendship, with a declaration that my first letter very pleasing to you and that future letters would be also. Indeed, I was amicably invited to raise freely any difficulties I might still have. That is what I did, rather extensively, in my letter of 16.1. In view of your request and promise, I expected a friendly and instructive reply; but what I received doesn’t sound very friendly. You say that •no demonstrations, no matter how clear they are, count with me, that •I don’t understand Descartes’s meaning, that •I mix corporeal and spiritual things too much, etc., so that we can no longer instruct one another by exchanging letters.

To this I reply, very amicably, that I’m sure you understand those things better than I do, and that you are more accustomed to distinguish corporeal from spiritual things, for you have already ascended to a high level in metaphysics, where I am a beginner. That is why I sought to win your favour, to get instruction. But I never thought that by making frank objections I would give occasion for offence. Thank you for the trouble you have taken with both letters, and especially the second. I think I have grasped your meaning more clearly there than in the first; but I still can’t assent to it unless the difficulties I think I find in it are removed. That should not—*cannot*—give you any reason for offence. It is serious intellectual malpractice to assent to the truth without having the needed grounds for assent. Even if your conceptions were true, I shouldn’t assent to them as long as I still find them obscure or have any reason for doubt, even if my doubts arise not from what you are saying but from the imperfection of my intellect. Because you know this only too well, don’t think ill of me if I again raise some objections, as I’m bound to do as long as I can’t grasp the matter clearly. This is because I want to discover the truth, not because I want to distort your meaning. So I ask for a friendly reply to these few words.

You say that no thing has more essence than the divine will and power give it. And when we attend to the nature of a man who has an appetite for sensual pleasure, and compare his present appetites with those of the pious, or with those he himself had at another time, then we say that that man is ‘deprived of’ a better appetite because we judge that the appetite for virtue belongs to him. We can’t do this if we attend to the nature of God’s decree and intellect; for in relation to *that* the better appetite no more pertains to the nature of that man at that time than it does to the nature of the devil, or of a stone, etc. For even though God knew the

past and present state of Adam, that didn't lead him to think of Adam as 'deprived' of his past state, i.e. that the past state belonged to his present nature, etc.

From these words it seems to me (though I am subject to correction) to follow that nothing pertains to an essence except what it has at the moment when it is perceived. That is, if I have an appetite for sensual pleasure, that appetite pertains to my essence at that time; and if I have no appetite for sensual pleasure, then that lack of appetite pertains to my essence at that time. It also follows that in relation to God there's as much perfection. . . .in my actions when I have an appetite for sensual pleasure as when I don't, when I engage in all kinds of knavery as when I practice virtue and justice. At every time I do only what my essence at that time leads me to do; and so according to your views God desires knavery in the same way that he desires the things you call 'virtue'.

[He now goes through all that again, this time saying that Spinoza is committed to this incredible conclusion regarding 'God, as God, and not as a judge'—picking up on something Spinoza says on page 35.]

You say that the pious 'serve God'; but all I can get from your writings is that •serving God is simply •doing what God has willed that we should do; and you ascribe *that* also to the godless and sensual. So where's the difference, in relation to God, between the service of the pious and that of the godless? You say also that the pious in serving God continually become more perfect. But I can't see what you mean by 'become more perfect' or what 'continually become more perfect' means. For the godless and the pious both receive their essence. . . .from God (as God, not as a judge). And they both carry out God's will in the same way, namely according to God's decree. So how can they be different in how they relate to God? For that 'continually becoming more perfect' flows not from the act but from the will of God, so

that if the godless become less perfect through their acts, that too flows not from their acts but only from the will of God. Both are merely carrying out God's will. So why should the pious continually become more perfect through his acts and the godless be consumed in serving?

[He now tackles Spinoza on the question of what perfection is, saying 'I am sure there's an error concealed here, either yours or mine'. All he can get from Spinoza's writings is that a thing is called more or less perfect in proportion to its having more or less essence; but on that basis there is no difference in perfection between pious acts and impious ones.]

You must forgive me if I ask whether killing is as pleasing to God as giving charity, whether in relation to him stealing is as good as being just. If you say 'No', why? If you say 'Yes', what reasons can there be for me to act in the way you call 'virtuous' rather than in the other way? What law or rule forbids me kill more than to give charity? If you say *the law of virtue* itself, I must confess that I can't find in your writings any law according to which virtue could be regulated or known. . . . The fact is that I can't grasp what you think virtue—or the law of virtue—is, so I don't understand why you say that we must act from love of virtue.

You say that you refrain from vice and knavery because they are contrary to your individual nature and would make you stray from the divine knowledge and love. But in all your writings I see no rule or proof of this; indeed, the opposite seems to follow from what you have written. You refrain from the things I call 'vice' because they are contrary to your individual nature, but not because they contain vice in themselves. You refrain from doing them as we refrain from eating food that our nature finds disgusting. Those who refrain from evils only because their nature finds them disgusting can't expect us to celebrate their virtue!

Nor can I see in your writings any basis for your statement that acts that I call 'knavery' would make you stray from the knowledge and love of God. . . . How can an action determined by God and dependent on him make you stray from the love of God? To *stray* is to be confused and independent, and on your view that is impossible. You hold that all our actions come from our essence, which comes from God; so how can we stray? I must be misunderstanding 'stray'. . . .

Here there are some further questions.

(1) Do thinking substances depend on God in a different way from how lifeless ones do? Thinking beings have more essence than lifeless ones do, but don't they both require God and God's decrees for their activities in general, and for such-and-such actions in particular? So aren't they dependent in the very same way?

(2) Because you do not grant the soul the freedom Descartes ascribed to it, what distinction is there between the dependence of thinking substances and that of those without a soul? And if they don't have freedom of the will, how do you conceive of their dependence on God, and of the soul's dependence on God?

(3) If our soul doesn't have that freedom, isn't our action God's action? isn't our will God's will?

I shall look forward to receiving, shortly, your answer to this letter. Perhaps in that way I can understand your meaning somewhat better and then we'll discuss these matters in person somewhat more fully. For after I have your answer I shall have to be in Leyden in a few weeks, and will give myself the honour of greeting you while I am there, if that is agreeable to you. . . .

PS: In my excessive haste I have forgotten to include this question: Can't we by our prudence prevent what would otherwise happen to us?

23. to van Blijenbergh, 13.iii.1665:

This week I received two letters from you, the one of 9.iii serving only to inform me of the other of 19.ii, which was sent to me from Schiedam. In the latter I see that you complain of my having said that no demonstration is of any force with you, etc., as if I had said that with regard to my own reasonings because they didn't immediately satisfy you. That was far from my meaning. I had in mind your own words:

'Whenever my natural knowledge cannot—or cannot *easily*—be reconciled with God's word, this word has so much authority with me that I look with suspicion at the conceptions I have imagined to be clear, rather than putting them above and against the truth I think I find prescribed to me in that book.' [page 29]

[Spinoza shortens this, ending with '...rather etc.']. So I only repeated briefly your own words, and I don't believe that I gave the slightest reason for offence, especially because I brought that up to show the great difference between us.

Furthermore, because you had said at the end of your second letter [page 34] that your only wish was to persevere in your belief and hope, and that other things that we can persuade one another of concerning the natural intellect are indifferent to you, I thought and still think that my writing could be of no use, and that therefore it was more advisable for me not to neglect my studies—which I would otherwise have to set aside for so long—for the sake of things that can't be useful. This doesn't contradict my first letter because there I considered you as a pure philosopher; and even many who consider themselves Christians accept that a philosopher's only touchstone of truth is the natural intellect, not theology. But you have taught me otherwise and shown me that the foundation on which I intended to build our friendship was not laid as I thought.

...Having said enough to show that I have given you no reason for displeasure, much less to think that I can't bear contradiction, I now answer your objections again.

First, I say that God is absolutely and really the cause of everything that has essence, no matter what it is. If you can demonstrate now that evil, error, knavery, etc. are things that express essence, then I will grant completely that God is the cause of knavery, evil, error, etc. But I think I have shown well enough that what constitutes the form of evil, error, and knavery does not consist in something that expresses essence, and that therefore we can't say that God is the cause of it.

Nero's matricide, insofar as it comprehends something positive, was not knavery. Orestes performed the same external action, and with the same intention of killing his mother; but he is not blamed, or at least not as severely as Nero is. What, then, was Nero's knavery? It was his being—as his act showed—ungrateful, without compassion, and disobedient. None of these things expresses any essence, so God was not the cause of them, though he was the cause of Nero's act and intention.

Secondly, when we are speaking philosophically we must not use theological ways of speaking. For because theology has usually—and that not without reason—represented God as a perfect man, it is appropriate in theology to say that God desires something, that he finds sorrow in the acts of the godless and takes pleasure in those of the pious. But in philosophy we understand clearly that to ascribe to God those attributes that make a man perfect is as bad as ascribing to a man the attributes that make an elephant or an ass perfect. ... Speaking philosophically, we can't say that God 'desires' something or that something is 'pleasing' or a cause of 'sorrow' to him. Those are all human attributes that have no place in God.

Finally, I should like it noted that although

- the acts of the pious, i.e. those who have clearly the idea of God according to which all their acts and thoughts are determined,
- the acts of the godless. i.e. those who don't have that idea of God, but only confused ideas of earthly things by which all their acts and thoughts are determined, and
- the acts of everything there is,

follow necessarily from God's eternal laws and decree and continually depend on God—nevertheless they differ from one another not only in degree but also essentially. A mouse depends on God as much as an angel does, but a mouse isn't a kind of angel; sadness depends on God as much as joy does, but sadness isn't a kind of joy.

I think that answers your objections (if I have understood them; sometimes the conclusion you draw seems to differ from the proposition you undertook to prove). But this will be more evident if I apply these principles to answering your questions:

(1) *Is killing as pleasing to God as almsgiving?* I don't know (philosophically speaking) what you mean by 'pleasing to God'. If the question is 'Does God hate one and love the other?' or 'Has one done God an injury and the other a favour?', then I answer 'No'. If the question is 'Are men who kill and those who give charity equally good or perfect?' again I say 'No'.

(2) *Is stealing in relation to God as good as being just?* If 'good in relation to God' means that the just man does God some good and the thief does him some evil, I answer that neither the just man nor the thief can cause God pleasure or displeasure. But if the question is 'Are the two acts, considered as something real and caused by God, equally perfect?' I reply that looked at in that way they may well be.

If you then ask ‘Are the thief and the just man equally perfect and blessed?’ then I answer ‘No’. For I understand a ‘just’ man to be one who constantly desires that each person should possess his own. In my *Ethics*, which I have not yet published, I show that this desire necessarily arises in the pious from their clear knowledge of themselves and of God. [This is Spinoza’s first reference in the correspondence to his *Ethics* under that title.] The thief has no desire of that kind, which shows that he must lack the principal thing that makes us men, namely knowledge of God and of himself.

If you still ask what can move you to perform the act I call ‘virtuous’, I reply that I can’t know what way, of the infinitely many there are, God uses to determine *you* to such works. Perhaps he has imprinted a vivid idea of himself in you, and makes you—through love of him—forget the world and love all men as yourself. It’s clear that such a constitution of mind is contrary to all the ones we call ‘evil’; so they can’t exist in one subject. . . .

(3) *If there was a mind to whose individual nature the pursuit of sensual pleasure and knavery was not contrary, is there a reason for virtue that should move that mind to do good and refrain from evil?* This question presupposes a contradiction. It is like asking: If it agreed better with the someone’s nature to hang himself, would there be reasons why he should not hang himself? But suppose it were possible that there should be such a nature. Then I say (whether I grant free will or not) that if anyone sees that he can live better on the gallows than at his table, he would act very foolishly if he didn’t go hang himself. Someone who saw clearly that he would enjoy a better and more perfect life or essence by being a knave than by following virtue would also be a fool not to be a knave; for acts of knavery would be virtue in relation to such a perverted human nature.

As for the other questions that you have added at the end of your letter, since one could ask a hundred in an hour without ever coming to a conclusion on anything, and since you don’t press much for an answer, I shall leave them unanswered. For now I shall say only that I shall expect you at the time we arranged, and that you will be very welcome to me. . . .

24. from van Blijenbergh, 27.iii.1665:

When I had the honour of being with you, the time didn’t allow me to stay longer with you. Still less could my memory retain everything we discussed, although immediately on leaving you I collected all my thoughts in order to retain what I had heard. So in the next place I stopped at I tried to put your opinions on paper myself, but I found then that I hadn’t retained even a quarter of what was discussed. So you must excuse me if I trouble you again by asking about matters where I didn’t clearly understand your meaning or didn’t retain it well. (I wish I could do something for you in return for your trouble.)

(1) When I am reading your *Descartes’s ‘Principles’* and *Metaphysical Thoughts*, how am I to distinguish what is stated as Descartes’s opinion from what is stated as your own?

(2) Is there really error, and what does it consist in?

(3) What is your reason for holding that the will is not free?

(4) Why do you have Meyer say this in the preface?

Though he accepts. . . that there is a thinking substance in nature, he denies that it constitutes the essence of the human mind; instead he maintains that just as extension is determined by no limits, so also thought is determined by no limits. Therefore, just as the human body is

not extension absolutely, but only an extension determined in a certain way according to the laws of extended nature by motion and rest, so also the human soul is not thought absolutely, but only a thought determined in a certain way according to the laws of thinking nature by ideas, a thought which, one infers, must exist when the human body begins to exist.'

This seems to imply that just as the human body is composed of thousands of small bodies, so also the human mind is composed of thousands of thoughts; and that just as the human body when it disintegrates is resolved again into the thousands of bodies of which it was composed, so also our mind, when separated from our body, is resolved again into that multitude of thoughts of which it was composed. . . .

[He nags away at this, with details that we needn't concern ourselves with, since Spinoza gives them the back of his hand.]

(5) You maintained in our conversation and in your letter of 13.iii that from our clear knowledge of God and of ourselves there arises in us a constant desire that each should remain in possession of his own; you haven't explained *how* that knowledge has that result. . . . How does it proceed from the knowledge of God that we are obliged to love virtue and to omit those acts we call vicious? On your view killing and stealing contain something positive in them, just as much as giving charity does; so how does it happen that killing doesn't involve as much perfection, blessedness, and satisfaction as giving charity?

Perhaps you will say, as you do in your letter of 13.iii, that this problem belongs to the *Ethics*, and that you discuss it there. But until it is solved and the preceding questions are answered I can't clearly understand your meaning. . . .

25. from Oldenburg, 28.iv.1665:

I was delighted to learn in a recent letter from Serrarius that you are alive and well and remember your Oldenburg. But at the same time I complain greatly of my fortune (if I may use that word!) in being deprived for so many months of the enjoyable correspondence I used to have with you. The fault lies both with •a great deal of business and with •frightful domestic misfortunes. [We don't know what these were.] My great fondness for you and my faithful friendship will always remain steadfast and unshakable through the years. Boyle and I often talk about you, your erudition, and your profound meditations. We would like to see the fruit of your understanding published and entrusted to the embrace of the learned. We're sure you won't disappoint us in this.

There is no need for Boyle's essay on nitre and on solidity and fluidity to be published in Holland. It has already been published in Latin here, but there is no opportunity to send you copies. I ask you, therefore, not to allow any of your printers to undertake such a thing.

Boyle has also published a notable treatise on colours, both in English and in Latin, and at the same time an experimental history of cold, thermometers, etc., in which there are many excellent things and many new things. Only this unfortunate war prevents me from sending these books to you. [War had broken out again between the Dutch and the English a month earlier.]

Another notable publication is a treatise on sixty microscopic observations [Robert Hooke's *Micrographia*], in which many things are discussed boldly but philosophically (and on mechanical principles). I hope our booksellers will find a way of sending copies of all of these to your country. For my part, I am anxious to receive from you what you have done recently or are working on now.

26. to Oldenburg, v.1665:

A few days ago a friend of mine said he had been given your letter of 28.iv by an Amsterdam bookseller, who no doubt received it from Serrarius. I was extremely glad to learn that you were well and that you are as favourably disposed toward me as before. I have often asked Serrarius and Christiaan Huygens (who also told me he knew you) about you and your health. I also learned from Huygens that the very learned Boyle is alive and has published that notable treatise on colours in English. Huygens would lend it to me if I understood English.

So I'm pleased to learn from you that this treatise (as well as the other on cold and thermometers, which I hadn't previously heard about) has been given Latin citizenship and published. Huygens also has a copy of the book on microscopic observations, but I believe it is in English.

He has told me wonderful things about these microscopes, and also about certain telescopes, made in Italy, with which they could observe eclipses of Jupiter caused by the interposition of its satellites and also a certain shadow on Saturn which looked as if it were caused by a ring. These things make me astonished at Descartes's haste. He thought that Saturn's projections are planets, perhaps because he never saw them touching Saturn, and he said that the reason why these 'planets' don't move may be that Saturn doesn't rotate around its own axis. But this doesn't fit well with his principles; he could easily have come up with an explanation that did fit his principles if he hadn't laboured under a prejudice.

27. to van Blijenbergh, 1.vi.1665:

When I received your letter of 27.iii, I was about to leave for Amsterdam. So I left it at home, only half-read, intending to answer it on my return. I thought it was only about the first problem, but when I read it through I found that its content was quite different. Not only did it ask for a proof of things I had Meyer put in the preface to indicate to everyone my own opinions, not to prove or explain them, it also asked for proof of a great part of ethics, which as everyone knows must be based on metaphysics and physics. So I couldn't bring myself to satisfy you on this.

I wanted a chance to talk with you in the friendliest way, so that I might ask you to desist from your request, give you a reason for declining, and show you that those things won't help to solve your first problem, but that on the contrary most of them depend on the solution of that problem. You have thought that you can't understand my opinion regarding the necessity of things until you have answers to these new questions; but in fact those answers and what pertains to them can't be perceived unless one first understands that necessity. For as you know, the necessity of things concerns metaphysics, the knowledge of which must always come first.

However, before I could get the desired opportunity, I received another letter this week, under cover from my Amsterdam host, which seems to show more displeasure at the long wait. So I need to write these few lines to tell you briefly my resolution and intention. That I have now done. I hope that when you have weighed the matter you'll voluntarily desist from your request and still retain your good will toward me. For my part, I shall show in every way that I can or may that I am your well-disposed friend and servant, B. de Spinoza

28. to Bouwmeester, vi.1665:

I don't know whether you have completely forgotten me, but many things make me suspect that you have. First, when I was about to leave ·Amsterdam· I wanted to say goodbye to you, and since you had invited me I was sure I would find you at home. But I learned that you had gone to The Hague. I returned home to Voorburg, not doubting that you would at least visit us in passing. But you have returned home, God willing, without greeting your friend. Finally, I have waited three weeks, and in all that time I have no letter from you.

If you want to remove this opinion of mine, you can do so easily by a letter in which you can also indicate a way of arranging our correspondence, of which we once talked in your house. Meanwhile, I *beg* you, by our friendship, to pursue serious work energetically and with true enthusiasm, and to devote the better part of your life to the cultivation of your intellect and soul. You must do this *now*, while there is time, before •you complain that the time for that is past or •you are past.

I don't want you to be afraid to write freely to me, so I should tell you that I think you •have less confidence in your ability than you should and •are afraid of asking or suggesting something unbecoming a learned man. . . . Well, if you fear that I will communicate your letters to others who may then subject you to mockery, I give you my word that from now on I'll keep them scrupulously and won't communicate them to any other mortal without your permission. On these conditions you can begin our correspondence, unless perhaps you doubt my good faith. I don't believe for a moment that you do; but I want to learn your opinion about these matters from your next letter.

I also want some of the conserve of red roses that you promised, though for a long time now I have been better.

[This mention of a recognised medicine for catarrhal affections of the lungs is the first explicit evidence of the pulmonary disease that Spinoza died of a dozen years later.] After I left ·Amsterdam· I opened a vein once, but the fever didn't stop (though I was somewhat more active even before the bloodletting—because of the change of air, I think). But I have suffered two or three times from tertian fever. By good diet I have got rid of it; my only care is that it should not return.

As for the third part of our philosophy, I shall soon send some of it either to you (if you wish to be its translator) or to friend de Vries. I did decide to send nothing until I finished it, but it's turning out to be longer than I expected and I don't want to hold you back too long. I shall send up to about the 80th proposition. [This refers to the *Ethics*, though why 'our philosophy' is not clear. In its final form Part 3 has only 59 propositions; at the time of this letter Spinoza was evidently planning it as a three-part work, including material that eventually went into Part 4.] I hear much about English affairs [meaning: the war], but nothing certain. The populace go on suspecting all sorts of evils, and no-one knows why the fleet doesn't set sail. Indeed, there do seem to be things to be anxious about, and I'm afraid that our countrymen are going too far with their attempt to be wise and cautious. But the outcome will eventually show what they have in mind and what they are striving for. May the gods make things turn out well.

I would like to hear what people think there ·in Amsterdam·, and what they know for certain. But more than that, indeed more than anything, I would like to hear that you consider me, etc.

29. from Oldenburg, 20.iv.1665:

From your last letter to me [which we don't have] it is clear that you take our affairs seriously. You have obliged me and also

Boyle, who joins me in sending you thanks and will at the earliest opportunity repay your kindness and affection with every kind of service he can render. So will I.

[A paragraph criticising a 'busybody' who has insisted on doing a new translation into English of Boyle's *experiments and Considerations touching Colours*, although there is already one in print in which Oldenburg had a hand.]

Kircher's *Subterranean World* hasn't yet appeared here because of the plague, which makes most commerce impossible. [The 1665 bubonic plague killed about a fifth of London's population.] In addition we have this dreadful Anglo-Dutch war, which brings with it an Iliad of evils and almost banishes civilised behavior from the world.

Although our philosophical Society [described by Oldenburg on page 9] holds no public meetings at this dangerous time, some of its Fellows have been separately busy with experiments in hydrostatics, anatomy, mechanics and other subjects. Boyle has examined the origin of forms and qualities. . . .and has composed a treatise on this—undoubtedly an excellent one—which will soon go to press. [A large part of Boyle's *The Origins of Forms and Qualities According to the Corpuscular philosophy* can be found on the website from which this version of the correspondence comes.]

From what you have told me about your projected theological-political treatise I see that you are not so much philosophising as (to coin a word) theologising—recording your thoughts about angels, prophecy and miracles. But perhaps you are doing this philosophically. Anyway, I'm sure that the work will be worthy of you and badly wanted—by me in particular. These difficult times stand in the way of freedom of communication, but please don't be reluctant to indicate to me in your next letter what your plan is, what your target is, in this writing of yours.

Every day we expect news here of a second naval battle, unless your fleet has returned to port. The courage that you hint is debated among you is bestial, not human; obviously if men acted according to the guidance of reason they wouldn't tear one another to pieces in this way. But why am I complaining? As Tacitus wrote: There will be vices as long as there are men. But they don't go on continually, and during the breaks better things happen by way of compensation.

[Oldenburg announces a recent letter from astronomer Hevelius, reporting on his recent, current, and near-future work.]

What do your people think about Huygens's pendulums? I'm especially interested in the ones that are said to measure time so exactly that they could serve to determine longitudes at sea. Also, what is happening about his *Dioptrics* and his *Treatise On Motion*, both of which we have long been waiting for. I'm sure he isn't idle; I just want to know what progress he is making.

30. to Oldenburg, 1.x.1665:

Fragment 1:

I have seen Kircher's *Subterranean World* at Huygens's home. He praises Kircher's piety but not his ability! Perhaps this is because Kircher holds that pendulums won't help at all to discover longitudes (which is completely opposed to Huygens's opinion).

You want to know what people here think about Huygens's new pendulums. All I can tell you, so far, is that the craftsman who has the exclusive right to make them is giving up the work because he can't sell them. I don't know whether this is because commerce has been interrupted by the war or because he's trying to sell them at too high a price. . . .

When I asked Huygens about his dioptrics, and about his other treatise on parhelia [see Glossary], he replied that he is still investigating something in dioptrics but that when he has discovered it he'll publish that book along with the treatise on parhelia. But I believe that his thoughts at present are more on his voyage to France (he's preparing to settle there when his father returns) than on anything else.

What he says he is investigating in dioptrics is the question: 'Can the lenses in telescopes be arranged in such a way that the defect of one corrects the defect of the other, so that all the parallel rays passing through the lens will arrive at the eye as though coming together in a mathematical point?' This still seems to me impossible. Apart from that his dioptric only discusses spherical figures—judging from what I have seen of it and what I *understood* him to tell me.

As for the treatise on motion that you ask about, I think you are waiting for that in vain. It's too long now since he began to boast that •by calculation he had discovered rules of motion and laws of nature far different from the ones Descartes gives, and that •Descartes's rules and laws are almost all false. He still hasn't published any example of this. About a year ago he told me that everything he had discovered about motion by calculation he afterwards found had been proven in England by experiments. But I'm sceptical! Moreover, as regards Descartes's sixth rule of motion [in his *Principles of Philosophy* II.51] I judge that he and Descartes are both completely mistaken. . .

Fragment 2

. . . I rejoice that your philosophers are alive and mindful of themselves and their republic •of philosophers•. I shall wait for news of what they do next when the warriors are sated with blood and stop for a rest. If that famous mocker •Democritus• were alive today he would surely die of laughter.

But these turmoils don't move me to laughter or even to tears; they cause me to philosophise to observe human nature better. I don't think it right for me to mock nature, much less to lament it, when I reflect that men like everything else are only a part of nature, and that I don't know how each part of nature •agrees with the whole and •coheres with the other parts. It's because I don't know all this that certain things in nature—things that I perceive in part and only in a fragmentary way, and that don't square with our philosophic mind—used to strike me as disorderly and absurd. But now I go along with everyone's living according to his own mentality: those who want to die for *their* good may do so, as long as I'm allowed to live for *the true* good.

I am currently working on a treatise giving my views about scripture. [This refers to the *Treatise on Theology and Politics*, though Spinoza may not yet be thinking of it as having a political component. It can be found on the website from which this version of the correspondence comes.] I am led to do this by the following considerations:

- (1) the prejudices of the theologians; for I know that they are the greatest obstacle to men's being able to apply their minds to philosophy; so I am busy exposing them and removing them from the minds of the more prudent;
- (2) the opinion the common people have of me; they never stop accusing me of atheism, and I have to rebut this accusation as well as I can; and
- (3) my desire to defend in every way the freedom of philosophising and saying what we think; the preachers here suppress it as much as they can with their excessive authority and aggressiveness.

I haven't heard of any Cartesian explaining the phenomena of the recent comets on the Cartesian hypothesis, and I doubt that they can be rightly explained on that hypothesis. . .

31. from Oldenburg, 12.x.1665:

You act as becomes a judicious man and a philosopher: you love good men, and you shouldn't doubt that they love you in return and judge your merits as they should. Boyle joins me in sending you warm greetings, and urges you to continue with your philosophising vigorously and precisely. Above all, if your work comes up with anything that might tell us the answer to that difficult question about how each part of Nature agrees with the whole of it, and what rules cover each part's cohering with all the other parts, we ask you most affectionately to communicate it to us.

I entirely approve your reasons for writing a treatise on Scripture, and I'm aching to see what you have written on that subject. Serrarius may soon be sending me a small parcel. You could, if you see fit, safely commit to him what you have already written, and be sure that we'll return it to you promptly.

I have glanced through Kircher's *Subterranean World*. His reasonings and theories don't speak well for his ability; but the observations and experiments that he reports testify to his diligence and his desire to deserve well from the republic of philosophers. So you see, I credit him with something more than piety, and you'll easily see what those who sprinkle him with that holy water are up to.

Writing about Huygens's treatise on motion, you indicate that Descartes's rules of motion are almost all false. I don't now have at hand the little book—*Descartes's 'Principles of Philosophy' demonstrated Geometrically*—that you published about this, and I can't recall whether you showed that falsity there, or whether to please others you simply followed Descartes's tracks. I wish you would finally reveal the fruit of your own talent, and entrust it to the philosophical world, to cherish and nourish. I remember

that somewhere you claimed that we can understand and explain very clearly many things that Descartes said surpass human understanding—indeed, things much more sublime and subtle than those. [Meyer makes this claim on Spinoza's behalf in his Preface to *Descartes' 'Principles. . .'*] What's stopping you, my friend? What are you afraid of? Try it. Get on with it. Finish it. It's a task of such importance! The whole chorus of real philosophers will be your advocate—you'll see. I venture to pledge my own loyalty, which I wouldn't do if I were unsure that I can honour my pledge. I can't believe that you intend to oppose the existence and providence of God in any way; and as long as those supports are intact, religion stands firm and any philosophical contemplations are easily either defended or excused. Don't delay any longer, then, and don't let the critics hold you back.

[Re a current dispute between two astronomers, Hevelius and Auzout, about whether what was seen recently was one comet or two: the issue is being adjudicated, Oldenburg says, and when there's a decision someone will tell him and he will tell Spinoza. He adds:] All the astronomers I know think that there were *two* comets, and I haven't heard anyone try to explain their appearance according to the Cartesian hypothesis.

If you learn anything more about Huygens's work, about the success of his pendulums in determining longitudes, or about his move to France, *please* tell me about it as soon as possible. Please tell me also what is being said among you about

- the chances of a peace treaty between the English and the Dutch,
- the plans of the Swedish army that has been sent to Germany, and
- the progress of the Bishop of Munster [who invaded Holland on behalf of the English].

I believe that next summer the whole of Europe will be involved in wars, and everything seems to be tending toward a change such as we've never seen before. Let us serve the supreme Deity with a pure mind, and develop a philosophy that is true, solid and useful.

Some of our philosophers, having followed the King to Oxford ·where he went to escape the plague·, meet there quite often to discuss the advancement of studies in physics. Among other things, they have recently begun to inquire into the nature of sounds. I believe they plan to conduct experiments to determine the relation between •the tension produced in a string by weights and •the pitch of the sound it makes. More about these matters at another time.

32. to Oldenburg, 20.xi.1665:

I am most grateful to you and Boyle for your kind encouragement of my philosophising. I push ahead as well as I can, given my slender ability, never doubting your assistance and good will.

When you ask me for my views about our knowledge of how each part of Nature agrees with the whole to which it belongs and how it coheres with the other parts, I think you're asking why we think that each part of Nature agrees with the whole and coheres with the other parts. For I had said in my preceding letter that I *don't know* how they really cohere and how each part agrees with its whole; to know this I would have to know the whole of Nature and all of its parts. So I'll try to show the reason that compels me to affirm this. Let me warn you in advance that I don't attribute beauty or ugliness to Nature, or order or confusion; because it's only in relation to our imagination that things be called beautiful or ugly, orderly or confused.

When I say that ·two· parts cohere, all I mean is that the laws (= the nature) of one part adapts itself to the laws (= the nature) of the other, so that they are opposed to each other as little as possible. Concerning whole and parts, I regard things as parts of some whole to the extent that the nature of each adapts itself to the natures of the others so that they all agree with one another as far as possible. When they disagree with one another, to that extent each forms in our mind an idea distinct from ·our idea(s) of· the others, leading us to regard it as a whole and not as a part.

For example, when ·in our blood· the motions of the particles of lymph, chyle, etc. adapt themselves to one another in their sizes and shapes in such a way that they completely agree with one another and jointly constitute one fluid, to that extent—and *only* to that extent—the chyle, lymph, etc. are considered as parts of the blood. But when we think of the particles of lymph as being different in shape and motion from the particles of chyle, to that extent we think of ·each of· them as a whole and not as a part.

Suppose that living in the blood there's a little worm that can distinguish by sight the particles of the blood, of lymph, of chyle, etc., and can observe by reason how each particle, when it bangs into another, either bounces back or passes on a part of its motion, etc. It would live in this blood as we do in our part of the universe, and would regard each particle of the blood as a whole and not as a part. It couldn't know how all the parts of the blood are regulated by •the universal nature of the blood, and compelled by •it to adapt themselves to one another so that they agree with one another in a certain way.

Suppose there were no causes outside the blood that would communicate new motions to the blood, and no space outside the blood and no other bodies to which the particles of blood could transfer their motion, it is certain

that the blood would always remain in the same state, and its particles wouldn't change except in ways that could be explained in terms of •the nature of the blood alone, i.e. of •the relation of the motion of the lymph, chyle, etc. to one another.

Thus the blood would always have to be considered as a whole and not as a part. But because there *are* many other causes by which the whole nature of the blood is regulated in a certain way, and which in turn are regulated by the blood, the result is that other motions and other changes happen in the particles of the blood that follow not simply from

the relation of the motion of its parts to one another,
but from

the relation of •the motion of the blood as a whole and
of •its external causes to one another.

In this way the blood has the nature of a part and not of a whole. That is my view about whole and part.

Now, all bodies in nature must be conceived as we have here conceived the blood, for all bodies are surrounded by others and determined by one another to exist and produce an effect in a certain and determinate way, so that the ratio of motion to rest in the whole—i.e. in the whole universe—is always the same. From this it follows that every body. . . must •be considered as a part of the whole universe, •agree with the whole to which it belongs, and •cohere with all the other bodies. And since the nature of the universe is not limited (as the nature of the blood is) but is absolutely infinite, the variations of its parts that can follow from this infinite power must be infinite.

But when the whole is a substance, I think, each part has an •even• closer union with it. . . . Because it is of the nature of a substance to be infinite, it follows that each of its parts pertains to the nature of corporeal substance, and can't conceivably exist without the rest of the substance.

So you see why I think that the human body is a part of Nature, and how I think this can be so. But I think the human mind is a part of Nature too. For I maintain that Nature also has an infinite power of thinking which, just because it is infinite, is a representation of the whole of Nature, its thoughts proceeding in the same way as does Nature, which it represents. And I maintain that the human mind is this same power, considered not as as infinite and perceiving the whole of Nature but as finite and perceiving only the human body. For this reason I maintain that the human mind is a part of a certain infinite intellect.

But it would take too long to give detailed explanations and demonstrations of all these things and everything connected with them; and I don't think you expect me to do so now. Indeed, I'm not sure that I have properly understood you—perhaps the question I have answered is not the one you were asking. Please let me know.

You write that I hinted that Descartes's rules of motion are almost all false; if I remember rightly, I said that Huygens thinks this. The only rule that I said is false is the sixth, and I said that I think Huygens is also wrong about that. In that letter I asked you to tell me about the experiment your Royal Society has tried using this hypothesis. From your silence about this I infer that you aren't permitted to reply.

Huygens continues to be completely occupied with •polishing lenses. He has constructed a rather elegant instrument for this purpose, and he can also use it •as a lathe• for •making the lenses. But I still do not know what progress he has made with this, and to tell the truth I don't much want to, because I know from experience that no instrument can polish lenses as well, and with as little risk of error, as can be done by a free hand. I don't know anything for sure about the outcome of his work with pendulums, or about the timing of his move to France.

The Bishop of Munster, having foolishly gone into Frisia at the head of an army . . . , hasn't been able to accomplish anything; unless winter begins very early, he won't be able to leave Frisia without great losses. He wouldn't have risked this undertaking, I'm sure, if he hadn't been urged to it by some traitor. But this is all old stuff, and nothing in the last week or two has been worth writing about.

[Then some remarks about the Anglo-Dutch war and associated matters.]

I wrote this letter last week, but I couldn't send it because the weather prevented me from going to the Hague. That's the disadvantage of living in a village. Nearly all the letters I receive have taken a week or two to reach me; and there are often difficulties when I want to send a letter. So when I don't reply to you as promptly as I ought to, don't think that this comes from my forgetting you. . . . Please convey my warmest greetings to Boyle. . . .

33. from Oldenburg, 8.xii.1665:

Your philosophical account of the agreement of the parts of Nature with the whole, and their connection with one another is very pleasing, though I don't see how we can eliminate order and symmetry from nature, as you seem to do, especially since you yourself recognise that all its bodies interact in a definite and constant manner. . . . , always preserving the same over-all ratio of motion to rest. This seems to be a sufficient ground for true order.

But perhaps I don't properly understand you here, any more than I did in what you wrote about Descartes's rules. If you would explain to me thoroughly in what respect you judge that Descartes and Huygens are both mistaken about the rules of motion, you would please me very much and I would do my best to deserve this favour.

I wasn't present when Huygens performed his experiments here in London, proving his hypothesis. I am told that this happened, among other experiments:

Someone suspended a one-pound ball in the manner of a pendulum; it was then released, striking another ball suspended in the same way (but weighing only half a pound) at an angle of 40°; Huygens had done a brief algebraic calculation and predicted what the effect would be; and it was exactly as he had predicted.

A certain distinguished gentleman. . . , proposed many such experiments, which Huygens is said to have solved. After I have had a chance to talk to him I may be able to explain this matter to you more fully and precisely.

Meanwhile I urge you once again not to decline my request. And if you know anything about Huygens's success in polishing telescopic lenses, please don't be reluctant to share it with me. Now that—by the grace of God—the plague is less virulent, I hope that our Royal Society will return to London shortly and resume its weekly meetings. If anything notable happens there I will certainly tell you about it.

[After passing on warm greetings from Boyle, Oldenburg reports two biological matters. •Domestic animals that turned out to have grass in their windpipes. How could this happen, and how could they have lived for a while in that condition? •A girl who was reported to have milk in her blood.]

But I pass to politics. Here there is a rumour on everyone's lips that the Israelites will return to their native land after more than two thousand years away from it. Few here believe this, though many—Christians who think it would herald the second coming of Christ—desire it. . . . Until this news is reported by trustworthy men from Constantinople, to whom this matter is of the greatest concern, I can't trust it. But I'm eager to know what the Jews in Amsterdam have

heard about this matter, and how they are affected by this report. If it is true, it seems likely to lead to a world-wide crisis.

There seems to be no hope yet of peace between England and the Netherlands

Explain, if you can, what the Swede and the Brandenburger are up to.

P.S. Soon, God willing, I'll tell you what our philosophers think about the recent comets.

letters 34–58: written in 1666–1674

34. to Hudde, 7.i.1666:

Till now other business has prevented me from sending you what you asked for and I said I would provide, a demonstration that there is only one God from the premise that God's nature involves necessary existence. I start the demonstration with this:

- (1) The true definition of each thing contains nothing except the simple nature of the thing defined.

From this it follows that

- (2) No definition involves or expresses any multiplicity or any definite number of individuals, because a definition involves or expresses nothing but the nature of the thing as it is in itself.

For example, the definition of *triangle* contains nothing but the simple nature of the triangle, not some definite number of triangles; just as the definition of *the mind* as a thinking thing, or the definition of *God* as a perfect being, contains nothing but the nature of the mind or of God; it says nothing about how many minds or gods there are.

- (3) There must necessarily be a positive cause of each existing thing, through which it exists.
 (4) This cause must be affirmed to exist either •in the nature and definition of the thing itself—because existence pertains to its nature, i.e. its nature necessarily contains existence—or •outside the thing.

From these premises it follows that if some definite number of individuals exists in nature, there must be one or more causes bringing it about that there are precisely that number of individuals, neither more nor fewer. Suppose for example that exactly twenty men exist in nature now (and to keep

things simple suppose they are the only men there have ever been): we can't explain why there are twenty of them simply by looking into the cause of human nature in general. That might explain why there is at least one man, but it couldn't explain why there are exactly twenty of them. Now, according to (3) there must be, for each individual man, a reason and cause why *he* exists. But according to (2) and (3) that cause can't be contained in the nature of the man himself, for the true definition of *man* doesn't involve the number twenty. Therefore, according to (4), the cause of the existence of these twenty men—and hence of each of them separately—must exist outside them.

It follows that all the things that are conceived to exist as many in number must result from external causes, and aren't produced by the force of their own nature. But since according to (2) necessary existence pertains to the nature of God, his true definition must contain his necessary existence; so that his necessary existence can be inferred from his true definition. But from his true definition (as I have already demonstrated from (2) and (3)) the necessary existence of many gods cannot be inferred. It follows, therefore, that there is only one God. Q.e.d.

This is the method that seems best to me at this time to demonstrate the proposition. Previously I demonstrated it in a different way, using the distinction between essence and existence. But in the light of what you said to me I was happy to send you this demonstration. I hope you will find it satisfactory, and I shall await your judgment on it.

35. to Hudde, 10.iv.1666:

In your last letter, written on 30.iii, you have cleared up very nicely what was somewhat obscure to me in your earlier letter (10.ii). Now that I know what your own opinion is, I shall state the question as you conceive it, namely:

•Is there only one being that exists by its own sufficiency or power?

Not only do I answer Yes, but I also undertake to demonstrate this from the fact that the being's nature involves necessary existence. (It could easily be demonstrated from •God's intellect—as I showed in my *Descartes's 'Principles'*—or from •God's other attributes.) I start by showing what properties a necessarily existent being must have. It must be . . .

(1) . . . eternal.

For if a limited duration were attributed to it, it would be conceived as not existing after that, i.e. as not involving necessary existence, which would be contrary to its definition.

(2) . . . simple, and not composed of parts.

Component parts must be prior in nature and knowledge to what is composed of them. In a being that is eternal by its nature this cannot be.

(3) . . . not limited; it can only be conceived as infinite.

To think of that being (and its nature) as limited is to think of it as not existing outside its limits; and that is contrary to its definition. [Spinoza is saying in effect that something that exists necessarily must exist **(1)** everywhen and **(3)** everywhere.]

(4) . . . indivisible.

If the being *x* were divisible, it could be divided into parts, and then there are two cases:

(i) The parts are of a different nature from *x* itself; in which case *x* could be destroyed by being pulled to pieces, and so could fail to exist, which is contrary to its definition.

(ii) The parts are of the same nature as *x* itself; in which case each part of *x* would involve necessary existence through itself, which means that it could exist (and be conceived) independently of the other parts, so that its nature could be grasped as finite, which (by **(3)** above) is contrary to the definition.

This shows us that if we try to ascribe any imperfection to a being of this kind, we shall immediately fall into a contradiction. For whether the supposed imperfection consists in •some defect or limitedness, or •some change forced on the being by external causes stronger than it is, it always comes down to this: . . .the being in question does not exist necessarily. For that reason I conclude that

(5) whatever involves necessary existence cannot contain any imperfection, but must express pure perfection.

Next,

(6) If we suppose that a being that *doesn't* express all perfections exists of its own nature, we must also suppose that the being which contains within itself all perfections also exists. For if a being with a lesser power exists by its own sufficiency, then of course a being with a greater power must also exist by its own sufficiency.

[Spinoza explains, not very clearly, that that argument relies on a tie between perfection and power.]

To come to the point at last: I say that there can be only one being whose existence pertains to its nature, namely the being that has all perfections in itself—the one I call 'God'. A being to whose nature existence pertains must express every perfection (by proposition 5) and no imperfection; so its nature must be possessed by God (who by proposition 6, we must also hold exists), because God has all perfections and no imperfections. And nothing other than God can have it, because otherwise one and the same nature involving

necessary existence would exist in two forms, which according to the preceding demonstration is absurd. So God and nothing else involves necessary existence. This is what was to be demonstrated.

36. to Hudde, vi.1666:

I have not been able to respond more quickly to your letter of 9.v. Because I see that for the most part you are suspending judgment on the demonstration I sent you—I think because you find it obscure—I shall try to explain its meaning more clearly here.

First, in (1)–(4) I listed four properties that a being existing by its own power must have. These four, and others like them, I boiled down to *one*—namely *pure perfection*—in (5). Next, to derive everything needed for the demonstration only from the given supposition, I sought in (6) to demonstrate God's existence. And from that, finally, calling on nothing else but the simple meanings of words, I inferred the desired conclusion.

That in short is what I was trying to do. Now I shall explain the meaning of each step separately, beginning with the properties set out first.

You don't find any difficulty in proposition (1); and it is nothing but an axiom, as is (2). All I mean by 'x is simple' is 'x is not composite'—doesn't have parts that differ in nature from x or parts agreeing in nature with x. The demonstration is certainly universal.

You have perceived the meaning of (3) up to this point: that if the being is *thought* then it can't be conceived to be limited in thought, and if it is *extension* it can't be conceived to be limited in extension. But you say that you don't perceive that the conclusion follows. Yet all it needs is this: it is a contradiction to conceive something whose definition

involves existence. . . . under a negation of existence; and since a thing's being limited isn't a positive fact about it, but only a fact about some existence that it doesn't have, it follows that something whose definition involves or affirms existence can't be conceived as limited. . . .

All I wanted to show in (4) was that such a being can't be divided into parts that have the same nature as it has, because that would be inconsistent with its having the three properties I have already proved it to have. And the being can't be divided into parts that have a different nature from the one it has, because that would mean that it could be destroyed, i.e. pulled apart so that nothing expresses the nature of the whole. The latter part of this argument holds good even if the parts are supposed to be necessarily existent.

In (5) I presupposed only that perfection consists in being, and imperfection in the privation [see Glossary] of being. I say *privation* and not mere *lack*. An extended thing, for example, may lack thought but this isn't a privation in it and therefore isn't an imperfection in it. But if it were deprived of extension, that would be a privation and thus would show an imperfection in it; and that would be the situation if it were limited. Similarly if it lacked duration, position, etc.

You concede (6) without reservation, but you say that it doesn't explain to you why this:

there are many beings that exist through themselves and can subsist by their own sufficiency, but differ in nature as thought differs from extension

is impossible. I can only judge from this that you understand it in a sense very different from mine. I'm sure I see what you are making of it, but not to lose time I shall just explain my meaning.

What I take (6) to say, then, is that if we assert that something that is only

•unlimited *in its own kind*, and perfect *in its own kind* exists by its own sufficiency, then we'll have to concede the existence also of a being that is

•*absolutely* unlimited and *absolutely* perfect.

This being I call 'God'. For example, if we maintain that extension or thought (each of which can be perfect in its own kind. . . .) exists by its own sufficiency, we will also have to concede the existence of God, who is absolutely perfect—i.e. of an absolutely unlimited being.

Please notice what I said just now about the term 'imperfection', namely that it—like the term 'privation'—signifies that a thing lacks something that pertains to its nature. For example, an extended thing can be called 'imperfect' in relation to duration (it doesn't last longer) or position (it doesn't stay still) or quantity (it isn't bigger); but it won't be called 'imperfect' because it doesn't think, since its nature, consisting only in *extension*. . . ., requires nothing of that sort. Something extended can be called 'imperfect' or 'perfect' only on the basis of its being limited or unlimited *in extension*. And since the nature of God doesn't consist in a definite kind of being, but in a being that is absolutely unlimited, his nature must have everything that expresses being perfectly, since otherwise his nature would be limited and deficient.

It follows from this that there can only be one being, God, which exists by its own power. If we assert, for example, that extension involves existence, it must be eternal and unlimited, expressing absolutely no imperfection but only perfection. Therefore, extension will. . . .express God's nature in some way. For God is a being that is not just unlimited in a certain respect but absolutely unlimited and omnipotent in its essence. Extension was just an example chosen at random; the same thing will also have to be affirmed of everything that we want to maintain as having such a nature.

I conclude, then, as in my preceding letter, that nothing except God exists by its own sufficiency. I think what I have said here will suffice to explain the meaning of the preceding letter; but you can judge that better than I can.

With that I might finish. But because I intend to have new dishes made for polishing lenses, I'd like to get your advice about this. I don't see what we gain by grinding convex-concave lenses. On the contrary, if I have calculated properly, convex-plane ought to be more useful. [Spinoza defends this in terms of a diagrammed example. And then:] Convex-concave lenses please me less not only because •they require twice the labour and expense but also because •their rays—not being all directed toward the same point—never fall perpendicularly on a concave surface. But no doubt you have already considered these things, made more accurate calculations, and finally settled the matter. So I ask your judgment and advice about this.

37. to Bouwmeester, 10.vi.1666:

I haven't been able until now to reply to your last letter that I received some time ago. Now that I am granted a little relief from various affairs and worries, having fought my way free of them. . . ., I write to thank you warmly for your love and courtesy to me, which you have quite often shown by your actions but have now also by your letter.

I pass now to your question:

Is there, or could there be, a method that would enable us to proceed smoothly and untiringly in thinking about the most excellent things? Or are our thoughts governed more by fortune than by skill, our minds being like our bodies in being vulnerable to chance events?

I answer that there *must* be a method by which we can

direct and link our vivid and clear perceptions, and that the intellect is not vulnerable to accidents as the body is.

This is evident simply from this: . . . All the vivid and clear perceptions we form can arise only from other vivid and clear perceptions that are in us; they can't have any other cause, so they can't be caused from outside us. It follows that the vivid and clear perceptions we form depend only on our nature, and its definite, fixed laws—i.e. on our absolute power—not on fortune (i.e. not on causes which, although they too act according to definite and fixed laws, are unknown to us and foreign to our nature and power). I acknowledge that all our other perceptions depend on fortune in the highest degree.

These considerations make it clearly evident that the true method must chiefly consist in the knowledge of the pure intellect—of its nature, its laws. And the main thing that is needed for this is to distinguish •the intellect from •the imagination, i.e. to distinguish •true ideas from •ideas that are made up, false, doubtful, or dependent only on the memory. The method doesn't require us to know the nature of the mind through its first cause; all that is needed is to put together a little natural history of the mind, or of perceptions, in the way Bacon teaches.

So much for the true method and the way to arrive at it. But I should warn you that these things require uninterrupted meditation, and a constant mind and purpose; and to achieve *that* you have to decide on a definite way and principle of living, and to set yourself a definite goal.

38. to van der Meer, 1.x.1666:

While isolated here in the country, I've been thinking about the problem you raised, and find it to be very simple. The general proof rests on this: that a person is playing fairly if

his expectation of winning or losing is equal to his opponent's. This expectation consists of •the probability and •the money the opponents stake and risk: if the probability is the same on each side, then each player must stake the same amount of money; but if the probabilities are unequal, then the player with the greater probability of winning must stake correspondingly more money. That will give them equal expectations, making the game fair. . . .

Suppose that A, B, and C are playing together with equal probabilities of winning, and that they all wager the same amount of money. Clearly,

- each is risking only 1/3 of the total stake to win 2/3, and
- each has only one chance to win against two chances of losing.

If C pulls out before they have begun to play, he ought to receive only what he staked—i.e. 1/3 of the total—and that's how much B must pay if he wants to buy C's expectation, and take his place. A can't object to this transaction because it makes no difference to him whether he takes on two men with one chance each or one man with two chances.

[The letter continues with a page of further examples, all illustrating the same basic point.]

39. to Jelles, 3.iii.1667:

Various problems have prevented my replying to your letter more quickly. I've examined your point about Descartes's Dioptric. [Note by Curley: Descartes held that hyperbolic and elliptical lenses were preferable to any others we might conceive of.] He explains the different sizes of images formed at the base of the eye solely in terms of one fact about the rays coming from different points on the object, namely

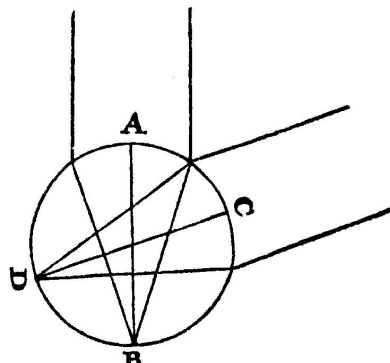
- how far they are from the eye when they begin to cross each other.

He ignores the fact about

- how big an angle they make when they cross each other on the surface of the eye,

although the latter is what matters in telescopes. He passed over it in silence because, apparently, he couldn't determine that angle mathematically; and that was because he didn't know any means of collecting those rays coming in parallel from different points into so many other points.

·Or· perhaps he kept silent so as not to prefer the circle to the other figures he introduced. In fact the circle is in this respect better than any other figures we can discover, because the circle, being the same everywhere, has the same properties everywhere.



For example, if the circle ABCD has this property:

- all the rays parallel to AB and coming from the side of A are refracted at its surface in such a way that they then come together in the point B,

then

- all the rays parallel to CD and coming from the side of C are refracted on its surface in such a way that they all meet in the point D.

This cannot be said of any other figure, although hyperbolas and ellipses have infinite diameters.

So the situation is as you say. If we attended only to the length of the eye or of the telescope, we would be forced to make very long telescopes before we could see things on the moon as distinctly as we do those on earth. But as I said, the chief thing is the size of the angle at which rays from different points cross the surface of the eye. And this angle is also larger or smaller as the foci of the lenses arranged in the telescope differ more or less. If you'd like to see a demonstration of this, I'll be happy to send it to you.

40. to Jelles, 25.iii.1667:

I did receive your letter of 14.iii, but various obstacles have prevented me from answering earlier.

Concerning the matter of Helvetius, I spoke to Vossius about it and. . .he laughed heartily and was surprised that I would ask him about these trifles. However, not thinking this of any importance [i.e. not being swayed by Vossius's scepticism] I went to the silversmith who had tested the gold. He took quite a different view, saying that in the smelting and the separation the gold had increased and become heavier by an amount equal to the weight of the silver he had put into the crucible for separation. So he firmly believed that the gold that transmuted his silver into gold had something special in it. Various other gentlemen present at the time agreed. [Was this credulous of Spinoza? Curley points out that 'Boyle, Huygens, and Newton all took seriously the possibility of transforming baser metals into gold'.]

After this I went to Helvetius himself, who showed me the gold, and the crucible coated with gold on the inside, and told me that he had thrown into the molten lead hardly a fourth of a grain of barley or mustard seed [presumably meaning

'a piece of gold hardly as big as' etc.]. He added that he would soon publish an account of the whole business, and added that someone. . . had done the same thing in Amsterdam. . . .

The author of the little book you write about—claiming to have demonstrated the falsity of Descartes's arguments for the existence of God in *Meditations* 3 and 5—is fighting with his own shadow and will harm himself more than others. I agree with you that Descartes's axiom is somewhat obscure and confused; he would have spoken more clearly and truly if he had said:

The power of thought to •think about things, i.e. to conceive them, is not greater than Nature's power to •bring them into existence.

This is a clear and true axiom, from which God's existence follows very clearly and validly. The argument of this author's that you recount shows that he doesn't yet understand the matter. . . .

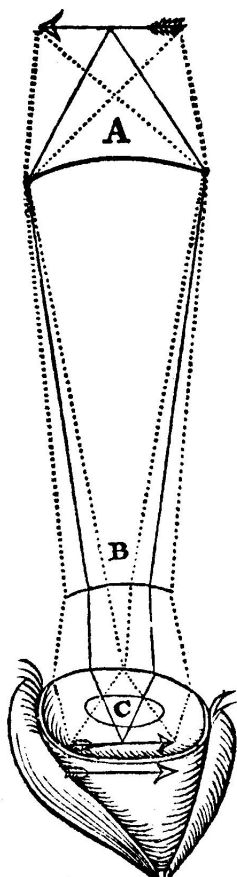
Suppose someone asks, regarding a limited body of this kind, 'What causes it to move?' We can reply that it has been determined to such motion by another body, and this again by another, and so on •backwards• to infinity. We are free to give this reply because the question is only about motion, and by continually supposing another body we give a sufficient and eternal cause of that motion. But if I see in the hands of an uneducated man an elegantly •hand•-written book full of excellent thoughts, and I ask him where he got it, and he replies that he copied it from a book owned by another uneducated man whose •hand•-writing was also elegant, and he proceeds in this way to infinity, he won't satisfy me. For that answer concerns only the shape and order of the letters, whereas I was also asking about their meaning—the thoughts they express—and he doesn't answer *that* question by proceeding in this way to infinity •with a book copied from a book copied from a book•. . . How this

can be applied to ideas can easily be seen from what I have explained in the ninth axiom of my geometric demonstration of Descartes's *Principles of Philosophy*.

In your letter of 9.iii you ask for a further explanation of what I had written in my earlier letter [letter 39] about a circular shape. All you need is to notice that all the rays that are assumed to be parallel when they strike the first lens of the telescope are not really so because they all come from one point. We treat them as parallel •because they are so close to being so, i.e. •because the object is so far from us that the opening of the Telescope is to be regarded as only like a point in relation to the distance.

To see a whole object we need not only the rays from one single point but also all the other cones of rays proceeding from all the other points; and they must come together in so many other foci when they pass through the lens. The eye isn't so precisely constructed that all the rays coming from the different points of the object meet in exactly as many points in the back of the eye; but shapes that can produce this result are certainly preferable to all others, •and the circle is such a shape•. Any limited segment of a circle can bring together all the rays proceeding from one point into another point on its diameter; so the circle as a whole can have the same effect on all the rays coming from the other points on the object, each point on the object corresponding to one point of focus. . . .

What I say here about a circle can't be said about an ellipse or a hyperbola, much less other more composite shapes, because one can only draw one line that passes through each focus from a single point on the object. This is what I was trying to say in my first letter.



You can see from the above figure the demonstration that the angle made on the surface of the eye by rays coming from different points becomes greater or less as the foci are more or less distant.

41. to Jelles, 5.ix.1669:

[This letter is entirely devoted to describing, with pictures, a lengthy experiment that Spinoza had done—with two helpers, ‘all three of us as busy as we could be’—in the field of hydrodynamics, the physics of the movement of water through tubes of various lengths and widths. There is nothing else about this in the correspondence that we have, and it isn’t of philosophical interest.]

[What is interesting is that this is the only letter of Spinoza’s that we have from a nearly four-year-long stretch starting at iii.1667. In his 1928 edition of the correspondence, Abraham Wolf writes: ‘Reasons for the absence of other letters readily suggest themselves. These were busy years for Spinoza, and a very trying period for him and his friends. Simon de Vries died in 1667. Pieter Balling died in 1669. Oldenburg was imprisoned in the Tower of London in 1667. Koerbagh, a warm friend of Spinoza and a too ardent disciple of Spinozism, was imprisoned in Amsterdam in 1668, and died in prison under gruesome circumstances. All who were suspected of being free-thinkers, or even liberal thinkers, were watched closely, and denounced to the authorities during these years. People were accordingly particularly cautious about writing letters to each other on philosophical or theological matters, and such letters as they did write were probably destroyed promptly by the recipients.’]

42. from van Velthuysen to Ostens, 24.1.1671:

Now that I have some free time, at last, I’ll try to give you what you ask for. You ask me to tell you my opinion of the book entitled *Treatise on Theology and Politics*, and I’ll do that as well as I can (within the limits set by the time available and my abilities). I shan’t go into the details, but will try to give a brief account of what the author is saying about religion.

I don't know—and am not interested in knowing—his nationality or how he lives. The argument of his book shows well enough that he is not dull-witted, and that his discussion of the religious controversies among Christians in Europe is neither careless nor superficial. This author has convinced himself that he'll make a better job of examining the opinions that cause men to break into factions and form parties if he sets aside prejudices. So he has worked to free his mind from all superstition; but he has overdone it, and in trying to avoid superstition he has—it seems to me—cast off all religion.

Well, anyway, he doesn't rise above the religion of the deists [see Glossary], of whom there are quite enough everywhere in this wicked age, especially in France. I remember reading Mersenne's attack on them [*L'Impiété des Déistes, Athées, et Libertins, combattue et renversée*]; but few if any of them (I think) have written on behalf of that wicked cause as maliciously, resourcefully and cunningly as the author of this work. Indeed, unless I miss my guess, this man doesn't stay within the bounds of the deists, and leaves men an even narrower scope for worship.

He recognises God and says openly that God is the maker and founder of the universe. But he maintains that the form, appearance and order of the world are completely necessary—as necessary as •God's nature and •the eternal truths that he claims to be true independently of God's will; and thus that everything happens by unconquerable necessity and inevitable fate. He holds this:

For those who think straight, there is no place for •divine• *precepts* and *commands*; human ignorance has introduced such terms in the same way that the common people's lack of knowledge has led them to talk as though God had *feelings*. When God presents eternal truths (and other things that must happen

necessarily) to men as *commands*, he is •merely• accommodating himself to their intellectual level.

Regarding the things commanded by the laws (and thought to be subject to the human will), he teaches •that their happening is as necessary as the triangle's having the nature that it does, and •that therefore these two:

- It is up to us to decide whether to obey the precepts;
- By following or disregarding the precepts men can incur something good or evil;

are no more true than these two:

- God's will is prevailed upon by prayers;
- God •sometimes• changes his eternal and absolute decrees.

So the reason why there are precepts and decrees is that men's ignorance has moved God to provide them for the use of people who can't form more perfect thoughts about God, and who need wretched aids of this kind to arouse in them a zeal for virtue and a hatred of vices. In line with this, the author doesn't mention prayers, or life and death, or any reward or punishment men will receive from the judge of the universe.

In this he is consistent with his principles: what room can there be for a last judgment, and what expectation of reward or punishment, when everything is ascribed to fate and all things are said to emanate from God by an inevitable necessity—or rather, when this whole universe is said to be God? I'm afraid our author is not very far from the latter opinion: maintaining that everything emanates necessarily from God's nature is not very different from maintaining that the universe itself is God.

Still, he places man's supreme pleasure in the cultivation of virtue, which he says is its own reward and a stage for the most splendid things. He holds that the man who understands things rightly ought to attend to virtue, not

•because of God’s precepts and law or •because he hopes for a reward or fears punishment, but •because he is attracted by the beauty of virtue and the gladness of mind man sees in being virtuous.

He maintains this:

God, through the prophets and revelation, exhorts men to virtue by the hope of reward and fear of punishment (two things always connected with laws), because the mind of common men is so made—so badly fashioned—that the only way it can be persuaded to practise virtue is by arguments borrowed from the nature of laws, and from the fear of punishment and hope of reward. Men who judge the matter truly understand that there is no truth or force in arguments of this kind.

It follows from this that the prophets and the holy teachers used arguments that were in themselves false (and so did God, speaking through their mouths); but the author doesn’t think that this matters. He . . . openly and indiscriminately teaches that Scripture wasn’t provided to teach the truth about the natures of the things it talks about, and that it bends things to its purpose of forming men for virtue. Although the nature of the moral virtues and vices was very well known to the prophets, he says, their knowledge wasn’t sufficient to completely shield them, in their activity of trying to rouse men to virtue, from the errors of the common people.

So he further teaches that •the prophets were not free from errors of judgment even when they were warning men about their duty, and that •this doesn’t detract from their holiness and credibility. What they said was governed by a need to accommodate themselves to the preconceived opinions of their audience, arousing men to uncontroversial virtues that no-one has ever been in two minds about. The purpose of a prophet’s mission was to promote the cultivation

of virtue among men, not to teach any truth.

. . . .It doesn’t matter much what arguments are used incite us to virtue, the author says, provided that they don’t subvert the moral virtue the prophet is aiming at. He doesn’t think that the mind’s perception of the truth of •things other than virtue is important for piety, because •those things don’t contain moral holiness. He also thinks that knowledge of the truth and even of the mysteries is needed only to the extent that it contributes to piety.

I think the author has in mind a distinction that I believe all theologians accept, between •what a prophet says when he is propounding a doctrine and •what he says when he is simply narrating something. But he is very wrong to think that his teaching agrees with this.

. . . .He thinks that all those who deny that reason and philosophy are interpreters of Scripture will agree with him. Everyone can see that countless things said about God in Scripture aren’t true of him, and are merely accommodated to men’s understanding so as to move men to have a zeal for virtue aroused in them; so this author thinks we must choose between these:

- The holy teacher wanted to educate men to virtue by those arguments, not by true ones.
- Every reader of holy Scripture is free to judge of the meaning and purpose of the holy teacher from the principles of his own reason.

He utterly condemns the latter opinion and rejects along with it those who teach . . . that reason is the interpreter of Scripture. He holds that Scripture must be interpreted according to its literal meaning, and that men should not be free to decide, on the strength of their own will and sense of reason, how the words of the prophets are to be understood, so that on the basis of their own reasons and the knowledge they can decide when the prophets are speaking literally and

when figuratively. This has been a digression; I'll return to it later.

Sticking to his principles about the fatal [see Glossary] necessity of all things, the author denies that any miracles occur that are contrary to the laws of nature. . . . That something should happen contrary to the laws of nature is no more possible, he says, than that the angles of a triangle should not be equal to two right angles. God can't bring it about that a lesser weight raises a heavier one, or that a body moving at two miles an hour can catch up to one moving at four. So he maintains that miracles are subject to the common laws of nature, which he says are as immutable as the natures of things, precisely because those natures are contained in the laws of nature. And he doesn't attribute to God any power except his ordinary power that shows itself according to the laws of nature. These, he thinks, cannot be feigned to be different [i.e. we can't *tell a coherent story* about a state of affairs in which the laws of nature are different from what they are in fact], because that would destroy the natures of things and be inconsistent.

A miracle, according to the author, is therefore something unexpected, whose cause the common people are ignorant of. When after prayers have been properly performed it seems that some threatening evil has been warded off or some coveted good obtained, the common people say this results from the power of prayers and from God's special guidance—whereas the author holds that God had already decreed absolutely from eternity that those things would happen that the common people think happen by *his* intervention and the efficacy of prayers. In his view, the prayers are not the cause of the decree; the decree is the cause of the prayers.

All that about fate and the unconquerable necessity of things' natures and behaviour he bases on the nature of

God, i.e. on the nature of God's •intellect and •will; which have different names, but in God they really converge. He maintains, therefore, that God has necessarily willed this universe and its series of events as necessarily as he knows it. . . . He infers from this that God could no more have founded another universe than he could have destroyed the natures of things and made twice three equal seven. And stories about a supposedly possible universe different from ours are inconceivable not only by us but also, according to the author, by God. [Van Velthuysen's next few sentences repeat what he has just said, with one addition, namely the attribution to 'the author' of the view that:] the natures of the things contained in this universe are necessary, and can't have that necessity from themselves but must have it from the nature of God, from which they emanate necessarily. . . .

All of this, and indeed everything in the first eighteen chapters, is a preparation for what the author presents in the final chapters [19–20], where he tries to get the magistrate [see Glossary] and everyone else to accept this axiom: *It is the magistrate's right to establish what divine worship is to be maintained publicly in the State.*

Next, the magistrate may allow his citizens to think and speak about religion as their hearts and minds dictate to them, and he ought to grant them that freedom even with respect to acts of external worship, as long as this doesn't interfere with their attachment to moral virtues or piety. There can't be any controversy about moral virtue, and (the author says) God can't be displeased by any of men's choices about what to embrace as sacred when moral virtue isn't, whether theoretically or practically, at stake in them.

[In a strikingly repetitive passage, van Velthuysen attributes to 'the author' the view that God is not offended by men's adherence to 'sacred things' which, though they have no moral content or implications, men go in for because they

see them as an aid to virtue. He continues:] To prepare men's hearts to embrace these paradoxes, the author maintains **(1)** that the whole worship instituted by God and given to the Jews—i.e. the citizens of the Israelite State—was intended only so that they could live happily in their State; but **(2)** the Jews were no more precious or pleasing to God than other nations. God repeatedly made this known to them when—through the prophets—he reproached them for their ignorance and error in identifying holiness and piety with

- the worship God had established and commanded them to perform, when it ought to have been identified only with
- zeal for moral virtues, i.e. with the love of God and love of one's neighbour.

And since God had fashioned the heart of all nations with the principles [see Glossary] and (as it were) the seeds of the virtues, so that they judge concerning the difference between good and evil spontaneously, with hardly any instruction; from which the author concludes that God hadn't seen the other nations as lacking the means to obtain true blessedness, but offered himself equally graciously to all men.

Indeed, wanting to make the other nations equal to the Jews in everything that can in any way contribute to achieving true happiness, he maintains that those nations also had true prophets, and he gives examples. Indeed, he insinuates •that God ruled over the other nations through good angels, which in Old Testament fashion he calls 'gods', and •that for that reason the religious worship of the other nations doesn't displease God so long as it isn't so corrupted by human superstition that it draws men away from true sanctity and drives them to religious practices that are inconsistent with virtue. . . .

Taking it for granted that external worship is not pleasing to God *in itself*, the author thinks it matters little what

ceremonies are used in external worship, provided that the worship arouses reverence for God in men's minds and moves them to practise virtue.

Next, since he thinks that

- the main point of all religion lies in the practice of virtue, and
- there's no need for knowledge of mysteries that isn't in itself naturally suited to promoting virtue, and
- the need for knowledge and the power of knowledge are proportional to how much it contributes more to educating men to virtue and arousing them to it,

he infers that all opinions about God and his worship, and about everything pertaining to religion, are to be approved or at least not rejected if their followers think that •they are true and that •what they are *for* is the flourishing of uprightness.

To establish this doctrine he cites the prophets themselves as authors of his opinion and witnesses to it. Having been instructed that God doesn't care what sort of opinions men have about religion—that all worship and opinions are pleasing to God if they come from a desire for virtue and reverence for divinity—they went so far as to present arguments that •weren't true in themselves but •were thought to be true by their audience and •were naturally suited to make them eager for the practice of virtue. Thus, he says that God allowed the prophets to use arguments that •would be adapted to the times and knowledge of the people, and that •they thought good and effective.

He thinks that this is why different divine teachers used arguments that were different from, and often inconsistent with, one another, Paul taught that man is not justified by works, whereas James urged the opposite view. James, the author thinks, saw that Christians took the doctrine of justification by faith in the wrong way, which led him to offer many arguments showing that man is justified by faith *and*

by works. Paul was addressing the Jews, who wrongly placed their justification in the works of *the law*, given specially to them by Moses, which raised them above the other nations. The doctrine of salvation by faith put them on the same level as other nations, depriving them of all their privileges; so they rejected it, and Paul was pushing back against that rejection. James, however, understood that it was not in the interest of the Christians of *his* time to go Paul's way, resting quietly in God's mercy and having almost no concern for good works. Thus, both Paul's teaching and James's contributed greatly to making men apply their minds to piety, each according to *its* circumstances of time and person. . . .

And this is one among many reasons why the author thinks it is quite wrong to set up *reason* as the interpreter of Scripture; and also wrong to interpret one holy teacher through another, because they are of equal authority and the words used by a given teacher are to be explained by *his* tone and linguistic habits. In investigating Scripture's true meaning, the author thinks, we must attend only to the text's literal meaning and not to anything outside it.

Therefore, given that

Christ himself and the other divinely sent teachers showed by their own example that it's only by the practice of the virtues that men proceed to blessedness, and that nothing else is of any importance,

the author infers show that •the magistrate's only concern ought to be that justice and uprightness flourish in the State, and that •he has no business deciding what worship and doctrine are most congruent with the truth; but that he ought to take care that things not be accepted which pose an obstacle to virtue. . . .

So the magistrate can easily, without offence to the divinity, tolerate different forms of worship in his State. To make this convincing, the author addresses the moral virtues

that are concerned with external actions and are useful in society, and maintains that no-one's practice of them should be based on his private judgment and will. He holds that the practice, exercise and modification of the virtues depends on the authority and command of the magistrate, because. . . *which* external acts are virtuous at a given time depends on what good or harm they would do, and this is something that the magistrate is better able to judge than a private citizen.

The author thinks there are also virtues that exist within the mind and are *always* virtues, whatever changes there are in external circumstances. It is *never* permissible to be disposed to cruelty or barbarity, or not to love your neighbour or the truth. But circumstances can arise where it is indeed permissible not indeed to set aside the mind's intention and zeal for those virtues but •to refrain from acting on them or even •to do things which externally seem to be inconsistent with them. So it may stop being the duty of an upright man to state the truth openly and share it with the citizens, if we think that this would do them more harm than good. And although each of us ought to embrace all men in love, and it is never permissible to abandon this affect [here = 'feeling or attitude'], it quite often happens that we can treat certain men harshly without this vice, when it is established that the mercy we are prepared to use toward them will lead to great evil for us.

No-one thinks that it is always suitable to tell any truth, whether it pertains to religion or to civil life, in any circumstances. Someone who teaches that •roses shouldn't be cast before swine if there's a risk that the swine will attack the rose-thrower will also think that •it isn't a good man's duty to educate the common people on certain fundamental religious principles if there's a risk that this will disturb the State or the Church in a way that does it more harm than good.

Moreover, civil societies. . . don't leave it to individuals to decide what would be useful to the community; they leave such decisions to the rulers. The author tries, on that basis, to show that •the magistrate has the right to decide what doctrines and what *kinds of* doctrines ought to be taught publicly in the State, and that •it's the duty of the subjects to refrain from outwardly teaching and professing doctrines about which the magistrate has legally decreed that there ought to be public silence. God didn't leave this to the judgment of private individuals any more than he allowed them to. . . do things that would mock the force of the laws and frustrate the magistrates. The author thinks that. . . it's as safe leave to the magistrate's judgment •the choice of external acts of divine worship as to grant him •the right and power to appraise an injury done to the State and to punish it by force. The author holds that just as

If the magistrate judges that a given act is harmful to the State, a private individual is obliged to *act* in accordance with that judgment; but he is entitled to have his own *opinion* about whether the judgment is right,

so also

When the magistrate judges what doctrines ought to be publicly propounded, a private citizen is obliged to refrain from outwardly contradicting any of those doctrines and from *doing* anything else that would prevent the magistrate's laws about worship from having their force; but he isn't obliged actually to *believe* any of those doctrines.

It can happen that a magistrate disagrees with many of the common people on the basic principles of religion, and wants certain things to be publicly taught that go against their judgment, because he thinks such teaching is important for the divine honour. The author sees in

this that a difficulty remains: great harm could be done to the citizens because the magistrate's judgment differs from theirs. So he adds a further thesis which calms the minds of the magistrate and of his subjects, and preserves freedom of religion intact: the magistrate doesn't have to fear God's anger if he permits what he thinks are improper religious practices to occur in his State, provided they don't subvert or conflict with moral virtues.

The reason for this opinion cannot escape you, since I have already fully explained it above. The author maintains that God doesn't care what kind of opinions men cherish in religion, . . . or what kind of religious practices they publicly engage in, because all these things ought to be regarded as having nothing in common with virtue or vice—although everyone has a duty to conduct his reasoning in such a way that he holds those doctrines, and engages in that worship, with which he thinks he can make the greatest progress in the practice of virtue.

Here, Sir, you have a brief account of the main points of the teaching of the theologico-politician. In my judgment it destroys and completely subverts all worship and religion, and either •secretly introduces atheism or •invents a God who can't move men to reverence for his divinity. Because he himself is subject to fate, there's no room for any divine governance or providence, and the author takes away all distribution of punishments and rewards. At least it's easy to see from the author's writing that the authority of the whole of sacred Scripture is broken by his reasoning and arguments, and that he mentions it only for form's sake, because it follows from his position that the Koran is equal to the Word of God. He doesn't have a single argument to show that Mohammed was not a true prophet, because •the Turks also. . . cultivate moral virtues that there's no dispute about among the nations, and (according to the author's

teaching) •it is not uncommon for God to draw nations that didn't receive the oracles given to the Jews and Christians into the circle of reason and obedience, doing this by other revelations.

So I don't think I am deviating far from the truth, or doing the author any injustice, if I denounce him for using covert and counterfeit arguments to teach pure atheism.

43. to Ostens, ii.1671:

You'll be surprised that I have kept you waiting for so long, but until now I have hardly been able to put my mind to replying to that man's pamphlet [namely letter 42, immediately above], which you were pleased to send me. I'm replying only because I promised to; and I'll keep that promise in as few words as I can, showing briefly how wrongly he has interpreted my intention. Whether he did this from malice or from ignorance I can't easily say.

First, he says that he is not much interested in knowing my nationality or my way of life. If he *had* known, he wouldn't so easily have persuaded himself that I teach atheism. Atheists are accustomed to seek honours and riches immoderately, but I have always scorned them, as everyone who knows me knows. Next, to prepare the path to his goal he says that I am not dull-witted, so that he can more easily persuade people that I have written resourcefully and cunningly, and maliciously, for that most wicked cause of the Deists. This shows well enough that he hasn't understood my arguments. For who can be so intellectually resourceful as to give so many valid arguments for something he regards as false? . . . I'm not surprised now because this is how Voetius once defamed Descartes, and how the best men are always maligned.

Next, he continues: 'In trying to avoid superstition he has cast off all religion.' I don't know what he understands by 'religion' or by 'superstition'. Is someone casting off all religion when he maintains that

- God is to be recognised as the highest good, to be freely loved as such; that
- our greatest happiness and freedom consist only in this; that
- the reward of virtue is virtue itself, whereas the punishment of folly and weakness is folly itself; and that
- each person ought to love his neighbour and obey the commands of the supreme power?

I explicitly said these things, and have also proved them by the strongest arguments.

But I think I see what mud this man is stuck in. He takes no delight in virtue or in understanding, and would prefer to live according to the impulse of his affects if he weren't inhibited by the fear of punishment. So he abstains from evil actions and obeys the divine commandments in the way a slave does, reluctantly and half-heartedly; and he expects God to load him down with gifts far more pleasant to him than the love of God. . . . He believes that anyone who isn't held back by this fear lives without restraint and casts off all religion!

Enough of that. I pass to the deduction he uses to show that I teach atheism by covert and counterfeit arguments. His basic point is that I take away God's freedom and subject him to fate, which is certainly false. Consider these:

- (1) God's understanding of himself follows necessarily from his nature.
- (2) Everything follows necessarily from God's nature.

Everyone accepts (1), but no-one thinks of God forced by some fate to understand himself; everyone thinks that God understands himself completely freely, even if necessarily.

Well, I maintain **(2)** as a truth of the same kind as **(1)**. This is all quite obvious. If he believes these things are said with an evil intention, I wonder what he thinks about his Descartes, who maintained that

•everything we do was previously preordained by God,
who indeed re-creates us (as it were) at each moment,

and that nevertheless

•we act from the freedom of our will

[*Principles of Philosophy* I: 39–41]. Surely, as Descartes himself admits, no-one can comprehend this.

Next, this inevitable necessity of things doesn't destroy either divine laws or human laws. Moral teachings, whether or not they take the form of a law from God himself, are still divine and salutary [see Glossary]. As for the good that follows from virtue and divine love, *how* good it is doesn't depend on whether it •comes from God as a judge or •emanates from the necessity of the divine nature. And on the other side, the evils that follow from evil actions are not less to be feared because they follow from them necessarily. Finally, whether we do what we do necessarily or freely, we are still led by hope or fear. So he speaks falsely when he attributes to me the view that

all things are ascribed to fate and emanate with
inevitable necessity from God,

and infer from this that

there's no place for precepts and commands, no ex-
pectation of reward or punishment.

I don't ask here why maintaining that •all things emanate necessarily from God's nature is little if at all different from maintaining that •the universe itself is God. But do notice the equally odious thing that he quickly adds, namely that I do not hold that man ought to attend to virtue because of God's precepts and law, or because he hopes for a reward or fears punishment, but. . . etc. You won't find this anywhere

in my treatise. On the contrary, I said explicitly in chapter 4 that the chief precept in the divine law (which as I said in chapter 12 has been inscribed divinely in our mind) tells us to love God as the greatest good, not from fear of punishment (for love can't arise from fear), nor from love of anything else (for then we would be loving not God but the other thing), and I showed in the same chapter that God revealed this very law to the prophets. And I maintain that whether we take that law to be •something that God himself issued as a law or rather to be •something which, like the rest of his decrees, follows necessarily from his nature, it will still be God's decree and a salutary teaching, either way; and whether I love God freely or from the necessity of God's decree, I shall nevertheless love God and shall be saved.

That man is one of those of whom I said in my preface that I would rather they ignored my book than troubled me by interpreting it perversely, as they usually do everything. While they do themselves no good, they harm others.

That's really all I need to say in support of my views; but it may be worthwhile for me to note a few things further.

(1) He is wrong to think that I had in mind that axiom of the theologians who distinguish between the speech of a prophet who is propounding a doctrine and that of one who is simply narrating something. If he is referring to the axiom I attributed to Alpakhar in chapter 15, how could I think that mine agrees with it when I rejected it as false in the same chapter? If he is referring to something else, I don't know what it is, and so couldn't have had it in mind.

(2) I don't see why he says I think everyone who denies that reason and philosophy are the interpreter of scripture will follow my opinion. For I refuted their opinion as well as that of Maimonides.

It would take too long to enumerate all the passages where he shows that he hasn't approached my work with

a completely dispassionate mind; so I pass straight to his conclusion, where he says **(3)** that I have no argument left to me by which I might prove that Mohammed was not a true prophet. He tries to show this from my opinions [i.e. to show that Spinoza's opinions imply that Mohammed *was* a true prophet], although it clearly follows from them that Mohammed was an impostor, because he completely takes away the freedom that the universal religion concedes, following the natural light and what the prophets revealed—a freedom that I have shown absolutely ought to be granted.

But even if this were not the case, I ask you: am I bound to show that someone is a false prophet? Surely the contrary is true: that the prophets were bound to show that they were true.

If he replies that Mohammed also taught the divine law and gave certain signs of his mission, as the other prophets did, he'll have no reason to deny that Mohammed was a true prophet. Also, if the Turks and other nations worship God with the practice of justice and with loving-kindness toward their neighbour, then they have the spirit of Christ and are saved, whatever they ignorantly regard as settled concerning Mohammed and the oracles.

There, my friend, you see how far that man has wandered from the truth. When he unblushingly says that I teach atheism by covert and counterfeit arguments, he is harming himself, not me.

I don't think you will find that I have spoken too harshly against that man; but if you do find anything too harsh, I beg you to delete it or (if you prefer) correct it. Whoever he turns out to be, it is not my intention to provoke him and make an enemy of him. Just because this often happens in such debates, I could hardly get myself to reply, and I wouldn't have succeeded if I hadn't promised. I commit this letter to your prudence.

44. to Jelles, 17.ii.1671:

Professor... told me recently that he had heard that my *Treatise on Theology and Politics* has been translated into Dutch, and that someone (he didn't know who) planned to have it printed. *Please* find out about this, so as to prevent the printing if that is possible. This request comes not only from me but also from many of my friends, who don't want the book be prohibited, which it doubtless will be if it is published in Dutch. I don't doubt that you will do me and the cause this service. [The translation wasn't published in Spinoza's lifetime, 'no doubt in deference to Spinoza's wishes', Curley says in a note.]

Some time ago one of my friends sent me a little book entitled *Homo Politicus* or *Political Man*, which I had previously heard a lot about. I read it, and found it to be the most harmful book men can devise. The author's supreme good is money and honour. He fits his teaching to those goals and shows how to reach them: by rejecting all religion internally, by externally professing whatever can most serve your advancement, and by not being true to anyone except when it's to your advantage. He values most highly hypocrisy, promising without giving, lying, false oaths, and many other things.

I thought about writing a little book indirectly against this, in which I would •treat of the supreme good, •show the anxious and miserable condition of those who are eager for money and honour, and •show by clear reasoning and many examples that States with an insatiable desire for honour and money are bound to perish, and have in fact done so.

The thoughts of that author are much inferior to those of Thales of Miletus, as I'll now show you. Thales offered the following argument:

- All things are common among friends;
- the wise are friends of the gods;
- all things belong to the gods;

therefore

- all things belong to the wise.

That's how this very wise man made himself the richest of all—by nobly scorning wealth rather than by greedily pursuing it. On one occasion he showed that it's by choice and not by necessity that the wise have no wealth. When his friends reproached him for his poverty, he said: 'Do you want me to prove that I can acquire what I consider unworthy of my labour, and what you seek so greedily?' When they said 'Yes', he leased all the olive-presses in Greece, getting them cheaply because for several years there had been a shortage of olives. Being very experienced in the movement of the stars, he had seen that in that year there would be an abundance of olives; when it came, people needed presses to deal with the oil, and Thales leased them out at a high price. Thus, in one year he acquired great wealth for himself, which he subsequently shared with as much generosity as he had shown cleverness in acquiring it.

45. from Leibniz, 3.x.1671:

Among the other praises common report has bestowed on you, I understand that you also have outstanding skill in optics. For that reason I want you to see the enclosed essay, such as it is, because I won't easily find a better critic for this sort of study. I call it *A Note on Advanced Optics*, and have published it so that I could more conveniently share it with friends or with those interested in the subject. I hear also that Hudde is distinguished in this kind of study, and no doubt he is well known to you. So you would add

wonderfully to your kindness if you also got me his judgment and good-will. . . .

I believe you have received Francis Lana's *Prodromus*, written in Italian, where he also proposes some excellent things in dioptrics. But a young Swiss named Oltius, who is very erudite in these matters, has also published *Physico-Mechanical Thoughts on Vision*, in which he •promises a simple and general instrument for polishing lenses of every kind, and also •says he has found a certain way of collecting all the rays coming from all the points on an object, into as many other corresponding points—but only for an object at a certain distance and of a certain shape.

What I have proposed comes to this: not that all the rays of all the points are gathered again—for as far as we know this is impossible for any object, whatever its distance and shape—but that the rays of the points outside the optic axis, as well as the rays of points on the optic axis, are gathered, and therefore, that the apertures of the lenses can be made as large as you wish without loss of clear vision. But these matters will await your most acute judgment. . . . Your unremitting admirer, Gottfried Wilhelm Leibniz, Doctor of Laws and Councillor of Mainz

PS.: If you think me worthy of a reply, the lawyer Diemberoeck will (I hope) be happy to take charge of it. I think you have seen my *New Physical Hypothesis*. If not, I shall send it.

46. to Leibniz, 9.xi.1671:

I have read the paper you kindly sent me, and thank you for sharing it with me. You explain your line of thought clearly enough, I believe, but I haven't been able to follow it adequately. I hope you won't mind replying to me about these few matters:

(1) Why ought we to make the aperture of lenses small? Is it *only* because the rays from one point don't meet exactly in another point but in a small space that we call a 'mechanical point', whose size varies with the size of the aperture?

(2) Do the lenses that you call 'Pandochal' [= 'capable of receiving all the rays of light'] correct this fault? That is, does the mechanical point—i.e. the small space in which the rays coming from one point meet after refraction—remain the same size, whether the opening is large or small? For if those lenses do this, it will be possible to increase their aperture as much as you like, which will make them far better than any other figures known to me. If not, I don't see why you regard them as so far superior to the common lenses. For circular lenses have the same axis everywhere. So when we use them, all the points on the object are to be considered as lying on the optical axis, and although not all the points on the object are at the same distance, nevertheless, the difference which arises from that cannot be sensed when the objects are very remote, because then the rays coming from the same point are considered as if they entered the lens parallel to one another.

But I do think that when we want to take in several objects in one glance (as when we use large convex ocular lenses), your lenses can help to represent all the objects at once more clearly. But I shall suspend judgment about all these things until you explain your thinking to me more clearly. I beg you to do this.

As you wished, I have sent the second copy to Hudde, who hopes that within a week or two he will have time to examine it.

Lana's *Prodromus* has not yet reached me. Neither has Johan Holt's *Physico-mechanical Thoughts on Vision*. What I regret more is that I haven't been able to see your *Physical Hypothesis*—it isn't for sale here in the Hague. If you send it

to me, you will make me most grateful. I'll be glad to be of service to you in anything at all. . . .

PS: Diemerbroeck doesn't live here, so I'm forced to give this to the ordinary carrier. No doubt you know someone here in the Hague who would be willing to take care of our correspondence. I would like to know who that is, so that letters can be managed more conveniently and securely. If the *Treatise on Theological and Politics* hasn't yet reached you, I shall send a copy, if you don't mind.

47. from Fabritius, 16.ii.1673:

His most serene highness the Elector Palatine, my most gracious lord, has commanded me to write to you—whom I haven't known until now, but who has been highly recommended to his most serene highness—to ask whether you would be inclined to take up an ordinary professorship of philosophy in his renowned university. You will receive the annual salary ordinary professors enjoy today. Nowhere else will you find a prince more favourable to men of outstanding intellect, among whom he judges you are one. You will have the most ample freedom to philosophise, which he believes you won't abuse to disturb the publicly established religion.

I beg you most earnestly to reply to me as soon as possible, and to give your reply either to his most serene highness's resident in the Hague, Grotius, or to Gilles van der Hek, to be forwarded to me in the packet of letters that is usually sent to the court. Or use whatever other means seems most convenient.

I add this one thing: that if you come here you will live pleasantly a life worthy of a philosopher, unless everything else turns out contrary to our hope and expectation.

48. to Fabritius, 30.iii.1673:

If I had ever wanted to take up a professorship in any faculty, I couldn't have wished for a better one than the one that is offered to me, through you, by his most serene highness the Elector Palatine, especially because of the freedom of philosophising that your most gracious prince is willing to grant, not to mention the fact that I have long wished to live under the rule of a prince whose wisdom all admire.

But I have never planned to teach publicly, so I can't be persuaded—although I have weighed the matter for a long time—to embrace this excellent opportunity. For one thing, if I devoted myself to educating young men, I would stop advancing in philosophy. Also, I don't know what the limits of that freedom of philosophising might have to be, for me not to seem to aim at disturbing the publicly established religion. Schisms arise not so much from ardent zeal for religion as from men's varying affects [see Glossary], or their eagerness to contradict one another, which results in their tending to distort or condemn everything, even things that are rightly said. Having experienced these things already while leading a private and solitary life, how much more I would have to fear them after rising to the rank of professor.

You see then, Sir, that I'm holding back not because I hope for a better offer but from a love of tranquillity, which I believe I can in some manner obtain if I abstain from public lectures. Please entreat his most serene highness the Elector to let me deliberate further about this matter, and continue to procure the most gracious prince's favour towards his most devoted supporter. . . .

[That is the last we hear of this offer.]

48a. from Jelles (to Spinoza?), early 1673:

I have more readily granted your earnest request to write to you about my faith or religion after you explained that you were urging me to do this because some people are trying to convince you that the Cartesian philosophers (among whom you are pleased to count me) cherish a strange opinion, falling into ancient paganism, and that their propositions and fundamental principles run contrary to the fundamental principles of the Christian religion and piety, etc.

Let me say first, by way of preface, that the Cartesian philosophy touches religion so little that Descartes's propositions are followed not only by various Protestant denominations but also by the Roman Church; so what I say about religion is only my personal opinion and not that of Cartesians in general. I don't want to get into a dispute with others or to silence the slanderers, but what I say will be enough for me to satisfy you and those like you. I didn't set out to prescribe a universal creed or define the essential, fundamental and necessary articles of belief, but only to tell you my personal opinion; but I shall do my best to fulfill the conditions that Jacob Acontius says must be satisfied by a universal Confession acceptable to all Christians, namely that it must contain only

- what necessarily must be known,
- what is very true and certain,
- what is certified and corroborated by evidence, and
- what as far as possible is expressed in the same words and ways of speaking that the Holy Ghost used.

Here, then, you have a Confession that seems to me to be of that kind. Read it attentively. Don't judge it rashly. And be assured that as I have pursued the truth, so shall I try to impart it to you in this letter. [The rest of Jelles's Confession is omitted, except for the conclusion, which follows.]

I'm confident that I have now done more than you had expected, and that therefore you'll be satisfied. . . .

In return I ask you only to consider what I have said carefully and prudently, and then to judge what there is in the reports people have given you about my opinions in religion.

If you come across anything in this that seems false or contrary to Scripture, please tell me, and also let me know why it seems so to you, so that I can investigate it. Those who consider something to be contrary to Scripture and false if they find it contrary to their catechisms or confessions of faith will doubtless judge that much of my letter is of that kind. But I'm confident that those who test it according to the truth—which I have shown here to be the only unerring rule or touchstone of. . . .orthodoxy and unorthodoxy—will judge differently about this. I also expect this of you.

Here, now, you have my opinion as far as the Christian religion is concerned, and with it the proofs and arguments on which it rests. It is now up to you to judge whether those who build on such a foundation, and try to live according to such knowledge, are Christians or not, and what truth there is in the reports that some have given you about my opinion. . . .

48b. reactions to the above, a little later:

from Jan Rieuwertsz:And although some who misunderstood Jelles's meaning ascribed a strange opinion to him, nevertheless he—considering this more worthy of pity than of anger—proceeded continually to penetrate more and more into the love and knowledge of God, achieving a level of spiritual understanding that few men have reached. That slander was the reason why he sent this confession to a certain friend living outside the city, asking for his judgement

on whether his opinion agreed with the truth of the matter. His friend replied: I have read through your writing with pleasure, and can find nothing in it that I would change.

from Pierre Bayle: He (·Spinoza·) openly professed the Gospel and attended the assemblies of the Mennonites or those of the Arminians in Amsterdam. He even approved a confession of faith which one of his close friends communicated to him. . . .When a certain Jarig Jelles was suspected of various heterodoxies, he believed that to justify himself he ought to publish a confession of his faith. Having prepared it, he sent it to Spinoza asking for his opinion of it. Spinoza replied that he had read it with pleasure and found nothing in it he would want to change. . . .

from Hallman: More letters had been found than had been printed. But they were of no importance, and so were burned. But he (·Jan Rieuwertsz·) had at least preserved one letter,. . . .which I persuaded him to show to me. It was on a half sheet, quite short, and written in Dutch. The date was 19.iv.1673, from the Hague, and the letter was addressed to Jarig Jelles, who had sent him his confession of a universal Christian faith and asked his judgment about it.

In this reply Spinoza didn't give him any praises, or even much approval, but reported to him only that he could make one objection to it. For when Jelles claimed that

man is inclined by nature to evil, but through God's grace and the spirit of Christ becomes indifferent to evil and good,

this was self-contradictory, Spinoza said, because he who has the spirit of Christ in this way must necessarily be impelled only to the good. . . .

49. to Graevius, 14.xii.1673:

[A letter asking to be sent ‘the letter about Descartes’s death that I think you copied some time ago’.]

50. to Jelles, 2.vi.1674:

As far as politics is concerned, the difference between Hobbes and me that you ask about consists in this: I always preserve natural right intact, and hold that in each State the supreme magistrate’s [see Glossary] •right over the subjects is proportional to the superiority of his •power over them. This is always the case in the state of Nature.

As regards the thesis that I defend in the *Metaphysical Thoughts*, namely that it is very improper to call God *one* or *unique*: . . . We don’t conceive things under numbers unless they have first been brought under a common genus. Someone who holds a penny and a dollar in his hand won’t think of *two* unless he can call them by a single name such as ‘coins’. When he does that, he can say that he has *two coins*, calling each by the name ‘coin’. This shows clearly that a thing is called ‘one’ or ‘unique’ only after another thing has been conceived that (as they say) ‘agrees with it’. . . . It is certain that someone who calls God ‘one’ or ‘unique’ does not have a true idea of God, or is speaking improperly about him. [The two ellipses replace, respectively, ‘A thing is said to be “one” or “unique” only in relation to its existence, not in relation to its essence’ and ‘The existence of God is his essence, and we cannot form a universal idea concerning his essence.’]

As for shape being negative rather than positive: it is obvious that the whole of matter, considered indefinitely, can’t have a shape—that only finite and determinate bodies can have shapes. Someone who says that he conceives a shape is merely saying that he conceives •a determinate thing

and •how it is determinate. So this determination isn’t a fact about the thing’s *being* but its *non-being*. Therefore, because the shape is nothing but a determination, and determination is (as they say) a negation, it cannot be anything but a negation.

I have seen in a bookseller’s window the book the Utrecht professor •van Mansvelt• wrote against mine, which was published after his death. From the little I read then I judged that it wasn’t worth reading, much less answering. So I left the book lying there, and its author with it. I thought with amusement about how the most ignorant people are generally the boldest and the readiest to write. It seems to me that the [gap in original] offer their wares for sale in the way shopkeepers do, showing the worst goods first. The Devil is said to be a very cunning fellow, but *their* minds far surpass his in craftiness, it seems to me.

•EXCHANGE WITH BOXEL ABOUT GHOSTS• [to page 84]

51. from Boxel, 14.ix.1674:

I am writing you this letter because I want to know your opinion about apparitions and spirits or ghosts—what you think about them (if there are any), and how long their life lasts (some think they are immortal, others deny this). Not being sure that you even grant that there *are* any, I shan’t proceed further •with questions about their nature•.

But the ancients certainly believed in them. Modern theologians and philosophers still believe such creatures exist, though they disagree about their essence. Some say they’re made of a very thin, fine matter; others that they are spiritual. But. . . you and I disagree greatly about this because I doubt whether you grant that they exist, although as you know there are so many examples and stories in all antiquity that it will hard to deny or doubt their existence.

One thing is certain: even if you don't deny that they exist, you don't think that any of them are the souls of the dead, as the Catholics profess. Here I shall stop, and await your reply. I shall say nothing about the war, nothing about the rumours; these are the times we live in.

52. to Boxel, 16–20.ix.1674:

Yesterday I received your letter, which was very welcome to me, as much because I wanted to hear some news from you as because I see that you haven't yet completely forgotten me. Some might think it an evil omen that your reason for writing to me was ghosts or spirits; but I . . . can get advantage not only from true things but even from trifles and imaginations.

Let us set aside the question of whether there are ghosts, phantasms, and imaginations, because you find it extraordinary to deny that there are such things or even to doubt them, because so many stories have been told about them by the ancients and the moderns. The great respect I have always had for you, and still have, doesn't permit me •to contradict you outright•, much less to flatter you •by pretending to agree•. I shall take a middle course: of the many stories you have read about ghosts, please choose one or two that •are least subject to doubt and •most clearly prove that there are ghosts. Frankly, I have never read one credible author who showed clearly that they exist. I still don't know what they are—no-one has been able to tell me.

If experience has shown us clearly that a certain thing exists, we must know *what it is*. Without that knowledge we'll find it hard conclude from some story that there are *ghosts*, rather than that there is *something but we don't know what*. If the philosophers want to call the things we don't know 'ghosts', I can't deny them that, because there are countless things that I have no knowledge of.

. . . Also, please tell me what sort of things these ghosts or spirits are. Are they children, fools, or madmen? From what I've heard about them, their actions seem to be those of the brainless, rather than of intelligent men. The best we can say of their actions is that they are like children's games or the pastimes of fools.

One last point: stories of spirits and ghosts are prime examples of men's desire to tell things not as they are but as they want them to be. The chief cause of this, I believe, is that a story of this kind has no witness but the story-teller, so that he can add or omit details at his pleasure, without needing to fear that anyone will contradict him. They invent these things primarily as a way of •dealing with their fears about their dreams and phantasms, or of •strengthening their courage, faith and beliefs. I have other reasons, too, for doubting these stories or at least the details that the story-tellers find it *convenient* to include in them.

I shall stop here, until I know which stories have so convinced you that you think it's absurd even to doubt them.

53. from Boxel, 21.ix.1674:

You answered as I expected you to, as a friend and as one who has different opinions. The difference is of no importance, for friends can disagree about non-moral matters without harm to the friendship.

Before you explain yourself, you want me to say what sort of things ghosts are, whether they are children, fools, or madmen, etc., and you add that from what you have heard about them they sound more like fools than intelligent men. The old saying is true: a preconceived opinion hinders the investigation of the truth.

I have four reasons for believing that there are spirits:

- (1) Their existence increases the beauty and perfection of the universe.
- (2) The Creator has probably created them because they are more like him than corporeal creatures.
- (3) Because there is a body without a spirit, there must also be a spirit without a body.
- (4) I think that every dark body—i.e. every heavenly body that shines only with reflected light—in the upper air (or place or space) has inhabitants; and consequently that the immeasurable space between us and the stars is not empty but full of inhabitants, which are spirits. The highest and uppermost are true spirits; the lowest, in the nearest air, may be made of a very finely divided and thin corporeal substance, and also invisible.

So I think there are spirits of every kind, except that possibly there are no female spirits. I realise that this reasoning won't convince those who think that the world has been made by chance.

Apart from these reasons, daily experience shows that there are spirits; there are many stories of them, ancient and modern, right up to today. These stories are told by Plutarch in his treatise on famous men and elsewhere, by Suetonius in his *Lives of the Caesars*, by Wierius in his books on ghosts, and also by Lavaterus, who has discussed this topic at length, drawing from all the other writers. As also Cardanus, so renowned for his learning, in the books on *Subtlety* and *Variety* and in his autobiography, where he presents his own experiences and those of the friends and relations to whom spirits appeared. Melancthon, a lover of the truth and an intelligent man, and many others are witnesses of their own experiences.

A learned and wise man who is still alive told me once that in his mother's brewery people heard things happening at night like the day-time events of brewing. He swore to me that this happened several times. I myself have had several such experiences that I shall never forget. So I am convinced that there are spirits.

As for devils, who torment wretched men in this life and afterwards, that's another issue—as is everything involving witchcraft. The stories people tell about these things are fables.

[Boxel refers Spinoza to 'works on spirits' for examples, and then gives detail references to Pliny the younger, Suetonius, Valerius Maximus, and Alexander ab Alexandro,] for I believe you have those authors at hand.

I am not speaking about monks or clerics, who tell of so many apparitions and visions of souls, spirits and devils, and tell so many stories—fables, really—about ghosts that they bore one and one loathes to read them. Thyraus, a Jesuit, treats the same things in the book he calls *Apparitions of Spirits*. But those people do this only for their own profit, and to prove the existence of purgatory, which is a mine from which they extract so much silver and gold. One does not find this in the authors mentioned above and in others of the present day, who are beyond all passions, and therefore, so much the more to be believed.

As a reply to your letter, where you speak of fools and lunatics, I place here the conclusion of the learned Lavaterus's first book on spirits: 'He who dares to reject so many agreeing witnesses, both ancient and modern seems to me not worth believing when he affirms anything. Just as it is a mark of rashness to immediately believe all those who say that they have seen ghosts, so it would be a great impudence to contradict rashly and without shame so many credible historians, church fathers, and other great men.'

54. to Boxel, x.1674:

Relying on what you say in your letter of 21.ix—that friends can disagree over non-moral matters and still remain friends—I shall say clearly what I think about the arguments and stories from which you infer that there are all kinds of spirits, but perhaps none of the feminine kind. I haven't replied earlier because I don't have the books you cite at hand, and haven't yet found any of them except Pliny and Suetonius. But these two will relieve me of the trouble of looking for the others, because I believe they're all raving in the same way, loving unusual tales and things that make men amazed and astonished. I'm astonished not by the stories but by the people who tell them; that men of intellect and judgment squander and abuse their eloquence to make us believe such trifles—it's amazing!

But let us leave the authors and tackle the thing itself, starting with the conclusion you draw. Either

- My denial that there are ghosts or spirits shows that I don't properly understand the writers who have written about this, or
- You, who maintain that they exist, are giving these writers more respect than they deserve.

Let us see which of these is right.

You are sure there are spirits of the male kind, but doubt that there are spirits of the female kind. This seems to me to be more like a whim than a doubt. If it was your serious opinion, it would look like the common people's fancy that God is male, not female. I'm surprised that those who have seen spirits naked haven't looked at their genitals—were they afraid? or did they not know of the difference between male and female?

You will answer that this is mockery, not reasoning, and that shows me that your reasons seem to you so powerful

and well-founded that no-one can contradict them except someone who mistakenly thinks that the world was made by chance. Before investigating the reasons you have given, then, I need to state briefly my opinion about whether the world was created by chance.

Chance and necessity are contraries: someone who says that

- the world was produced necessarily from the divine nature

is absolutely denying that it was made by chance; but someone who says that

- God could have refrained from creating the world

is saying, though in different words, that it *was* made by chance, because it has come from a choice that could have not been made. And because this opinion. . . is completely absurd, everyone agrees that God's will is eternal, and has never been indifferent [i.e. has never been such that it could have gone either way]. So everyone should also agree (**attend to this** carefully) that the world is a necessary effect of the divine nature. They may call this nature 'will', 'intellect', or whatever they want to; but they end up seeing that it is one and the same thing in different words. For if someone asks them whether the divine will differs from the human will, they answer that the two have nothing in common except the name; and indeed they commonly grant that God's will, intellect, being or nature is one and the same thing; just as I, to avoid confusing the divine nature with the human, ascribe to God no human attributes such as will, intellect, attention, hearing, etc. So, I repeat, the world is a necessary effect of the divine nature, and was not made by chance.

. . . .On this basis I proceed to investigate your reasons for concluding that there are spirits of all kinds. . . .

(1) You argue that the existence of spirits contributes to the beauty and perfection of the universe. But beauty is not

so much a quality of the seen object as an effect it has on the viewer. If our eye was longer or shorter, or our constitution was different, the things we now consider beautiful would seem ugly, and those that are now ugly would seem to us beautiful. The most beautiful hand looks terrible when seen through a microscope. Some things are beautiful when seen from a distance and ugly when seen close up. If you say that God has made the world beautiful, you must maintain either that

- God made the world according to the tastes and eyes of men

or else that

- God made the tastes and eyes of men according to the world.

Take your pick. I don't see why God had to create ghosts or spirits to achieve either of these results.

'Perfection' and 'imperfection' are labels that don't differ much from 'beauty' and 'ugliness'. Not to be too wordy, I ask what would the existence of spirits—or of any sort of monsters such as centaurs, hydras, harpies, satyrs, griffins, arguses or the like—contribute to the decoration and perfection of the world? Decorating the world according to the liking of our imagination, fitting it out with things that we can easily imagine and dream but can't ever understand—a fine adorning of the world *that* would be!

(2) You argue next that because spirits are more like God than corporeal creatures are, it is probable that God created them. I still don't know, I admit, *how* spirits are more like God than other created things are. I do know that there is no proportion between the finite and the infinite, so that the difference between the most excellent creature and God is the same as that between the least creature and God. So this argument doesn't accomplish anything for your purposes.

If I had as clear an idea of spirits as I have of the triangle or the circle, I wouldn't hesitate to say that God created them. But because my idea I have of them agrees completely with the ideas I find in my imagination of harpies, griffins, hydras etc., I can't consider them as anything but dreams that are as unlike God as being is unlike not-being.

(3) Your third argument—that because there is a body without a spirit, so there must also be a spirit without a body—seems to me no less absurd. Do you also think it probable that there are such things as memory, hearing, sight, etc. without bodies, because there are bodies without memory, hearing, sight, etc.? or that there is a sphere without a circle because there is a circle without a sphere?

(4) You end with an argument that is the same as the first; see my reply to that. My only comment here is that I don't know what the 'high' and 'low' places are that you conceive in the infinite material world, unless you think that the earth is the centre of the universe. If the sun or Saturn is the centre of the universe, then the sun or Saturn will be the 'lowest' place, not the earth.

... These arguments and others like them won't be able to persuade anyone that there are ghosts or spirits of any kind, except those who close their ears to their intellect and let themselves be seduced by superstition, which is so hostile to reason that it prefers to diminish respect for the philosophers by believing old wives' tales.

As for the stories, I said in my first letter that I don't deny them outright; I only deny the conclusion drawn from them. I add now that I don't consider them so credible that I accept many of the details they often add, not so much for •the truth of the story as to •decorate it or •make it a better basis for the conclusion they want to draw.

I had hoped that out of so many stories you would have produced at least one or two that one couldn't in the least

doubt, and that clearly showed that there are spirits or ghosts. The man who thought that ghosts exist because of what he heard in his mother's brewery—that is laughable! It would take too long here to investigate all the stories written about these trifles. I'll just say this: Julius Caesar, who is reported by Suetonius as mocking such things, had a successful life. . . . All those who weigh the effects of human imaginings and affects must also laugh at such things, whatever is said against them by Lavaterus and others who share his dreams about this matter.

55. from Boxel, x/xi.1674:

I'm replying to your letter later than I had intended to, because a slight illness has taken away my pleasure in studying and meditating, and prevented me from writing to you. Now, thank God, I'm healthy again. In my reply I shall track through your letter, skipping your outbursts against those who write about spirits.

I say that there are no females among them because I deny the procreation of spirits; I say nothing about their shape and composition because this doesn't concern me.

Something is said to have been made by chance when it doesn't originate from an agent's intention. When someone digging to plant a tree finds an unexpected treasure, we say that this happened 'by chance'. Someone who acts of his own free will, being able either to act or not to act, is never said to act 'by chance'. Otherwise men would *always* act by chance, which would be absurd. The necessary and the free are contraries, but the necessary and the by-chance are not. The divine will is indeed eternal, but it doesn't follow from this that the world is eternal, because God could determine •from eternity to make the world •at a certain time.

You deny that the divine will has ever been indifferent, a position I reject. And it isn't necessary to **attend to this** as carefully as you think. Nor do all men say that God's will is necessary. . . ., because when we ascribe a will to someone we means that he acts according to his will and can refrain from acting. If we ascribe necessity to him, we are saying that he cannot refrain from acting.

Finally, you say that you don't admit any human attributes in God, so as not to confuse the divine nature with the human. So far, so good; for we can't conceive *how* God acts, or how he wills, understands, perceives, sees, hears, etc. But if you completely deny these actions, and all our highest speculations about God, and say that they are not even in God eminently [see Glossary] and metaphysically, then I don't know what sort of God you have, or what you understand by 'God'.

We shouldn't deny something just because we don't grasp it. The soul, which is a spirit and incorporeal, can act only with the help of the most subtle bodies, the humours. And what proportion is there between a body and a spirit? *How* does the soul act with the help of bodies? . . . You can't answer this, and nor can I. But we see and feel that the soul acts, even if we don't grasp how it does so. Similarly, though we don't grasp how God acts and don't want to ascribe human acts to him, we mustn't let that lead us to deny that his actions agree eminently and inconceivably with ours—willing and understanding with the intellect, but seeing and hearing without eyes or ears. Comparably, wind and air can wipe out landscapes and mountains without hands or other tools, though men need hands and tools to do it.

If you ascribe necessity to God, and deprive him of will and free choice, one suspects that you are depicting this infinitely perfect being as something monstrous. To achieve

your goal you'll need fresh arguments, because in my judgment the arguments you have proposed have no certainty. . . . But let us leave that topic and proceed to others.

For a proof that there are spirits in the world, you want a demonstrative proof, of which there are very few in the world. Apart from those of the mathematicians, none have been found that are as certain as we would like. In most cases we have ·only· probable conjectures, and are satisfied with that. If the arguments by which the things are proven were demonstrations, then only foolish and obstinate men would speak against them. But, my dear friend, we are not so lucky. In the world we are not so precise; to some extent we proceed by conjecture; and in our reasoning we accept the probable, for lack of demonstrations. This is evident in all the sciences, both divine and human, which are full of questions and disputes, this being why we find so many differences of opinion.

It's why there used to be (as you know) philosophers called 'sceptics, who doubted everything. These sceptics disputed for and against, arriving (lack of true proofs) at what is probable, each believing what seemed to him most probable.

- The moon is positioned directly under the sun. Therefore, the sun will be obscured in a certain part of the earth.
- If the sun is not obscured while it is day, then the moon is not positioned directly under it.

This is a demonstrative proof from the cause to the effect, and from the effect to the cause. There are some proofs of that kind, but very few that can't be contradicted by anyone who understands them.

As for beauty, some things are better than others in their composition, i.e. in the proportions among their parts; and God has put the human intellect and judgment into

harmonious agreement with what is well-proportioned, and not with what has no proportion—so that (·for example·) our hearing can distinguish harmonious sounds from unharmonious ones, because the one causes pleasure and the other causes irritation.

The perfection of a thing is also beautiful—it has the beauty of *lacking nothing*. There are many examples of this, but I shan't bore you with them. Let us only look at the world, which is called 'the whole' or 'the universe'. If that's what it is (and it definitely *is*) then the world is not lacking in or deprived of incorporeal things.

What you say about centaurs, hydras, harpies etc. is not relevant here, for we are speaking only about the most universal genera of things, and about their highest degrees, for example, about eternal and temporal, cause and effect, finite and infinite, souled and unsouled, substance and accident, corporeal and spiritual, etc., which subdivide into countless and varied species.

I say that spirits are like God, because he is also a spirit. You require as vivid and clear an idea of spirits as of a triangle. This is impossible. What idea do you have of *God*? Is it as clear for your intellect as your idea of a triangle? I know for sure that you don't have such an idea of God; and I repeat that we are not so fortunate that we grasp things through demonstrative proofs, and that for the most part probability has the upper hand in this world. . . .

I say that the sun is the centre of the world and that the fixed stars are further from the earth than Saturn, and Saturn further than Jupiter, and Jupiter further than Mars, etc., so that in the endless air some things are further from us and others nearer. We call these 'higher' or 'lower', respectively.

The credit of philosophers is not undermined by those who maintain that there are spirits but those who deny this. For all the philosophers, ancient and modern, are convinced there are spirits. Plutarch is a witness of this in his treatises *The Opinions of the Philosophers* and *Socrates's Spirit*. Similarly, also all the stoics, Pythagoreans, Platonists, Aristotelians, Empedocles, Maximus Tyrius, Apuleius, and others. No philosopher today denies them. Go ahead then: reject all the wise and intelligent eye- and ear-witnesses, all the philosophers and historians, who relate these stories. Say that they, along with the common herd, are all fools and idiots. Your answers don't persuade anyone—they're absurd, and generally don't touch the heart of our dispute. And you don't produce a single proof that establishes your opinion. What Caesar mocked was not spirits, but omens and foretellings, as did Cicero and Cato. Still, if he hadn't mocked the soothsayer Spurina on the day he died, his enemies wouldn't have killed him with so many stab-wounds. But enough of that for now.

56. to Boxel, x/xi.1674:

...It would be evident just from this dispute we are now having—even if reason didn't show it—how difficult it is for two people who follow different principles to be able to understand one another, and to agree, on a topic that depends on many other things.

Have you seen or read *any* philosophers who think that the world was made 'by chance' in your sense of the phrase, i.e. that in creating the world God had a purpose and yet went completely outside it? I don't know that any man ever had such a thought.

Any more than I know by what reasons you plan to persuade me that 'by chance' and 'necessarily' are not

contraries. As soon as I realise that the three angles of a triangle *necessarily* equal two right angles, I also deny that this happens *by chance*. As soon as I find that heat is necessarily an effect of fire, I also deny that this happens by chance.

To say that the necessary is contrary to the free seems no less absurd and contrary to reason. No-one can deny that God knows himself and all other things freely; yet everyone agrees that God can't fail to know himself, can't stop knowing himself. You seem not to be distinguishing necessity from coercion or force. A man *necessarily* wants to live, to love, etc., but this isn't something he is *coerced* into. The same holds even more for God's wanting to be, to know and to act.

And if you think about this:

Indifference is only ignorance or doubt; a will that is always constant and determined in everything is a virtue and a necessary property of the intellect,

you'll see that what I have said agrees completely with the truth. To say that God *could have failed to will* something that in fact he did will, and *could not have failed to understand* something, is to attribute to God two different 'freedoms', one necessary (understanding), the other indifferent (will). This distinguishes God's will from his essence and from his intellect; so people who go this route fall from one absurdity to another.

The **attention** I required in my preceding letter seemed unnecessary to you. That's why you did not fix your thoughts on the main point, and why you neglected what was most relevant.

Next, you say that you don't know what kind of God I have if I deny that the acts of seeing, hearing, attending, willing, etc. are in God *eminently*. This makes me suspect that you think there's no greater perfection than that which can be explained by those attributes. I'm not surprised at

this. If a triangle could speak, it would say in the same way that God is triangular eminently, and a circle would say that the divine nature is circular eminently. In the same way each thing would ascribe its own attributes to God, and make itself like God. Everything else would strike it as deformed.

I don't have time or space to answer your questions to me about the divine nature. Anyway, raising difficulties is not the same thing as giving arguments. It's true that we proceed on the basis of conjectures •in the world, but not that we do so •in our contemplations. In daily life we're compelled to follow what is most probable, but in contemplations we must follow the truth. A man would die of hunger and thirst if he weren't willing to eat or drink until he had a perfect proof that the food and drink would be good for him. But in contemplation this is irrelevant. On the contrary, we must beware of assuming as true something that is only probable. Once we have accepted something that is false, countless other false things follow from it,

Next, from the fact that the divine and human sciences are full of disputes and controversies we can't conclude that everything in them is uncertain. Many people are such lovers of contradiction that they have even mocked geometrical demonstrations. Sextus Empiricus and the other sceptics whom you mention deny that the whole is greater than its part, and they judge similarly concerning the other axioms.

...I agree that when we don't have a demonstration we must be content with probabilities; but a probable proof, though we can have doubts about it, must be something that we can't contradict. What can be contradicted is not probable but improbable. For example, if I say that Peter is alive, because I saw him in good health yesterday, that is indeed probable as long as no-one can contradict me. But if someone else says that yesterday he saw Peter faint, and that he thinks Peter then died, this makes what I said seem

false. Your conjecture concerning ghosts and spirits seems false, not probable; I have shown this so clearly that I find nothing in your reply worthy of consideration.

You ask whether I have as clear an •idea of God as I do of a triangle, and I answer Yes. But if you should ask whether I have as clear an •image of God as I do of a triangle, I would answer No. We can't imagine God, but we can indeed understand him. I'm not saying that I know God completely: I don't know all or even most of his attributes, but that doesn't block me from knowing some of them. Early in my learning of Euclid's *Elements* I understood that the three angles of a triangle equal two right angles. I clearly perceived this property of the triangle, though I was ignorant of many of its other properties.

As for ghosts or spirits, I haven't yet heard any intelligible property of theirs, but only imaginations that no-one can get his mind around. When you say that ghosts or spirits here below—I follow your style, although I don't know that matter here 'below' is worth less than matter 'above'!—consist of a very thin, finely divided substance, you seem to be talking about spiders' webs, air, or vapours. To call them invisible is to say what they are *not*, not what they *are*, unless perhaps you want to say that they can switch their invisibility on or off as they please, and that the imagination will find no difficulty in this or other impossibilities,

The authority of Plato, Aristotle, and Socrates is not worth much to me. I would have been amazed if you had mentioned Epicurus, Democritus, Lucretius, or any of the defenders of atoms. But it's not surprising that those who invented occult qualities, intentional species, substantial forms, and a thousand other trifles also contrived ghosts and spirits, and believed old wives' tales so as to lessen the authority of Democritus, whose good reputation they so envied that they had all his books burned. . . . If you are willing to put

your faith in *them*, what reason do you have for denying the miracles of our blessed Virgin and of all the saints, which so many famous philosophers, theologians, and historians have described that I can produce a hundred of them to one who testifies to ghosts.

I have gone on longer than I meant to. I don't want to trouble you any more with these things. I know I won't convince you, because you follow principles completely different from mine.

·END OF THE BOXEL EXCHANGE· [from page 75]

57. from von Tschirnhaus, 8.x.1674:

[The opening paragraph of this is obscure, and we can do without it. The original clearly has one defect, and there may be more. Von Tschirnhaus wrote to Spinoza's friend Schuller a letter of which a part was meant for Spinoza, and in which Spinoza is addressed as 'you'. That part is what we have here. Spinoza replies to it in letter 58, to Schuller.]

Take any case where one man affirms something and another denies it, and they speak in such a way that each is aware of this ·apparent disagreement·. Going by their •words, they seem to be contrary to one another; but if we attend to their •concepts, each is speaking the truth according to his concept. (Well, not in every case; but whenever each speaker is saying something that he believes to be true.) I mention this as something immensely useful in ordinary life; once it has been observed, countless disagreements can be prevented, along with the quarrels stemming from them. This rule is so universal that it holds for all men, including madmen and dreamers. For whatever these people say they are seeing or have seen, it is quite certain that they are telling the truth about what *they* have seen, though we haven't seen it.

This is also observed most clearly in the case we are discussing, concerning free will. It seems that those who argue for it and those who argue against it are all speaking the truth according to their concepts of freedom. Descartes calls 'free' what is not *compelled* by any cause, whereas you call 'free' what is not *determined to something* by any cause. I agree with you that in all things we are determined to something by a definite cause, and thus that we have no free will. But I also think, with Descartes, that in some things. . . .we're in no way compelled, and so have free will. . . .

The state of the question is three-fold. **(1)** Do we have, absolutely, any power over things that are outside us? No. For example, my now writing this letter is not absolutely in my power, because I certainly would have written earlier if I hadn't been prevented by being away from home or by having friends visiting me. **(2)** When the will determines our body to move in a certain way, do we have power absolutely over those motions? We do if we are living in a healthy body; if I am healthy, I can always apply myself to writing or not. **(3)** When I can enjoy the exercise of my reason, can I use it most freely, i.e. absolutely? Yes. For who can deny, without contradicting his own consciousness, that

the next bit, literally translated: in my thoughts I can think that I will to write, or not to write?

what was probably meant: it is absolutely up to me whether to perform the mental act of willing to write or the mental act of willing not to write?

And also as far as the action is concerned, because the external causes permit this (which concerns **(2)**), that I indeed have the capacity both to write and not to write? [The above re-interpretation will be dropped when Spinoza replies in letter 58. He probably thought that von Tschirnhaus meant something like that, but his comments are tied to what he actually wrote.]

I affirm with you that there are causes determining me to this; I write now because you first wrote to me and asked me to write back at the first opportunity, and because there's an opportunity now that I don't want to miss. And I affirm with Descartes, my consciousness serving as a witness, that such things don't compel me, and that I really could despite those reasons refrain from doing this. This seems impossible to deny.

Also, if we were compelled by external things, who could acquire the habit of virtue? If this were affirmed, indeed, all wickedness would be excusable. But in fact it often happens that if we are determined to something by external things, we resist this with a firm and constant heart.

Thus, . . . you and Descartes are both speaking the truth according to your own conception. But the absolute truth agrees only with his opinion. For your conception is based on the supposition that

- the essence of freedom consists in *not being determined by anything*.

If this is affirmed, both positions, yours and Descartes's, will be true. But the essence of a thing is something without which it can't even be *conceived*; and freedom can certainly be conceived clearly, even in someone who is determined by external causes or inducements to act in some way. . . .; but not in someone who is being compelled. [He gives references to passages in Descartes's Correspondence.] But let this be enough. I ask you to respond to these difficulties.

58. to Schuller, x.1674:

Our friend Jan Rieuwertz sent me the letter you were kind enough to write me, together with your friend's judgment [letter 57] concerning my opinion and Descartes's on free will, which was most welcome to me. Just now I am greatly

distracted by other matters and am not in the best of health; but your singular kindness, and (what I think is most important) your zeal for the truth compel me to satisfy your desire as well as the limits of my ability allow.

. . . Your friend says that if one man affirms something concerning some matter and another denies it, then etc.; this is true if he means that the two men are using the same words but thinking about different things. I have sent some examples of this to Jan Rieuwertz and am writing to him now to ask him to communicate them to you.

So I pass to that definition of *freedom* which he says is mine, though I don't know where he got it from. I say that a thing is

- free if it exists and acts solely from the necessity of its own nature, and
- compelled if it is determined by *something else* to exist and produce effects in a certain and determinate way.

For example, God exists necessarily, but he exists freely because he exists from the necessity of his own nature alone. He understands himself and everything else freely because it follows solely from the necessity of his nature that he understands all things. You see, then, that I place freedom not in a free decree, but in free necessity.

But let us descend to created things, which are all determined by external causes to exist and to produce their effects in a definite and determinate way. To understand this clearly, consider a simple example:

A stone receives, from an external cause that starts it moving, a certain quantity of motion; and by this it then necessarily continues to move, although the impulse of the external cause has ceased.

Therefore, the stone's continuing to move is compelled, not because it is necessary but because it must be defined [here = 'made definite', 'given its properties'] by the impulse of the external

cause. What I say here about the stone applies to any individual thing whatever, however complex in structure and operations; *every* individual thing is necessarily determined by some external cause to exist and produce effects in a certain and determinate way.

Now suppose that the stone is thinking while it moves, and that it knows that it's doing its best to continue to move. Being conscious only of its effort and not being at all indifferent, the stone will believe that it is very free and perseveres in motion purely because it wills to. This is the famous human freedom everyone brags of having, which consists only in this: that men are conscious of their appetite and ignorant of the causes by which they are determined. So the infant believes that he freely wants the milk; the angry boy that he wants vengeance; and the timid, flight. The drunk believes that it's from a free decision of his mind that he says things that next morning he soberly wishes he hadn't said. Similarly, the madman, the chatterbox, and a many people of this kind believe that they act from a free decision of the mind, and not that they are carried away by impulse.

Because this prejudice is innate in all men, they aren't easily freed of it. Experience teaches abundantly that •nothing is less in man's power than to restrain his appetites, and that •when men are torn by contrary affects [see Glossary] they often 'see the better and follow the worse' [Ovid]; yet they still believe themselves to be free because when they want something only slightly their appetite for it can easily be restrained by the memory of something else that comes to mind more easily, and they mistake this restraint as an exercise of their free will.

I think I have now explained sufficiently what my opinion is concerning free and compelled necessity, and concerning that fictitious human freedom. From this it is easy to reply to

your friend's objections. When Descartes says that being free is not being compelled by any external cause, if he means by a man who is 'compelled' one who acts unwillingly, then I grant that in certain things we are not at all compelled, and in this respect we have free will. But if by 'compelled' he means acting necessarily though not unwillingly, then (as I have explained above) I deny that we are free in anything.

But your friend says that we are most free in the exercise of our reason, i.e. that we can use it absolutely. He pushed this opinion with great—not to say too much—confidence. 'Who can deny,' he writes, 'without contradicting his own consciousness, that in my thoughts I can think that I will to write, or not to write?' I would like to know what sort of consciousness he is speaking about, beyond what I have expounded in the example of the stone. For my part, unless I contradict my consciousness—i.e. contradict reason and experience—and unless I encourage prejudices and ignorance, I deny that I can think, by any absolute power of thinking, that I do will to write and that I do not will to write.

But I appeal to *his* consciousness; for doubtless he has experienced that in dreams he doesn't have the power of thinking that he wills to write and does not will to write. Nor when he dreams that he wills to write, does he have the power of not dreaming that he wills to write. Nor do I believe that he has learned anything *less* from experience than that the mind is always equally capable of thinking of the same object; what experience *does* teach us is that the mind's ability to contemplate a given object is proportional to the body's ability to have an image of that object stirred up in it.

And when he adds that the causes of his applying his mind to writing have indeed prompted him to write but haven't *compelled* him to, what that comes down to (if you think about fairly) is that his mind was then so constituted

that he was easily led to that by causes that couldn't have had that effect at some other another time (e.g. when he was in an emotional turmoil). That means simply that causes that couldn't have compelled him at another time have compelled him now—not to write unwillingly, but to necessarily want to write.

He says next that if we were compelled by external causes, no-one could acquire the habit of virtue. That is:

We can't have a strong and constant disposition •from a fatal [see Glossary] necessity, but only from •a free decision of the mind

—I wonder who told him *that!* And as for what he adds finally: that if this is posited then all wickedness would be

excusable—what of it? Evil men are no less to be feared, and no less harmful, when they are necessarily evil. But concerning these matters, please see chapter 8 of Part 2 of my *Metaphysical Thoughts*.

Finally, I should like your friend, who raises these objections to me, to tell me how he conceives •the human virtue that arises from the free decree of the mind to be consistent with •God's preordination. If he joins Descartes [*Principles of Philosophy* I:39–41] in admitting that he doesn't know how to reconcile these things, then he is trying to hurl at me the spear by which he himself is already pierced through. But in vain. If you examine my position attentively you'll see that everything in it is consistent.

letters 59–84: written in 1675–1676

59. from von Tschirnhaus, 5.i.1675:

When shall we obtain your method of rightly governing reason in acquiring knowledge of unknown truths? and your general treatment of physics? I know that you have made great progress in both. The first was already known to me, and the second can be learned from the Lemmas added to your *Ethics* Part 2, by which many difficulties in physics are easily solved.

If you have the time and the opportunity, I humbly ask you for the true definition of motion and its explanation, and for your answer to this:

Given that extension conceived through itself is indivisible, immutable, etc., how can we deduce *a priori* •the number and variety of extended things that can arise, and consequently •the existence of the shapes of the particles of each body, shapes that aren't the same for any two bodies?

When I was with you, you indicated to me your method for finding truths that aren't yet known. I know by experience that this method is excellent and yet—as far as I have understood it—very easy. Just by applying it, I have made great progress in mathematics. I should like, therefore, for you to give me the true definition of

- adequate idea,
- true idea,
- false idea,
- fictitious idea and
- doubtful idea.

I have tried to discover how a true idea differs from an adequate idea, but so far all I have learned is this: When

in an investigation I encountered a certain concept or idea, and tried to work out whether this •true idea was also the •adequate idea of something, I asked what the cause of this idea or concept was. Once I found that, I asked again what is the cause in turn of this concept [i.e. this cause of the first concept], and so I proceeded, always seeking the causes of the causes of the ideas, until I found a cause of which I couldn't see any further cause. . . .

For example, if we are ask what is the true origin of our errors, Descartes will reply that we assent to things that we haven't yet clearly perceived. But although this is a true idea of this thing [i.e. of the cause of our errors] I can't learn all I need to know about it unless I also have an adequate idea of it. To achieve this I seek again the cause of this cause: why do we assent to things not clearly understood? And I reply that it's because of a gap in our knowledge. But I can't ask what the cause is of our *not* knowing certain things. So the series of Why?-questions stops, and I see that I have uncovered an adequate idea of our errors.

Meanwhile, I ask you this: because it is established •that many things expressed in infinite ways have an adequate idea of themselves, and •that from an adequate idea of x everything knowable about x can derived, perhaps more more easily from one idea than from another, is there a means of knowing which of two ideas must be used in preference to the other? So, for example, the adequate idea of the circle consists in

- the equality of the radii,
- but it also consists in
- the infinity of equal rectangles that are made from the segments of two lines •intersecting within the circle•.

And there are countless further expressions each of which explains the adequate nature of the circle. And though from each of these everything that is knowable about the circle can be deduced, this can be done much more easily from some than from others. For example, someone who considers the ordinates of curves will deduce many things about their measurement, but we'll do this more easily if we consider the tangents, etc.

In this way I wanted to indicate how far I have progressed in this inquiry. I long for its completion, or—if I have made a mistake somewhere—its correction, as well the definition I asked for.

60. to von Tschirnhaus, i.1675:

I don't recognise any difference between a true idea and an adequate one except that 'true' concerns only the agreement of the idea with its object, whereas 'adequate' concerns the nature of the idea in itself. There's no difference between a true idea and an adequate one beyond that extrinsic relation.

To know from which one of the ideas of a thing all its properties can be deduced, I go by this: it is the idea or definition of the thing that expresses its efficient cause. For example, when I am wondering whether all of a circle's properties can be deduced from its *consisting of infinite rectangles etc.*, I ask whether this idea involves the efficient cause of the circle. Since it does not, I seek another, namely the circle's *being a space marked out by a line of which one end is fixed and the other moving*. Since this definition expresses the efficient cause, I know that I can deduce all the properties of the circle from it.

So also when I define God as a •supremely perfect Being, since that definition does not express God's efficient cause, I won't be able to derive all of God's properties from it. (God

does have an efficient cause, for a thing's efficient cause doesn't have to be external to it.) But when I define God as a thing that is absolutely infinite, i.e. a substance consisting of an infinity of attributes, each of which expresses an eternal and infinite essence

·I can deduce all God's properties from that·. [Spinoza doesn't state this definition here; he merely refers to it as definition 6 in Part 1 of the Ethics].

As for your questions about motion and method, my material on these is not yet written out in an orderly fashion, so I reserve them for another occasion.

·In a passing remark· you say that it is easier to derive results about the measurement of curves by considering their tangents than by considering their ordinates. I think the reverse of this is the case. ·But relative ease isn't crucially important·. What matters is to look for an idea of x from which the whole truth about x can be elicited, whether easily or with difficulty. If I try to do this for a given x, the last things that I derive will inevitably be more difficult than the first.

61. from Oldenburg, 8.vi.1675:

[Of the letters that we have, this is the first in nearly ten years from Oldenburg. His tone has changed because, Curley suggests, •his busy cross-channel correspondence has led to his being imprisoned for two months in the Tower of London on suspicion of espionage, and •he has read Spinoza's *Treatise on Theology and Politics*.]

A friend's forthcoming trip to the Netherlands. . . . gives me an opportunity I didn't want to miss: to let you know in this way that some weeks ago I conveyed my gratitude to you for your *Treatise ·on Theology and Politics·*, which you had sent me. . . ., but that I doubt whether my letter ever reached you.

In my letter I indicated an opinion of the *Treatise* which I

now, after much further thought, regard as premature. At that time certain things seemed to me to tend to the detriment of religion, when I judged it by the standard provided by •the common herd of theologians and •the accepted formulas of the confessions (which seem to be too full of partisan zeal). But now, as I rethink the matter more deeply, many things come to mind that persuade me that you are so far from •trying to harm true religion or solid philosophy that on the contrary you are •working to commend and establish the authentic purpose of the Christian religion, and indeed the divine sublimity and excellence of a fruitful philosophy.

Now that I believe that in your heart you have this •intention to •advance the cause of true Christianity•, I ask you earnestly to explain, in frequent letters to your old and honest friend who longs for the happiest outcome of such a divine plan, what you are now preparing and thinking about for •that purpose. I solemnly promise you not to divulge any of this to any mortal, if you ask me not to. I shall only try gradually to dispose the minds of good and wise men to embrace the truths that you sometimes bring into a fuller light, and to abolish their prejudices against your meditations.

If I'm not mistaken, you seem to see very deeply into the nature and powers of the human mind, and its union with our body. I *beg* you to teach me your thoughts on this theme.

62. from Oldenburg, 22.vii.1675:

Now that our communication has been so happily resumed, I don't want to fail in the duty of a friend by neglecting it. I gather from your reply of 5.vi that you intend to publish that five-part Treatise of yours [namely the *Ethics*]. I hope you'll allow me to urge you, from the sincerity of my affection for you, not to mix into it anything that might seem to weaken

the practice of religious virtue, especially given that what this degenerate and dissolute age is most eager for are doctrines whose consequences seem to support the vices that are rampant.

I shan't decline to receive some copies of the Treatise in question. But I would like them to be addressed, when the time comes, to a certain Dutch merchant living in London, who will make sure that they are then passed on to me. There will be no need •for you• to mention that books of this kind have been sent to me. Provided they come safely into my possession, I'm sure I can easily distribute them to my friends and get a just price for them.

63. from Schuller, 24.vii.1675:

[The letter opens with apologies for 'my long silence' and fulsome declarations concerning Spinoza's kindness and the importance of his work. Then:] I write now to let you know that von Tschirnhaus, who is still in England, enjoys the same good health as we do, and that three times he has asked me in letters to send you his regards and respectful greetings. He has also repeatedly asked me to set following doubts before you and to ask for your solution to them.

(1) Would you please convince us—by a direct demonstration, not by a reduction to impossibility—that thought and extension are the only attributes of God that we can know? And does it follow from this that creatures consisting of other attributes can't conceive extension, so that there would seem to be as many worlds as God has attributes? . . .

(2) Since God's intellect differs from our intellect both in essence and in existence, it will have nothing in common with our intellect, and therefore (by Part 1, proposition 3) God's intellect cannot be the cause of our intellect.

(3) Third, in the note to proposition 10 you say that nothing in Nature is clearer than that each being must be conceived under some attribute (which I see very well), and that the more reality or being a thing has, the more attributes it has. This seems to imply that there are beings that have three, four, etc. attributes; yet one could infer from what has been demonstrated that each being consists of only two attributes—some •definite attribute of God and •the idea of that attribute.

(4) I would like examples of the things produced immediately by God, and those produced by the mediation of some infinite mode. Thought and extension seem to me to be examples of the first kind; examples of the second kind seem to be (in thought) intellect, and (in extension) motion, etc.

These are the things Tschirnhausen and I would like you to clear up, if you have time for this. For the rest he reports that Boyle and Oldenburg had formed a strange conception of your person. He has...given them reasons that have induced them not only to •return to thinking worthily and favourably of your person, but also to •value most highly your *Treatise on Theology and Politics*. . . .

64. to Schuller, 29.vii.1675:

I rejoice that at last you have had an opportunity to cheer me with one of your letters, which are always so welcome to me. I earnestly ask you to do this frequently. I proceed to the doubts.

(1) The human mind can achieve knowledge only of things that are involved in, or can be inferred from, the idea of an actually existing body. For the power of each thing is defined solely by its essence (by Part 3, proposition 7). But (by Part 2, proposition 13) the essence of the mind consists only in its being the idea of an actually existing body. So the

mind's power of understanding extends only to things that this idea of the body contains in itself, or that follow from it. But this idea of the body doesn't involve or express any attributes of God except extension and thought. For (by Part 2, proposition 6) its object, the body, has God for a cause insofar as he is considered under the attribute of extension and not insofar as he is considered under any other attribute. And so (by Part 1, axiom 6) this idea of the body involves knowledge of God only insofar as he is considered under the attribute of extension.

Next, insofar as this idea is a mode of thinking, it also (by proposition 6 again) has God for a cause insofar as he is a thinking thing, and not insofar as he is considered under another attribute. Therefore (by axiom 6 again) the idea of this idea involves knowledge of God insofar as he is considered under thought but not insofar as he is considered under another attribute. It is evident, then, that the human mind, i.e. the idea of the human body, neither involves nor expresses any attributes of God except these two; and (by Part 1, proposition 10) no other attribute of God can be inferred from these two attributes or from their affections. So I infer that the human mind cannot achieve knowledge of any attribute of God except these two. . . .

Does this imply (you ask) whether there are as many worlds as there are attributes? On this see the note to Part 2, proposition 7. This proposition could be demonstrated more easily by reducing the thing to an absurdity. Indeed, I usually prefer that kind of demonstration when the proposition is negative, because that agrees better with the nature of such things. But because you ask only for a positive demonstration, I pass to. . .

(2) . . . the question of whether one thing can be produced by another from which it differs both in its essence and in its existence. ·The question arises· because things that

differ in this way from one another seem to have nothing in common. But since all individual things, except those that are produced by their likes, differ from their causes in their essence and their existence I don't see any reason for doubt about this.

Moreover, I believe I have already explained sufficiently in what sense I understand that God is the efficient cause both of the essence and of the existence of things (in the corollary and note to Part 2, proposition 25).

(3) As I indicated at the end of the note to Part 1, proposition 10, we arrive at the axiom of that note [he means the proposition that the more reality a thing has the more attributes it has] from •our idea of an absolutely infinite being, and not from •the possibility of beings with three, four, etc. attributes.

(4) The examples •of infinite modes• that you ask for:

- of the first kind, •i.e. produced immediately by God•:
 - in thought, absolutely infinite intellect,
 - in extension, motion and rest;
- of the second kind, •i.e. produced by the mediation of some mode of the first kind•:
 - the whole universe's face •or *make* or *Gestalt*•, which varies in infinite ways yet always remains the same. On this, see the note to lemma 7 between propositions 13 and 14 of Part 2.

I believe I have replied to the objections you and our friend have raised. If you think that some doubt still remains, please don't hesitate to convey it to me, so that I may try to remove it.

65. from von Tschirnhaus, 12.viii.1675:

I ask you for a demonstration of your thesis that the soul can't perceive more attributes of God than extension and thought. Indeed, although I see this evidently, still it seems

to me that the contrary can be •deduced from the note to Part 2, proposition 7. Perhaps I haven't understood that note properly; but I'll show you how I do that •inference, begging you to come to my aid with your accustomed kindness if I have misunderstood you.

Here is how things stand. Although I gather from the note that •the world is certainly unique, still it is no less clear also from the note that •it is expressed in infinite ways, and therefore each individual thing is expressed in infinite ways. From this it seems to follow that the modification that constitutes my mind and that expresses my body—this being one and the same modification—is nevertheless expressed in infinite ways, in one way through thought, in another through extension, in a third through an attribute of God unknown to me, and so on to infinity, since there are infinitely many attributes of God and the order and connection of the modifications seems to be the same in all.

Well, then, given that the mind represents a certain modification that is expressed not only in extension but also in infinite other ways, why does it perceive that modification only as expressed through extension, i.e. the human body, and not as expressed through other attributes?

Time doesn't permit me to pursue these matters at greater length. Perhaps all these doubts will be removed by more persistent meditations.

66. to von Tschirnhaus, 18.viii.1675:

... For the rest, to reply to your objection, I say that although each thing is expressed in infinite ways in the infinite intellect of God, nevertheless those infinite ideas by which it is expressed can't constitute one and the same mind of an individual thing, but infinitely many •minds•, because each of these infinite ideas has no connection with any other, as

I have explained in the same note (to Part 2, proposition 7), and as is evident from Part 1, proposition 10. If you will attend a little to these things, you'll see that no difficulty remains. [This is clearly part of a longer letter. We don't have the rest.]

·BURGH'S ATTEMPT TO SAVE SPINOZA'S SOUL· (ending on page 98)

67. from Burgh, 11.ix.1675:

As I was leaving my country I promised to write to you if anything worth mentioning happened on the trip. Something of the greatest importance *has* happened, and I am keeping my promise by letting you know that by God's infinite mercy I have been brought back into the Catholic church, as a member. You'll be able to understand in more detail how this happened from what I have written to Professor Craenen at ·the University of Leiden·; here I shall add a few words that concern *your* welfare.

The more I have admired the subtlety and acuteness of your intelligence, the more I now lament and weep for you. Although you are a most intelligent man and have received a mind endowed by God with excellent gifts, although you love the truth and are indeed eager for it, you have let yourself be led astray and deceived by that wretched and very proud Prince of wicked spirits. What is your whole philosophy but a mere illusion and fable? Yet you commit to it your peace of mind in this life and the eternal salvation of your soul.

See what a wretched foundation all your ideas rest on! You presume that you have finally discovered the true philosophy. How do you know that your philosophy is the best of all that ever were, are, or will be taught? Leaving the future out of it, have you examined all the ancient and modern philosophies that are taught here and in India and all over

the planet? And even if you have examined them all properly, how do you know that you have chosen the best?

You will say: 'My philosophy agrees with right reason, and the others are contrary to it.' But all the other philosophers—except for your disciples—disagree with you; with the same right they proclaim the same thing about themselves and their philosophy as you do about yours; and they accuse you of falsity and error as you do them. So if the truth of your philosophy is to shine forth, you must offer reasons that don't help the other philosophies and bring support only to yours—or else you must admit that your philosophy is as uncertain and trifling as all the others.

But now, confining myself to your book (to which you have given that impious title ·*Treatise on Theology and Politics*·), and mixing together your philosophy with your theology, I proceed further. (For you yourself mix them together, though with devilish cunning you pretend that one is separate from the other and that they have different principles.)

Perhaps you will say: 'The others haven't read holy Scripture as often as I have, and I prove my opinions from Scripture itself, the recognition of whose authority makes the difference between Christians and everyone else in the world.' But how? 'I explain holy Scripture by applying the clear passages to the more obscure ones, and from that interpretation I compose my doctrines, or confirm doctrines that I have previously thought up for myself.'

But think about what you are saying. How do you know that you are making this application properly? and that the application, ·even if it is· rightly made, is sufficient for the interpretation of holy Scripture? and thus that you are establishing your interpretation of holy Scripture properly? Especially when the Catholics say, rightly, that the whole word of God hasn't been given to us in writings, and thus

that holy Scripture can't be explained from holy Scripture alone—by one man or even by the Church itself, which is the only ·legitimate· interpreter of holy Scripture. We must also consult the apostolic traditions, as is •proved from holy Scripture itself and the testimony of the holy fathers, and is •equally in agreement with right reason and experience. So given that that principle of yours is quite false and leads to ruin, where does that leave your teaching, which is wholly built on and dependent on this false foundation?

So if you believe in Christ crucified,

- recognise that wicked heresy of yours,
- recover from the perversion of your nature, and
- be reconciled with the Church.

You support your heresies in the same way that all heretics have done, do now, and will do in leaving God's Church—namely by appealing to holy Scripture alone. Don't flatter yourself that perhaps the Calvinists (the so-called 'Reformed'), the Lutherans, the Mennonites, the Socinians, etc. can't refute your doctrine. They are all just as wretched as you are, sitting with you in the shadow of death.

But if you don't believe in Christ, you are more wretched than I can say—though the remedy is easy:

- Recover from your sins, realise the fatal arrogance of your wretched and insane reasoning.

You don't believe in Christ. Why? You will say: 'Because the teaching and life of Christ don't agree with my principles, any more than the teaching of Christians about Christ agrees with my teaching.' Are you then so bold that you think you are greater than all those who have ever risen up in the State or in God's Church—greater than the patriarchs, the prophets, the apostles, the martyrs, the doctors, the confessors, and the virgins, greater than innumerable saints, greater indeed (blasphemously) than the Lord Jesus Christ himself? Do you alone surpass them in teaching, in your

way of living, in everything? Will you—wretched little man, base little earthworm, indeed food for worms—exult that you are better than the incarnate, infinite wisdom of the eternal Father? Do you alone reckon yourself wiser and greater than all those who have ever been in God's Church since the beginning of the world, and who have believed, or even now believe, that Christ will come or has already come? What basis is there for this rash, insane, deplorable, and accursed arrogance of yours?

You deny that Christ, the son of the living God, the word of the eternal wisdom of the Father, was made manifest in the flesh, suffered for mankind, and was crucified. Why? Because this doesn't agree with your principles. But even if your (false, rash, absurd) principles were true and you built everything on them, you still couldn't account for everything that has happened or is happening in the world. Nor could you boldly assert that when something seemed contrary to those principles it must be really impossible or false. For there are countless things which, even if certainty is sometimes possible in natural things, you won't be able to explain at all. You won't even be able to remove the manifest contradiction between such phenomena and your explanations of other things that you take to be most certain. You will not explain completely from your principles any of the events brought about in witchcraft, . . . of which I personally have seen examples. . . .

Even if some of your ideas do agree adequately with the essences of the things whose ideas they are, what will you be able to judge about the essences of all things? For you can never be confident about whether the ideas of all created things are possessed in the human mind naturally, or whether many if not all of them are produced in it by •external objects and also by •the suggestion of good or evil spirits and •an evident divine revelation. Consider these:

- a divining rod for detecting metals and underground water;
- the stone the alchemists seek [for turning lead into gold];
- the power of words and symbols in charms and incantations;
- the apparitions of various kinds of spirits, good and evil, and their powers, knowledge and activities;
- the reappearance of plants and flowers in glass flasks after they have been burned;
- sirens;
- the gnomes that men say often appear in mines;
- the antipathies and sympathies of many things;
- the impenetrability of the human body.

How will you be able to define these things precisely and establish for certain whether they can actually exist in nature? I'm asking how you can do this *from your principles*, without consulting the testimonies of other men or empirical evidence (not to mention subjecting your judgment to God's omnipotence).

No, my philosopher, you couldn't determine anything about these things, even if your native intelligence were a thousand times more subtle and acute than it is. And if you trust your own unaided intellect in judging these and similar matters, certainly you are already thinking in the same way about things that are unknown to you, or that you haven't experienced. You regard them as impossible, though really they ought to seem to you only uncertain until you have been convinced by the testimony of a great many credible witnesses.

Julius Caesar, I imagine, would have judged the same way, if someone had said to him that a powder can be made, and will become common in later ages, whose power is so great that it makes castles, whole cities, even mountains fly up into the air. . . . He wouldn't have believed this man, and

would have mocked him with hearty laughter, as wanting to persuade him of something contrary to his judgement and experience and to the sum total of military science.

But let's get back on track. . . . What rash judgements will you make about the awe-inspiring mysteries of the life and passion of Christ, which even the Catholics who teach them warn are incomprehensible? What trifling, useless raving will you babble about the countless miracles and signs which after Christ's ascension his apostles and disciples—and subsequently several thousand saints—made known in testimony to. . . .the truth of the Catholic faith, and which. . . .even in our days throughout the earth? And since you can't contradict these things, why continue to cry out against it? Give in, recover from your errors and sins, clothe yourself in humility, and be born again.

But I should like to get down to the truth of what has happened, which is the foundation of the Christian religion.

(1) Think of the power of the consensus of so many tens of thousands of men—thousands of whom have far surpassed you in learning, in refined solidity, and in perfection of life—who *unanimously* declare that

Christ, the incarnate son of the living God, suffered, was crucified, and died for the sins of the human race; was resurrected, transfigured, and reigns in the heavens as God with the eternal Father, in unity with the holy Spirit,

and all the other things related to this—the countless miracles that have been done in God's church by the same Lord Jesus and then in his name by the apostles and the other saints,. . . .miracles that not only elude men's grasp but also contradict common sense, miracles that still occur today. How will you dare to deny. . . .all this?

[Burgh now likens Spinoza's scepticism towards the gospel narratives with the crazy view that Julius Caesar

never existed, that China was never occupied by the Tartars, or that Constantinople wasn't the capital of the Turkish Empire. Anyone who accepted any of these, in face of all the evidence, would be regarded as mad.]

(2) Consider the fact that God's church has been spreading without interruption since the beginning of the world, and continues unchanged and solid; whereas each of the other religions, whether pagan or heretical, had a beginning after the world began, and some have also ended. The same holds for the monarchs of kingdoms and the opinions of any philosophers!

(3) Consider that through the coming of Christ in the flesh, God's church was transformed from the worship of the Old Testament to that of the New, founded by Christ. . . . and then spread by the apostles and their disciples and successors. These were by the world's standard unlearned men, yet they confounded all the philosophers [meaning: beat them in arguments], although they taught the Christian doctrine, which is contrary to common sense and exceeds and transcends all human reasoning. They were by the world's standards undistinguished low-class men who got no help from the power of kings and earthly princes, and were indeed persecuted by them with every kind of tribulation, and suffered all the other misfortunes of the world. The most powerful Roman emperors tried to. . . . crush their work, killing as many Christians as they could. . . ., yet the more they did this the more Christianity increased.

Consider that in this way Christ's church quickly spread throughout the world, until eventually the Roman emperor himself was converted to the Christian faith along with the kings and princes of Europe, after which the Church hierarchy increased its power to such an extent that today it is a thing of wonder. All this was brought about through love, gentleness, patience, trust in God, and all the other

Christian virtues (not by the din of warfare, the force of large armies, and the devastation of territories, as worldly princes extend their boundaries), so that—as Christ promised—even the gates of Hell won't prevail against the Church.

Weigh also here the terrible and unspeakably severe punishment by which the Jews were forced into utter wretchedness and disaster because they were the authors of Christ's crucifixion. Read the histories of all times, and think about them thoroughly, and you won't find that anything similar has happened to any other society, not even in dreams.

(4) Notice the properties that are included in the essence of the Catholic church and therefore are really inseparable from it, namely:

- *Antiquity*: having replaced the Jewish religion, which at that time was the true religion, it counts its beginning from the time of Christ, sixteen and a half centuries ago. Through that period it traces an unbroken line of pastors, through which it has divine, pure and uncorrupted sacred books as well as an equally certain and unstained tradition of God's unwritten word.

- *Immutability*, by which its doctrine and administration of the sacraments are preserved inviolate, as they were established by Christ himself and the apostles, losing none of their power.

- *Infallibility*, by which the church determines and decides everything relating to the faith with the utmost authority, security and truth, according to •the power bestowed on it by Christ for this purpose and •the direction of the Holy Spirit, whose bride the Church is.

- *Unreformability*: it can't be corrupted or deceived, and can't deceive; so obviously it never needs reform.

- *Unity*, by which all its members believe the same thing, teach the same thing regarding faith, have one and the same

altar and all the sacraments in common, and work together towards a single goal, obeying one another.

• *No soul is separable from it*, under any pretext whatever, without at once incurring eternal damnation, unless before death it is reunited with the church through repentance (from which it is evident that all heresies have departed from it, whereas it always remains the same as itself, constant, steadfast, and stable, as built on a Rock);

• *Its tremendous extent*, as it visibly spreads itself throughout the whole world. The same is not true of any other society—schismatic, heretic, pagan—or of any other political regime or philosophical doctrine, because none of those do or can have the cited properties of the Catholic church.

• *Perpetuity to the end of the world*, concerning which the Way, the Truth and the Life himself [i.e. Jesus Christ] has made the church confident, and which is also manifestly demonstrated by the experience of all the properties mentioned, promised and given to it likewise by Christ himself, through the Holy Spirit.

(5) Consider that the admirable order by which the church, such an immense body, is directed and governed indicates plainly that it depends very particularly on God's providence and that its administration is arranged, protected and directed amazingly by the Holy Spirit (just as the harmony seen in all the things in this universe indicates the omnipotence, wisdom and infinite providence that has created and still preserves everything). In no other society is such an excellent and strict order preserved without interruption.

(6) Reflect on the following. Countless Catholics of each sex, many of whom are still alive today (I have known some of them), have lived wonderful and most holy lives, and have...performed many miracles in the name of Jesus

Christ; every day many people undergo a sudden conversion from a bad life to a better, truly Christian and holy life; the holier and more perfect Catholics are, the humbler they are, the more they consider themselves unworthy. . . .; even the greatest sinners retain a proper respect for sacred things, confess their own wickedness, accuse their own vices and imperfections, and wish to be freed from them. . . . So it can be said that the most perfect heretic or philosopher who ever lived hardly deserves to be considered among the most imperfect Catholics. This clearly shows that Catholic teaching is the wisest, and wonderful in its profundity—in a word, that it surpasses all the other teachings in the world because it makes men better than those of any other society, teaches them the secure path to peace of mind in this life, and delivers the eternal salvation of the soul to be achieved after this.

(7) Reflect on the public confession of many heretics hardened in obstinacy, and of the most serious philosophers, that after receiving the Catholic faith they at last realised that they had been wretched, blind, ignorant—indeed foolish and mad—when in their pride and arrogance they falsely persuaded themselves that they were elevated above everyone else in teaching, learning, and perfection of life. Some of these went on to lead a holy life, leaving behind the memory of countless miracles. Some faced up to martyrdom cheerfully and with the greatest rejoicing. Some also (among them St. Augustine) became the subtlest, deepest, wisest and therefore most useful doctors of the church. . . .

(8) Finally, reflect on the wretched and restless life of the atheists. Although sometimes they manifest great cheerfulness and want to seem to be leading a pleasant life with great internal peace of mind, look at their unfortunate and horrible deaths. I myself have seen some examples of this, and I know of countless examples, from the accounts of

others and from history. Learn from the example of these men to be wise while there is time.

I hope you see from this how rashly you are committing yourself to the opinions of your brain. For if Christ is the true God and is at the same time man, as is most certain, see what you are reduced to! For if you persevere in your abominable errors and most grievous sins, what else can you expect but eternal damnation? Reflect on how horrible that is. How little reason you have to mock the whole world (except for your wretched disciples)! How foolishly proud you are, puffed up with the thought of the excellence of your intelligence and with wonder at your vain, false and impious teaching! How shamefully you make yourself more wretched than the beasts by denying yourself freedom of the will! If you don't actually experience this freedom, how can you deceive yourself by thinking that you are worthy of the greatest praise, and indeed, of the most exact imitation? . . .

Come to your senses, philosophic man. Recognise that what you deem foolishness is wise and what you deem wisdom is mad. Go from pride to humility and you will be healed. Worship Christ in the most holy Trinity, so that he may have mercy on your wretchedness, and receive you. Read the holy fathers and the doctors of the Church, and let them instruct you about what you need to do. . . .to have eternal life. Consult Catholic men who have been thoroughly instructed in their faith and are living a good life; they will tell you many things you never knew, things that will astound you.

I am writing this letter with a truly Christian intention: first, that you may know the love I have for you, although you are a pagan; and second, that I might call upon you not to persist in corrupting others too.

So I conclude with this: God wants to snatch your soul from eternal damnation, provided you are willing. Do not

hesitate to obey the Lord, who has called you so often through others, and now calls you again, perhaps for the last time, through me. Having attained this grace by the inexpressible mercy of God himself, I pray that you will attain it also. Do not refuse. If you don't listen to God now when he is calling you, his wrath will be inflamed against you and you'll risk being left behind by his •infinite mercy and becoming a wretched victim of •divine justice, which consumes all things in its wrath. . . .

67a. from Steno, 1675:

I take it that you *are* the author of *·Treatise on Theology and Politics·*; some say that you are, and I have reasons for thinking they are right. I notice that in that book you bring everything back to the public security, or rather to *your* security, which you say is the goal of public security; yet you have embraced means contrary to the security you desire, and have completely neglected the part of you whose security ought to be your sole concern.

That your means contradict your goal is evident from the fact that

- while seeking public peace, you throw everything into confusion, and that
- while striving to deliver yourself from all dangers, you needlessly expose yourself to the greatest danger.

That you have neglected completely the part of yourself to which you ought to be uniquely attached is established by the fact that you permit everyone to think and say what they like about God, provided it doesn't destroy the obedience which you say ought to be given not so much to God as to man. This amounts to equating all human goods with the goods of a civil order, thus restricting them to the goods of the body. You say that you reserve the care of the soul for philosophy, but

that doesn't help you because your philosophy's treatment of the soul is based on mere *suppositions*, and because you leave those unsuited to your philosophy in a condition of life like that of automata, devoid of a soul and born only for the body.

I see a man turning this way and that in this darkness, a man who was once a close friend of mine and who even now, I hope, is not an enemy (for I'm sure the memory of our former intimacy preserves even now a mutual love). And I remember that I too was once stuck in serious errors, even if not exactly the same ones. So the more clearly I see God's mercy to me in the size of the danger from which I have been liberated, the more I am moved by compassion to pray that you receive the same heavenly grace that Christ's kindness has brought to me. To add deeds to my prayers, I offer myself to you as most ready to examine with you all the arguments it may seem suitable to examine, to discover and maintain the true way to true security. Your writings show you to be very far from the truth, but the love of peace and of the truth that I have seen in you in the past, and that isn't yet quenched in this darkness, makes me hope that you'll lend a receptive ear to our church, provided you are given an adequate account of what it promises everyone, and what it offers those who are willing to approach.

The church promises everyone true security, eternal security, or the enduring peace which accompanies infallible truth; and it offers the necessary means for attaining such a great good, namely:

- a certain pardon for evil actions;
- a quite perfect standard for acting rightly;
- the true, effective perfection of all activities according to this standard.

It offers these things, not only to the learned, or to those endowed with a refined intelligence and plenty of free time,

but indiscriminately to all people, of whatever age, sex or condition.

[This, Steno says, requires that those who approach the church don't merely 'not resist, but cooperate'; but he goes on to say that they don't have to do this 'by their own forces'—all that's needed is 'not to deny assent and cooperation'. He continues:] If you haven't yet understood this, I am not surprised, and I won't try to make you understand. It is not in my power to do that.

[He says that he'll 'outline briefly the form of a Christian government', first describing the four stages in 'the life of each man infected with sins'. **(i)** The man always acts as though 'his thoughts were not subject to any judge'. He may say true things about God and the soul, but he treats them 'as if they were distant or external objects', so that what he says about them is 'always doubtful and often contradictory'. He is guilty of many vices (in thought if not in outer action) because his soul 'like a corpse, lacks a spirit to give life to its actions, and is moved by every puff of desire'. **(ii)** The man starts to take in that God is calling him, recognises 'by the beam of this supernatural light that many things are false in his opinions and defective in his actions, and commits himself totally to God'. **(iii)** His soul's continuous exercise of the virtues becomes ready to understand properly the mysteries hidden in sacred scripture, and understanding that it will have only when **(iv)** it 'begins to see God and achieves the wisdom of the perfect'.—And 'the whole program of Christianity' is aimed at bringing each sinner from stage **(i)** to stage **(iv)**].

[Steno exclaims about the success of the Catholic church in 'producing perfect examples of the virtues in every century'. He could give examples involving bishops, priests, severely disciplined monks, but he chooses to emphasize the moral splendours of 'people converted from the worst life to the

most holy, and of •uneducated men and women ‘who by the exercise of divine virtues were raised to understanding wonderful things about God and the soul’, with the result that. among other things, they could perform miracles.]

I know what objections you can make to miracles. We aren’t impressed by a miracle just because it is a miracle; but where we see a miracle bring about the perfect conversion of someone’s soul from vices to virtues, we rightfully ascribe it to the author of all virtues. . . .

The church has always stood by its promises and still does, every day. You will see this if you study its past and present

- not in the books of our opponents, or by listening to those among us who haven’t yet advanced beyond stage **(i)**,

- but from those who are considered true Catholics according to the profession of our own people,

this being the normal standard for inquiries into such subjects. . . . I beg you to examine our doctrines in our writings; your own teaching about the strength of prejudices will easily persuade you to do that.

[He won’t cite Scripture in support of the Pope’s authority, Steno says, because of the underlying conflict between Spinoza and the church regarding how Scripture should be interpreted. He goes on to say that the church’s having a single head is intended so that ‘matters of divine law or things that are necessary should always remain unchanged’, whereas inessentials may change.]

Surely, therefore, if you are led by love of virtue and if you delight in the perfection of actions, you must inquire diligently into all the societies in the world. Nowhere else will you find the cultivation of perfection undertaken with such fervour, and brought to a conclusion with such happiness, as happens among us. . . .

. . . .Penetrate deeply into yourself and search your soul; if you examine everything properly you’ll find it to be dead. You live among matter in motion, as if there weren’t anything causing the movement. What you are introducing is a religion of bodies, not of souls. In the love of one’s neighbour you •provide for the actions needed to preserve the individual and propagate the species, but •have little if any concern for the actions by which we acquire knowledge and love of our author. But you believe that everyone is dead with you, you who deny the light of grace to everyone because *you* haven’t experienced it. Ignorant of the certainty of faith, which surpasses all demonstrations, you think the only certainty is demonstrative. Well, that certainty of yours that is confined within such narrow limits, is it demonstrative? I beg you to examine all your demonstrations and bring me even *one* concerning the way thinking and being-extended are united so that the cause of movement is united with the body that is moved.

But why do I ask you for *demonstrations* about these matters? You can’t even explain to me how thought and extension are *probably* united. So without suppositions you can’t explain. . . .pleasure or pain, or. . . .love or hate. The whole philosophy of Descartes, however diligently you have examined and reformed it, can’t explain to me even this one single phenomenon: how the impulse of matter on matter is perceived by the soul united to the matter.

[In this paragraph, the Latin requires that ‘you’ be understood as plural; presumably Steno is addressing Spinoza and Descartes.] But what other notion of matter itself do you give us, I ask, beyond what you derive from a mathematical examination of quantity relating to shapes that no particle has been proved, except hypothetically, even to *have*? Nothing can be more contrary to reason than

- to deny the divine words of him whose divine works lie open to the senses, denying them because they're contrary to human demonstrations made by hypotheses; or
- to make a judgment about the state of the body which, having been glorified by the change from corruptible to incorruptible, is to be re-united with the soul,

given that you don't even understand the state of the body by whose mediation the mind perceives corporeal objects.

I'm convinced discovering' new principles for explaining the nature of God, of the soul, and of body, is the same as inventing fictitious principles. Reason itself teaches that it's contrary to divine providence that the true principles concerning those things should have been concealed from the holiest men for so many thousands of years, to be uncovered first in this century by men who haven't even achieved perfection in the moral virtues. . . .

Examine thoroughly the principles and doctrines of this philosophy, not among its enemies, not among those of its hangers-on whom either wickedness has united with the dead, or ignorance with children, but among its teachers who are perfect in all wisdom, and precious to God, and probably already participants in eternal life. Then you will recognise that the perfect Christian is the perfect philosopher, even if that person is only a little old woman, or a serving girl busy with menial chores, or someone scratching out a living by washing rags, a layman in the eyes of the world. . . .

If you wish, I will gladly take upon myself the task of showing you how the points in which your teachings depart from ours are partly inconsistent, and partly uncertain, although I might wish that as soon as you have recognised one or two errors in your doctrines, compared with the evident credibility in ours, you would make yourself a pupil of the teachers I have mentioned and that among the first

fruits of your repentance you would offer God a refutation of your errors which you yourself have recognised by the illumination of the divine light, so that if your first writings have turned a thousand souls from knowledge of the true God, your recantation of them, confirmed by your own example, will bring a thousand thousands back to him with you. . . . With all my heart I pray for this grace for you.

68. to Oldenburg, reply to 62:

At the time when I received your letter of 22.vii I went to Amsterdam to see to the publishing of the book I wrote to you about. While I was dealing with this, a rumour spread around that a book of mine about God was in the press, and that in it I tried to show that there is no God. Many people believed this. As a result certain theologians, perhaps the authors of the rumour, complained about me to the Prince and the magistrates. And the stupid Cartesians, to clear themselves of the suspicion of favouring me, as they are believed to do, wouldn't stop denouncing my opinions and writings everywhere. They haven't stopped yet.

Since I learned these things from trustworthy men who also told me that the theologians were setting traps for me everywhere, I decided to put off the publication I was planning, until I saw how the matter would turn out; and I resolved to tell you how I would then proceed. But every day the matter seems to get worse, and I'm not sure what to do.

But I don't want to delay longer my reply to you. First, thank you very much for your friendly warning. But I'd like a fuller explanation of it, telling me *which* of my doctrines you believe might seem to undermine the practice of religious virtue. For I believe that the doctrines that seem to me to agree with reason are also most conducive to virtue. Next, if it's not too much trouble, I'd like you to let me know the

passages in the *Treatise on Theology and Politics* that have caused learned men to have misgivings. For I want to make that Treatise clearer with certain notes, and to remove the prejudices against it if I can.

69. to van Velthuysen, no date:

I am surprised that our friend Nieuwstad said that •I am considering a refutation of the writings that have for some time been coming out against my treatise, and that among other things •I am planning to refute your manuscript. I never thought of rebutting any of my opponents, so unworthy did they seem to me. And I don't remember that I said anything to Nieuwstad except that I planned to •clarify some more obscure passages in that treatise with notes, and to •attach your manuscript to them together with my reply, if this could be done with your permission, which I asked him to get from you. I added that if you withheld permission because I said certain things too harshly in my reply, you would have complete discretion to correct or delete them.

In the meantime, I am not at all angry at Nieuwstadt. Still, I did want to let you know how the matter stands, so that if I couldn't get your permission I would at least show that I didn't want to publish your manuscript against your will. I believe it can be done without any danger to your reputation, provided that your name isn't assigned to it; but I shall do nothing unless you grant me the right to publish it.

But to confess the truth, you would please me much more if you would write down the arguments by which you believe you can attack my treatise, and add them to your manuscript. I ask you most earnestly to do this. There is no-one whose arguments I would be more pleased to weigh carefully. I know that you are possessed only by a zeal for the truth, and I know the singular integrity of your heart, by

which I urgently beg you not to hesitate to undertake this task. . . .

70. from Schuller, no date:

I hope that my last letter, together with the process ·for transmuting metals· of the anonymous author, has been properly delivered to you, and at the same time that you are still well, as I myself am.

For three months I had no letter from Tschirnhaus, which led me to think that some calamity had happened to him on his trip from England to France. But now I rejoice to say that I have received a letter from him, which he asks me to share with you.

I am to convey to you, together with his most solicitous greetings, that he has arrived safely in Paris and met Huygens there, as we had advised him to. . . . He has accommodated himself to Huygens's temperament in every way, so that Huygens thinks very highly of him. He mentioned that you had commended Huygens's acquaintance to him, and that you valued his person highly. This pleased Huygens greatly; he replied that he values your person highly, and that recently he received the *Treatise on Theology and Politics* from you, which many people there think well of. They ask eagerly whether other writings by the same author have been published, to which Tschirnhaus has replied that he knew of none except the demonstration of Parts 1 and 2 of Descartes's *Principles*. He reported nothing else concerning you. He hopes that this ·report· will not be unwelcome to you. I am to convey to you, together with his most solicitous greetings, that he has arrived safely in Paris and met Huygens there, as we had advised him to. . . . He has accommodated himself to Huygens's temperament in every way, so that Huygens thinks very highly of him. He mentioned that you had

commended Huygens's acquaintance to him, and that you valued his person highly. This pleased Huygens greatly; he replied that he values your person highly, and that recently he received the *Treatise on Theology and Politics* from you, which many people there think well of. They ask eagerly whether other writings by the same author have been published, to which Tschirnhaus has replied that he knew of none except the demonstration of Parts 1 and 2 of Descartes's *Principles*. He reported nothing else concerning you. He hopes that this report will not be unwelcome to you.

Recently Huygens sent for Tschirnhaus and told him that Colbert [Chancellor of the Exchequer under Louis XIV] wanted someone to instruct his son in mathematics, and that if a position of this kind would please him Huygens would arrange it. Tschirnhaus replied by seeking some delay, but eventually he said he was available. Huygens reported that this pleases Colbert greatly, especially since Tschirnhaus, not knowing French, will have to speak to his son in Latin.

Regarding the objection Tschirnhaus made most recently [in letter 65], he replies that those few words I had written at your request [relaying the contents of letter 66] have revealed your meaning to him more deeply, and that he had already entertained the same thoughts (since your words in the *Ethics* chiefly admit of explanation in these two ways). But two reasons have led him to pursue the train of thought contained in the objection recently made.

First, that otherwise propositions 5 and 7 of book II seem to him to conflict with one another. In 5 it is maintained that objects are the efficient cause of ideas, which seems to be overturned by the demonstration of 7 because of its citation of axiom 4 of Part 1.

Tschirnhaus writes: 'Or (as I am inclined to think) I am not applying this axiom rightly, according to the intention

of the author, which I would be glad to learn from him if he has time.

The second reason that prevented me from following the explanation given was that in this way the attribute of thought is held to spread much more widely than the other attributes. But I don't see what stops that from contradicting the thesis that each attribute constitutes the essence of God.

'In any case, let me add this: if I can judge other understandings from my own, propositions 7 and 8 of part 2 will be very difficult to understand, because the author has chosen to provide them with such short demonstrations and not to explain them at greater length, no doubt because they seemed so evident to him.'

Tschirnhaus reports that in Paris he met a remarkably learned man named Leibniz, who is very capable in the various sciences and also free of the common prejudices of theology. They have become close friends, because Leibniz like Tschirnhaus works continually on the perfection of the intellect and indeed values nothing more highly than this. . . . In morals, Tschirnhaus says, he is most well-versed and speaks without any influence of the affects, simply from the dictate of reason. In physics, and especially in metaphysical studies concerning God and the soul, he continues, he is most expert.

He concludes that Leibniz is most worthy of having your writings communicated to him, if you give your permission. He believes that 'great advantage will come to the author from this', as he promises to show fully if it pleases you. But if not, be assured that he will honourably keep your writings secret, as he has promised. So far he hasn't as much as mentioned them.

This same Leibniz thinks very well of the *Treatise on Theology and Politics*, on the subject of which you may

remember receiving a letter from him [a letter that we don't have]. Unless there is some weighty reason against it, please don't be reluctant to permit this in keeping with your generous kindness. . . .

71. from Oldenburg, 15.xi.1675:

As far as I can see from your last letter, the publication of the book you intended for the press remains in danger. I approve your programme for the book, in which you indicate that you want to clarify and soften things that readers found troubling in the *Treatise on Theology and Politics*. These, I should think, are especially the passages that seem to speak ambiguously about **(a)** God and Nature, two things that many people think you run together. Also, to many you seem to deny **(b)** the authority and value of miracles, which most Christians are convinced are the only possible support for the certainty of divine revelation. And they say that you conceal your opinion regarding **(c)** Jesus Christ, the redeemer of the world and only mediator for men, and regarding his incarnation and atonement for mankind's sins. They ask that you reveal clearly your thinking on these three points. If you do this, in a way that pleases intelligent Christians who value reason, then I think your affairs will be safe. . . .

72. to Schuller, 18.xi.1675:

I was pleased to learn from your letter, which I received today, that you are well and that our Tschirnhaus has successfully completed his trip to France. In his conversations about me with Huyghens, he conducted himself very wisely, in my judgment at least. I am delighted that he has found such a favourable opportunity for the goal he had set himself.

But I don't see why he thinks that axiom 4 of part 1

contradicts proposition 5 of part 2. The proposition says that the essence of each idea has God for a cause insofar as he is considered as a thinking thing; while the axiom says that the knowledge or idea of an effect depends on the knowledge or idea of its cause.

To confess the truth, I don't follow what you write about this; I think there has been a slip of the pen either in your letter or in Tschirnhaus's copy of the *Ethics*. You write that proposition 5 says that *ideata* [= 'the things that ideas are ideas of'] are the efficient cause of ideas; in fact proposition 5 explicitly denies this. . . . It would be pointless for me to write more fully about this now; I should wait until you explain his mind more clearly to me and I know whether he has an adequately corrected copy of the work.

I believe that I know from letters the Leibniz of whom he writes, but why this counsellor in Frankfurt has gone to France I do not know. Judging from his letters he seems to have a liberal understanding and to be knowledgeable in every science. But I don't think it would be wise to entrust my writings to him so quickly. I should like to know first what he is doing in France, and to hear Tschirnhaus's judgment on him after he has associated with him longer and knows his character better. . . .

I haven't yet tried to test the process of your author, and I don't think I'll be able to focus my mind on it. The more I think about the thing itself [i.e. about what the process is supposed to *do*], the more convinced I am that you haven't made gold but only separated out a little that was hidden in the antinomy. But more of this on another occasion. . . .

73. to Oldenburg, no date:

Last Saturday I received your very short letter of 15.xi, in which you point out things in the *Treatise on Theology and*

Politics that have troubled readers. However, I had hoped also to learn from your letter *what* the opinions are that—as you had warned me previously—seem to undermine the practice of religious virtue. But to explain my intention regarding the three points you mention, I say:

(a) My opinion concerning God and Nature is far different from the one modern Christians usually defend. I maintain that God is the indwelling cause of all things, not the cause from outside. In saying that all things are in God and move in God I am agreeing with Paul [*Acts* 17:22–31] and perhaps also with all the ancient philosophers, though in another way; and, I would venture to say, also with all the ancient Hebrews, as far as it's legitimate to conjecture from traditions that have been corrupted in many ways. But some people think the *Treatise on Theology and Politics* rests on the assumption that God is one and the same as 'Nature' understood as a mass of corporeal matter. This is a complete mistake.

(b) Regarding miracles, I on the contrary am convinced that the certainty of divine revelation rests only on the wisdom of the doctrine, not on miracles, i.e. on ignorance ['on the contrary' because Oldenburg had said that most Christians are convinced of the opposite view]. I have shown this at sufficient length in chapter 6, on miracles. Here I add only that in my view the chief difference between religion and superstition is that one had wisdom as its foundation and the other has ignorance. This, I think, is why Christians are distinguished from others not by faith, not by loving-kindness, not by the other fruits of the Holy Spirit, but only by opinion: because like everyone else they defend themselves only by miracles, i.e. by ignorance, which is the source of all wickedness. And thus they turn faith into superstition, even if it is true. But I doubt very much whether kings will ever permit the use of a remedy for this evil.

(c) For salvation there's absolutely no need to know Christ according to the flesh. We must think quite differently about that eternal 'son of God', i.e. God's eternal wisdom, which has manifested itself in all things but most in the human mind and most of all in Christ Jesus. No-one can attain blessedness without the wisdom that teaches—as nothing else does—what is true and false, good and evil; this wisdom was manifested most through Jesus Christ, so his disciples also preached it as it had been revealed to them, showing that they could pride themselves beyond other people in that spirit of Christ. As for what certain churches *add* to this—that God assumed a human nature—. . . they seem to me to speak no less absurdly than if someone said that a circle has assumed the nature of a square.

I think these words will be enough to explain what I think about those three points. You'll know better than I whether it will please your Christians acquaintances.

74. from Oldenburg, no date:

Since you seem to reproach me for excessive brevity, I shall remove that fault this time by excessive prolixity! You had expected an account of the opinions in your writings that seem to your readers to destroy the practice of religious virtue. I shall say what distresses them most. You seem to build on a fatal necessity of all things and actions; but once that has been granted, they say, the sinews of all laws, of all virtue and religion, are cut, and all rewards and punishments are useless. They think that whatever compels or implies necessity *excuses*, so that ·on your view· no-one will be inexcusable in the sight of God. If we act by the fates, and everything. . . proceeds along an inevitable path, they don't see what room there is for guilt or punishments. It's quite hard to say what means there are to untie this knot. I want

to know what help you can offer in this matter.

Regarding your opinion about the three points I raised, which you think fit to reveal to me, the following things need to be asked about two of them.

(b) In what sense do you take miracles and ignorance to be equivalent, as you seem to do in your most recent letter? The raising of Lazarus from the dead, and the resurrection of Jesus Christ from death, seem to surpass the whole power of created Nature and to belong only to the divine power. Of course this exceeds the limits of a finite intelligence, but that doesn't mean that it involves culpable ignorance. It is fitting—don't you agree?—for a created mind to recognise in an uncreated mind and supreme Divinity

- knowledge that enables it to penetrate into things whose reason we puny humans can't explain; and
- power that enables it to do things whose means we puny humans can't provide.

We are men, and it seems that nothing human should be considered alien to us.

(c) Since you admit that you cannot grasp the doctrine that God really assumed a human nature, it is proper to ask you how you understand the passage [*John* 1:14] in our Gospel which affirms that 'the word became flesh,' and in the letter to the Hebrews the affirmation that 'the son of God assumed not the nature of the angels, but that of the seed of Abraham'. [The added phrases follow previous translators' view about what Oldenburg meant to say.] I should think that the whole tenor of the Gospel is this: that the only begotten son of God, the Word, who both was God and was with God, showed himself in human nature and by his passion and death paid the ransom for us sinners, the price of our redemption. I would be very glad to learn what should be said about passages like these, to support the truth of the Gospel and of the Christian religion, which I think you support.

I had intended to write more, but I've been interrupted by visiting friends, to whom I think it wrong to deny the duties of politeness. But the things I've thrown together in this letter may have been enough. . . .

75. to Oldenburg, no date:

At last I see what you were asking me not to make public. But because this is the principal foundation of everything in the treatise I had decided to publish, I want to explain to you briefly how I maintain the fatal necessity of all things and actions. I don't subject God to fate, but I conceive that all things follow with inevitable necessity from the nature of God. Everyone thinks that it follows necessarily from God's nature that God understands himself, but no-one thinks that God is compelled by some fate. Rather they think he understands himself completely freely, even if necessarily.

This inevitable necessity of all things doesn't destroy either divine or human legislation. The moral teachings themselves, whether or not they take the form of law or legislation from God himself, are divine and salutary [see Glossary]. The good that follows from virtue and the love of God will be just as desirable whether we get it •from God as a judge or •as something emanating from the necessity of the divine nature. The bad things that follow from evil actions and affects won't be any less frightful because they follow from them necessarily. And whether we do the things we do necessarily or contingently, we are still led by hope and fear.

Next, the only reason men are inexcusable before God is that they're in his power as clay is in the power of the potter, who out of one batch of clay makes some vessels for honour and others for dishonour [echoing *Romans* 9:20–21]. If you would attend a little to these few things, I'm sure you could easily reply to all the arguments that can be raised

against this opinion, as many have already experienced with me.

I have equated miracles with ignorance because those who try to base the existence of God and religion on miracles want to show something obscure by something else more obscure that they are completely ignorant of. . . . For the rest, I think I have explained my position on miracles sufficiently in the *Treatise on Theology and Politics*. Here I add only this one thing, ·about Christ's reported resurrection·:

If you attend to the following things—

- the risen· Christ didn't appear to the Senate, Pilate, or any of the unfaithful, but only to the saints;
- God has neither a right hand nor a left, and is not in any place but is everywhere according to his essence;
- matter is everywhere the same;
- God doesn't manifest himself outside the world in that imaginary 'space' they have invented; and finally
- the structure of the human body is kept within its proper limits only by the weight of the air

—you will easily see that this appearance of Christ was not unlike God's appearance to Abraham when he saw three men whom he invited to eat with him [*Genesis* 18:1–8]. You will say: 'But all the apostles believed completely that Christ was resurrected from the dead and really ascended into heaven.' I don't deny this. For Abraham also believed •that God had dined with him; and all the Israelites believed •that God descended from heaven to Mt. Sinai, surrounded by fire, and spoke directly to them [*Exodus* 19:18–24], although these and many other things of this kind were apparitions—revelations adjusted to fit the grasp and opinions of the men God wanted to reveal his mind to.

I conclude, therefore, that Christ's resurrection was really spiritual, and was revealed only to the faithful according to their power of understanding; that is, I take it that •Christ

was endowed with eternity, •that he rose from 'the dead' (in the sense *he* gave that phrase when he said 'let the dead bury their dead' [*Matthew* 8:22]), and •that his life and death provided an example of singular holiness which his disciples could follow and in that way be 'raised from the dead'.

It wouldn't be hard to explain the whole teaching of the Gospel according to this hypothesis. Indeed it's only on this hypothesis that Paul's arguments in 1 *Corinthians* 15 can be explained; interpreted according to the common hypothesis, they seem weak and can easily be refuted—not to mention the fact that the Christians have interpreted spiritually all the things the Jews interpreted in terms of the flesh.

Like you, I recognise human weakness. But do you think that we puny men have so much knowledge of Nature that we can determine how far its force and power extend themselves, and what surpasses its force? To claim to have this knowledge is *arrogant*, so it isn't wrong or boastful to explain miracles through natural causes as far as possible. As for things that we can't explain but can't show to be absurd, it will be best to suspend judgment about them, and to base religion only on the wisdom of ·its· teaching.

You think that the passages in the Gospel of John and the letter to the Hebrews are incompatible with what I have said, but that's because you understand the phrases of eastern languages in terms of European ways of speaking. It's true that John wrote his Gospel in Greek, but he still hebraizes. Anyway, when Scripture says that God manifested himself in a cloud, or that he dwelt in the tabernacle, and in the temple, do you believe that God himself took on the nature of a cloud, and a tabernacle, and a temple? ·Of course you don't! Well, that is the most that Christ said of himself: that he was the temple of God, because. . . .God manifested himself most in Christ. To express this more powerfully, John said that 'the word became flesh'. But enough of these things.

76. to Burgh, reply to 67:

I could hardly believe it when others told me, but now I have it from your letter: you have not only joined the Roman church but have become a vehement defender of it, and have already learned to revile your opponents and rage against them impudently and aggressively.

I hadn't intended to reply to your letter. I was certain that to restore you to yourself and your family you needed the passage of time more than you needed argument, not to mention other reasons that you approved in our conversation about Steno, whose footsteps you are now following. But friends who had had great hopes for you because of your natural ability pressed me •not to fail in the duty of a friend, •to think of what you recently were rather than of what you are now, and so on. So I have finally been persuaded to write you these few lines, asking you earnestly to be so kind as to read and weigh them fairly.

Opponents of the Roman church usually relate the vices of the priests and popes, but I shan't try in that way to turn you away from them. Those stories are often brought up maliciously, more to irritate than to instruct. I concede that the Roman church contains more men of great erudition and personal virtue than any other Christian church. (That's because it has more members than any other Christian church, and therefore more men of every kind.) But if you haven't lost your memory along with your reason, you can't deny that in every church there are many honourable men who worship God with justice and loving-kindness. We know many men of this kind among the Lutherans, the Reformed, the Mennonites, and the Enthusiasts; and among others there are your own •Protestant• ancestors, who in the time of the Duke of Alva suffered all kinds of torture for the sake of religion, with equal constancy and freedom of mind.

So you ought to concede that holiness of life is not exclusive to the Roman church, but is common to all. And because we know by this—as I say with the apostle John (4:13)—that we remain in God, and God remains in us, it follows that whatever distinguishes the Roman church from the others is completely superfluous and thus has been established only by superstition. For as I have said, with John, the unique and most certain sign of the true universal faith is *justice and loving kindness*. They are the true fruits of the Holy Spirit; wherever they are present, Christ is really present; wherever they are absent, Christ is absent; for only by the spirit of Christ can we be led to the love of justice and loving kindness. If you had been willing to weigh these things rightly, you wouldn't have lost yourself, and you wouldn't have driven your parents, who are now lamenting your misfortune, into bitter grief.

However, I return to your letter, in which first you lament that I let myself be led astray by the Prince of wicked spirits. Cheer up! and return to yourself. When you were in possession of your faculties, unless I'm mistaken, you worshipped an infinite God by whose power absolutely all things happen and are preserved. But now you are dreaming that •there's a Prince, an enemy of God, who against God's will leads astray and deceives most men (good ones are rare), and that •for that reason God hands these men over to this master of wicked acts to be tortured to eternity. So divine justice allows the Devil to deceive men with impunity, but the men the Devil has wretchedly deceived and led astray don't go unpunished.

Would these absurdities still have to be tolerated if you worshipped an infinite and eternal God, instead of *that* one. . . .? And you weep that I am wretched? And you call my philosophy, which you have never seen, a fable? Young man bereft of understanding, who has bewitched you into

believing that ·in the Eucharist· you are eating that highest and eternal being and have him in your intestines?

Yet you seem to want to use *reason*, and you ask me: ‘How do you know that your philosophy is the best of all that ever were, are, or will be taught?’ I can ask you the same thing, with far better right. For I don’t presume that I have discovered the best philosophy, but I know that I understand the true one. How do I know this? In the same way that you know the three angles of a triangle to be equal to two right angles. No-one will deny that this is enough—as long as his brain is healthy and he isn’t dreaming of foul spirits who fill us with false ideas that are like true ones. For the true is the indicator both of itself and of the false.

But you, who presume that you have at last discovered the best religion—or rather the best men, to whom you have abandoned your credulity—how do you know that they *are* the best among all those who ever did, do, or ever will teach other religions? Have you examined all those religions, both ancient and modern, that are taught here and in India and everywhere throughout the globe? Even if you had examined them properly, ·I would still ask· how do you know you have chosen the best? since you cannot give any reason for your faith.

You will say that you’re trusting in the internal testimony of the spirit of God, and that the others are led astray and deceived by the Prince of wicked spirits. But all those others will make the same boast about *their* teachings.

As for what you add about the common agreement of many thousands of men, and about the uninterrupted succession of the Church, etc.—that’s the same old song of the Pharisees [referring to the adherents of the rigidly ritualistic Judaism of his own time.] With no less confidence than the adherents of the Roman church, they display many thousands of witnesses who report •things they have heard as •things

they have experienced, with as much stubbornness as the Roman witnesses. They trace their lineage all the way back to Adam, and they boast with equal arrogance that their church has spread to this day, and remains unchanged and genuine, in spite of the hostility of the pagans and the hatred of the Christians.

They defend themselves most of all by their antiquity. They claim, unanimously, that their traditions were received from God himself, and that they alone preserve his written and unwritten word. No-one can deny that all heresies have left them, but that they have remained constant for thousands of years without any state compulsion, solely by the effectiveness of ·what I call· their superstition. The miracles they tell of are enough to weary a thousand babblers.

What they are most proud of is that they count far more martyrs than any other nation, and that the number of those who have suffered for the faith they profess increases daily. This is not a fable. I myself know among others a certain Juda, known as ‘Juda the Faithful’ [a Spanish nobleman who converted to Judaism] who in the midst of the flames, when he was already thought to be dead, began to sing the hymn ‘To thee, Lord, I offer my soul. . .’, and in the middle of it he breathed his last.

I grant that the organisation of the Roman church, which you praise so highly, is well-designed politically and profitable for many. I don’t believe there’s any order more suitable for deceiving the people and repressing men’s minds—except for the Mahomedan church, which surpasses it by far because it has had no schism ever since it began. [Spinoza is clearly unaware of the division in Islam between the Sunnis and the Shiites, which began immediately after the death of Mohammed.—note by Curley]

So if you make the calculation correctly, you’ll see that only your point **(3)** [on page 96] is in favour of the Christians:

namely, that unlearned and base men were able to convert almost the whole world to the faith of Christ. This, though, supports not the Roman church but everyone who professes the name of Christ.

Anyway, suppose that the reasons you cite *do* all favour only the Roman church, do you think you can use them to demonstrate mathematically the authority of that church? Of course you can't; so why do you want me to believe that my demonstrations come from the Prince of wicked spirits while yours are inspired by God? Especially given that in becoming a slave of this Church you have (as your letter clearly shows) been guided less by the love of God than by the the sole cause of superstition, namely the fear of hell. Putting no trust in yourself, and relying solely on others whom many people condemn—is this your humility? Using reason, and trusting in this true word of God that is in the mind and can never be distorted or corrupted—is this my arrogance and pride?

Away with this pernicious superstition! Recognise the reason God has given you, and cultivate it, unless you want to be considered one of the brute animals. Stop calling absurd errors 'mysteries', and don't shamefully confuse •things that are unknown to us...with •things that are demonstrated to be absurd, as are the terrifying secrets of this church. The more contrary these are to right reason, the more you believe they are simply out of our intellectual reach.

The *Treatise on Theology and Politics* is based on the thesis that Scripture must be explained only through Scripture. You fiercely announce that there are no reasons supporting this, and that it is false; but it's not something that I merely *supposed*—I conclusively demonstrated it to be true or solidly grounded, especially in chapter 7 where rival views are also refuted. And see also what I demonstrated at the

end of chapter 15. If you're willing to attend to these things, and also to examine the histories of the church (of which I see that you are most ignorant) so as to see how falsely the Popes transmit many things, and by...what tricks the Bishop of Rome had himself made Prince of the Church 600 years after the birth of Christ, I don't doubt that you will at length recover. I heartily desire this for you.

77. from Oldenburg, 14.i.1676:

You were exactly right when you saw why I didn't want that *fatal necessity of all things* to be spread around, namely so that the practice of virtue wouldn't be hindered by it, and rewards and punishments made would worthless. What your latest letter suggests about this doesn't seem to lessen this difficulty or calm the human mind. If we men in all our actions, moral as well as natural, are in God's power as clay is in the potter's hand how can any of us properly be called to account for having acted thus and so when it was completely impossible for him to act otherwise? Won't we *all* be able to say this to God?

'Your inflexible decree and irresistible power have driven us to act in this way; we couldn't act otherwise. So where's the justice in handing us over to the direst punishments that we couldn't possibly avoid because you were doing and directing everything...according to your will and good pleasure.'

When you say that •men are inexcusable before God simply because they are in God's power, I would turn that around and say (with greater reason, I think) that •men are completely *excusable* because they are in God's power. For everyone can easily object: 'Your power is inescapable, O God; so it seems that I should be excused for acting as I did.'

You still take miracles to be equivalent to ignorance. By that you seem to confine the power of God within the same limits as the knowledge of men—at least of the most acute men—as if God can't do or produce anything that men can't explain if they exert all the powers of their intelligence. And that narrative of Christ's passion, death, burial and resurrection seems to have been painted with such lively and genuine colours that I venture to challenge you to think about it: if you are persuaded of the truth of the narrative, do you believe that it is to be taken allegorically rather than literally? The details the evangelists have recorded so clearly about this matter seem to weigh heavily in favour of taking the narrative literally.

These are the things I wanted to note regarding this subject. I beseech you to pardon them, and in accordance with your sincerity, to reply in a friendly fashion. Boyle greets you courteously. At another time I'll report on what the Royal Society is doing now.

78. to Oldenburg, 7.ii.1676:

When I said in my previous letter that we are inexcusable because we are in God's power like clay in the hand of the potter, I meant this:

No-one can reproach God because he has given him a weak nature, or a mind lacking in power. Just as it would be absurd for a circle to complain that God didn't give it the properties of a sphere, or a child who is tormented by a stone that he didn't give it a sound body, so also a weak-minded man can't complain that he can't restrain or moderate his desires because God has denied him strength of character and a true knowledge and love of God himself.

Nothing belongs to a thing's nature except what follows necessarily from its given cause. It doesn't belong to the nature of each man that he should be strong-minded. And experience and reason both tell us that it is no more in our power to have a sound body than it is to have a sound mind. [We'll see that Oldenburg in his reply writes as though Spinoza had written 'it is no more in our power to have a sound mind than it is to have a sound body', and that is surely what he meant to say: 'You know that we don't choose our bodies; well, we don't choose our minds either.'] You insist that if men sin from a necessity of nature then they are excusable. But you don't explain what you want to infer from that. Is it that God can't become angry with them? Or that they are worthy of blessedness, i.e. of the knowledge and love of God? If the former, then I entirely agree that God doesn't become angry, but that all things happen according to his decree. I deny, though, that therefore all men ought to be blessed. Men can be excusable and yet lack blessedness and be tormented in many ways. A horse is excusable for being a horse and not a man, but it must still be a horse and not a man. He who is crazy because of a ·rabid· dog's bite is indeed to be excused; nevertheless, he is rightly suffocated. And one who cannot govern his desires and restrain them by fear of the laws, although he too is to be excused because of his weakness, still can't enjoy peace of mind and the knowledge and love of God. He necessarily perishes.

... When Scripture says that God becomes angry with sinners, and that he is a judge who finds out about men's actions, makes decisions about them, and passes sentence, it is adapting itself to the accepted opinions of the common people; it isn't trying to teach philosophy or make men learned, but to make them obedient.

I don't see why I seem to confine the power of God and human knowledge within the same limits, just because I have taken miracles and ignorance to be equivalent.

I accept Christ's passion, death, and burial literally, as you do, but I understand his resurrection allegorically. I agree that the evangelists relate the resurrection in such detail that we can't deny that they believed

- that the body of Christ was resurrected and ascended into heaven so that he sits on the right hand of God; and
- that this could also have been seen by non-believers if they had been present at the times and in the places where Christ appeared to the disciples.

Nevertheless, they could have been deceived about this, without that detracting from the Gospel's teaching, as also happened to other prophets. I've given examples of this previously. But Paul, to whom Christ also appeared afterwards, gloried that he knew Christ not according to the flesh, but according to the spirit.

79. from Oldenburg, 11.ii.1676:

Your letter of 7.ii contains some things that seem to merit critical examination. You say that a man can't complain that God has denied him true knowledge of God and sufficient powers for avoiding sins, because nothing belongs to a thing's nature except what follows necessarily from its cause. But I say that since God, the creator of men, formed them according to his own image—which seems to imply wisdom, goodness, and power in its concept—it seems to follow completely that it is more in man's power to have a sound mind than to have a sound body, because the soundness of the body depends on mechanical principles whereas the soundness of the mind depends on choice and prudence.

You add that men can be excusable and yet tormented in many ways. At first glance this seems hard and what you go on to offer as a proof—that a dog gone mad from

a bite is indeed to be excused but nevertheless is rightly killed—doesn't seem to settle the matter, since killing a dog of this kind would be cruel if it weren't necessary to preserve other dogs or other animals or men themselves from a bite of this kind, which would make them mad.

But if God implanted a sound mind in men, which he could, no contagion of vices would need to be feared. It seems very cruel for God to destine men to eternal torments (or at least for a time to severe torments) because of sins that they had no way of avoiding. Furthermore, the tenor of the whole of sacred Scripture seems to imply that men *can* abstain from sins. Indeed, it teems with curses and promises, announcements of rewards and of punishments, which all seem to •count against a necessity of sinning and •imply the possibility of avoiding punishments. To deny this is to imply that the human mind act just as *mechanically* as the human body does.

Your continuing to take miracles and ignorance as equivalent seems to be based on the view that a creature must have a clear insight into the infinite power and wisdom of the creator. I'm still completely convinced that this is false.

As for your claim that Christ's passion, death and burial are to be taken literally, but his resurrection allegorically, you don't support this with any argument that is clear to me. In the gospels Christ's resurrection seems to be related as literally as the other events. And the whole Christian religion—its *truth*—rests on this article of the resurrection. Take this away and the mission of Christ Jesus collapses, as does his heavenly teaching. You must have noticed how much trouble Christ took, after rising from the grave, to convince his disciples of the truth of the resurrection, properly so called. Wanting to turn all those things into allegories is the same as wanting to undermine the truth of the whole Gospel narrative.

I wanted to convey these few remarks to you again, in accordance with my freedom of philosophising, which I earnestly beseech you to take in good part.

Very soon I shall write to you about the studies and activities of the Royal Society, if God grants me life and health.

80. from von Tschirnhaus, 2.v.1676:

First, I have great difficulty conceiving how the existence of bodies with motions and shapes is to be demonstrated *a priori*. For in extension considered absolutely—i.e. considered in itself, *just* as extension—there are no shapes or motions.

Secondly, I would like to learn from you how these words in your letter on the infinite [page 17] are to be understood: ‘But they don’t infer that such things exceed every number because of how many parts they have.’ It seems to me that mathematicians *do* always demonstrate concerning such infinities that the number of the parts is so great that it exceeds every assignable number. And in the example of the two circles that you use there, you seem not to show what you said you would show. You do show that they don’t infer infinity from •the excessive size of the intervening space, or from •our not knowing its maximum and minimum; but you don’t demonstrate, as you wanted to, that they don’t infer it from •the multiplicity of the parts.

Leibniz tells me that the tutor of the Dauphin of France, a man of outstanding learning named Huet, is going to write about the truth of human religion, and will refute your *Treatise on Theology and Politics*.

81. to von Tschirnhaus, 5.v.1676:

What I said in my letter concerning the infinite, that they don’t infer the infinity of the parts from their multiplicity, is evident from the fact that if it were inferred from their multiplicity, this would be a multiplicity than which we could not conceive a greater; and it isn’t. In the whole space between two circles with different centres we conceive twice as great a multiplicity of parts as in half of the same space. Yet the number of parts, both in the half and in the whole space, is greater than every assignable number.

Next, from extension as Descartes conceives it—i.e. as a mass at rest—it is not only ‘difficult’ but completely impossible to demonstrate the existence of bodies. Matter at rest, left to itself, will continue to be at rest; it won’t move unless a more powerful external cause moves it. That’s why I didn’t hesitate to affirm that Descartes’s principles of natural things are useless, not to say absurd.

82. from von Tschirnhaus, 23.vi.1676:

I would like you to do me the favour of indicating how, according to your meditations, the variety of things can be derived *a priori* from the concept of extension. You’ll remember Descartes’s opinion about this: he holds that he can’t deduce it from extension except by supposing that it was brought about in extension by a motion aroused by God. So I don’t think he deduces the existence of bodies from matter that is at rest; saying that he *does* involves disregarding his supposition of God as a mover. For you haven’t shown how •the existence of a variety of bodies• must follow *a priori* from God’s essence, something that Descartes thought surpassed man’s grasp.

So I ask you this because I know that your views are different. I don't think you would have written so obscurely about this if you didn't have weighty reasons for not coming into the open about it; but be assured that whether you indicate something to me openly or whether you conceal it, my feeling towards you will always remain unchanged.

My reason for particularly wanting an explanation of this is as follows. I have always observed in mathematics that from anything considered in itself, i.e. anything's definition, we can deduce just one property, no more; to deduce more properties we have to relate the thing in question to other things, and then from the conjunction of the definitions of these things new properties do result.

Consider for example the circumference of a circle: from that alone I can't infer anything except that it exists everywhere like itself, or is uniform, a property that does indeed mark it off from all other curves. . . . But if I relate it to other things, such as the radii drawn from the centre, or two lines intersecting within the circle, etc., I shall certainly be able to deduce more properties from this.

Actually, this seems to be somehow contrary to proposition 16 of Part 1, which is nearly the most important proposition in that part of your treatise. In this proposition it is taken for granted that many properties can be deduced from a thing's given definition. This seems to me impossible unless we relate the thing in question to other things. And it has the further result that I can't see how the infinite variety of bodies can arise from any attribute considered by itself, e.g. from extension. Perhaps you think that this can't be inferred from one attribute considered by itself, but can be inferred from all the attributes taken together; if so, I would like you to explain how this would be conceived.

83. to von Tschirnhaus, 15.vii.1676:

You ask whether the variety of things can be demonstrated *a priori* from the concept of extension alone. I believe I have already shown clearly enough that this is impossible, and that therefore Descartes defines *matter* badly by •extension, and that it must be defined by •an attribute that expresses eternal and infinite essence. I may some day discuss these matters more clearly with you, if I live long enough; up to now I haven't been able to set out anything concerning them in an orderly way.

You add that from a thing's definition, considered in itself, we can deduce only one property; this may be true of very simple things, i.e. beings of reason (under which I include shapes also), but not for real beings. From my defining *God* as •a being to whose essence existence pertains• I infer many of his properties—that he exists necessarily, that he is unique, immutable, infinite, etc. I could give many other examples, but this one will do for now.

Finally, please inquire whether Huet's treatise—the one against the *Treatise on Theology and Politics* that you wrote me about earlier—has been published already, and whether you'll be able to send me a copy. Also, do you know yet what has recently been discovered concerning refraction? [This may refer to either or both of two then-recent discoveries: Newton's, that a prism resolves a beam of light into coloured beams with different indices of refraction; Bartholinus's, that light entering a crystal of Iceland spar emerges as two refracted rays.—note based on A. Wolf's edition of the correspondence.]

84. to a friend, date unknown:

Yesterday I received your welcome letter. I thank you heartily for your scrupulous concern for me. I would not let this

opportunity go by, if I weren't busy with a certain matter that I think to be more useful and that I believe will be more pleasing to you—namely, putting together the Political Treatise that I began some time ago, at your suggestion.

Six chapters of this Treatise are already complete. The first contains a kind of introduction to the work as a whole; the second treats of natural right; the third, of the right of the supreme powers; the fourth, what political affairs depend on the governance of the supreme powers; fifth, what is the

ultimate or highest thing society can consider; and sixth, how a monarchic State ought to be set up so as not to fall into Tyranny.

I am now writing the seventh chapter, in which I demonstrate methodically all the main points of the sixth chapter concerning the order of a well-ordered monarchy. Then I shall move on to the aristocratic State and the popular State, and finally to the laws and other particular questions concerning politics.

Notes on the other correspondents

Pieter Balling (c. 1664–1669): A Mennonite and an enemy of dogmatism. He was the agent in Amsterdam of various Spanish merchants, knew Spanish well, and may have come to know Spinoza through that. He was the translator into Dutch of Spinoza's *Descartes' 'Principles'* and *Metaphysical Thoughts*, and perhaps of other works as well.

Willem van Blijenbergh (1632–1696): A grain broker by profession, but also an ardent would-be theologian and metaphysician. Spinoza's initial warm welcome to him would have been more cautious if he had known that van Blijenbergh had already published a work entitled

Theology and Religion defended against the views of Atheists, wherein it is shown by natural and clear arguments that God has implanted and revealed a Religion, that God wants to be worshipped in accordance with it. . . etc.

In 1674 he wrote another such book, including 'a refutation of Spinoza's *Treatise on Theology and Politics*—'that blasphemous book'. Spinoza's final letter to him (27) is notably gentle and temperate.

Johannes Bouwmeester (1630–1680): A close friend of Meyer and of Spinoza. Trained in medicine and philosophy at the University of Leiden, he was a fellow member with Meyer of the society *Nil volentibus arduum* [Latin: Nothing is difficult for the willing] and codirector of the Amsterdam theater in 1677.

Hugo Boxel: High-level bureaucrat and then governor of his native city Gorkhum.

Robert Boyle (1627–1691): Son of an Earl, and the leading British scientist of the period between Bacon and Newton. He

belonged to a group of Baconians that was later incorporated as the Royal Society. His reputation as a scientist is most securely based on work that led him to the law relating the pressure and volume of gases. He held that science was not only compatible with Christianity but encouraged an appreciation of God's works, and he wrote extensively against atheism.

Albert Burgh: Son of an influential member of the governing classes. When he converted to Roman Catholicism, his parents asked their friend Spinoza to intervene, which he did, though unsuccessfully.

J. Ludovicus Fabritius (1632–1697): Professor of philosophy and theology at the University of Heidelberg. The Elector Palatine, on whose behalf he wrote letter 47, was Karl Ludwig, brother of Queen Christina of Sweden, Descartes's patroness.

Johan George Graevius (1632–?): Professor of rhetoric in the university of Utrecht.

Johannes Hudde 1628–1704: A student at the University of Leyden in the 1650s; joined a research group that translated Descartes's *Geometry* into Latin and published it with three appendices, one by Hudde. Did significant work in mathematics, optics, and probability theory. Mayor of Amsterdam (1672–1702).

Jarig Jelles (?–1683): A spice merchant in Amsterdam, he entrusted his business to a manager and devoted himself to the pursuit of knowledge. He was one of those who persuaded Spinoza to publish his *Descartes's 'Principles'*, and he paid the cost of publication.

Gottfried Leibniz (1646–1716): The most distinguished European philosopher of the generation after Spinoza's.

Lodewijk Meyer (1629–1681): Studied philosophy and medicine at the University of Leiden, where he became an ardent Cartesian. After receiving doctorates in both subjects he practised medicine in Amsterdam and figured in the literary world—wrote poems and plays, assisted with an important dictionary, directed the Amsterdam theater.

Henry Oldenburg (c. 1618–1677): Born in Bremen, where he studied theology. Most of his adult life was spent in England, where he was occupied partly in diplomatic work, partly in teaching (one of his pupils being a nephew of Boyle), but mainly with the secretaryship of the Royal Society, a position he held from 1662 until his death.

Jacob Ostens (1625–1678): A Collegiant [see Glossary] and surgeon.

G. H. Schuller (1631–79): A medical practitioner in Amsterdam. Spinoza consulted him medically sometimes, including during his final illness; and Schuller was with Spinoza when

he died.

Nicholas Steno (1638–1687): Physician and research biologist; converted to Roman Catholicism in 1667.

Ehrenfried Walther von Tschirnhaus (1631–1708): A German Count who studied in Holland and served as a volunteer in the Dutch army. He had many scientific activities and interests, and is also credited with being the first European to find out how to make porcelain.

Lambert de Velthuysen (1622–1685): Studied philosophy, theology and medicine at the University of Utrecht, and practised medicine there. His liberal views in religion brought him into conflict with the dominant church, but he couldn't see his way to agreeing with Spinoza.

Simon de Vries (c. 1633–1667): An Amsterdam merchant and Collegiant [see Glossary]. When his death was approaching, de Vries wanted to make Spinoza his sole heir; Spinoza declined, because the money ought to go to de Vries's brother, though he did eventually accept a small annuity—half the amount offered—from the brother.