

Roger Swyneshed, *Insolubles*¹

English translation by Stephen Read

- (1) That said about obligations, it remains to treat insolubles according to the method of the proemium.
- (2) Now the divisions pertaining to this are four. The first is this: some propositions signify principally as it is or principally other than it is, others neither principally as it is nor other than it is. A proposition signifying principally as it is, is, for example, a proposition signifying principally that God exists or you are sitting, if you are, and suchlike. A proposition signifying principally other than it is, is, for example, a proposition signifying that a man is an ass or that you are sitting, if you are not sitting. A proposition neither signifying principally as it is nor other than it is,² is a proposition signifying in some way and that so signifying is relevant to inferring itself not to signify principally as it is, for example, the proposition 'This proposition does not signify as it is', referring to itself, which principally signifies that it itself does not signify as it is. And this similarly, 'Every proposition signifies other than it is', which principally signifies that every proposition signifies other than it is. And likewise for similar cases.
- (3) About this it should be known that a proposition relevant to inferring itself not to signify principally as it is, is one from which, with its being wholly as it is (*cum totaliter sic esse sicut est*),³ it follows or is apt to follow that it does not signify principally as it is. An example: let the proposition 'This signifies other than it is' signify principally that this signifies other than it is, referring to itself. Then it follows: this proposition signifies other than it is, and it signifies principally like that, hence, it does not signify principally as it is. And thus from it, with its being wholly as it is, it follows that it itself does not signify as it is. And so it neither signifies other than it is nor as it is. And just as it is for that one, so too for similar ones.
- (4) The second division is this: some propositions falsify themselves, some not. A proposition falsifying itself is of two sorts. Some falsify themselves indirectly, some directly. A proposition falsifying itself indirectly is a proposition signifying principally as it is or other than it is and that so signifying falsifies another proposition falsifying it. An example: let A be a proposition signifying principally that B is false, and let B be a proposition signifying principally that A is false. And let there be only one A and only one B. Then on this assumption, it cannot be

¹ Translated from Paul Vincent Spade, 'Roger Swyneshed's *Insolubilia*: edition and comments', *Archives d'histoire doctrinale et littéraire de moyen âge* 46 (1979), 177-220 (reprinted in idem, *Lies, Language and Logic in the Late Middle Ages*, London 1988). References to Spade are to this edition, unless otherwise stated. The Latin text (with Italian translation) is also printed, with some passages omitted, in L. Pozzi, *Il Mentitore e il Medioevo* (Parma 1987), 180-99. For biographical details on Swyneshed, see, e.g., J. Weisheipl, "Roger Swyneshed OSB, Logician, Natural Philosopher, and Theologian," in *Studies Presented to Daniel Callus* (Oxford 1964), 231-252.

² Added in ms V* alone (V* is Spade designation for BAV vat.lat.2154): 'that is, which is neither true nor false'. Cf. §28.

³ Spade suggests (n.35) translating 'cum totaliter sic esse sicut est' as 'with some additional premise'. But this lacks the factivity of the original. In 'Roger Swyneshed's theory of insolubilia', in *History of Semiotics*, ed.A.Eschbach and J.Trabant (Amsterdam 1983), p.108 (also reprinted in *Lies, Language and Logic*), he translates it as 'with the case's being altogether as it is'. Pozzi (pp.185, 187) renders it in Italian as 'dall'essere del tutto così come è'.

claimed that each is true, but it is necessary to claim that one is false. Nor can there be any better reason to say that A is false than that B is false, or vice versa. Therefore, in the scenario described, it is necessary to claim that each is false. And in this way from A it follows that B is false, and from B it follows that A is false. So from A it follows that A is false indirectly via B, and from B it follows that B is false indirectly via A. And thus A falsifies B directly and itself indirectly.

- (5) A proposition falsifying itself directly is a proposition signifying principally as it is or other than it is, relevant to inferring itself to be false. And it is of two kinds. Some are relevant sufficiently, some are relevant insufficiently. Relevant sufficiently are propositions signifying principally as it is or other than it is from which, signifying in this way, it directly follows or is apt to follow that they are false. An example: let the proposition 'This is false' signify principally that this is false, referring to itself. Then it directly follows 'This is false, therefore, this is false'. And in this way it is relevant sufficiently to inferring itself to be false.
- (6) Relevant insufficiently are of two kinds. Some are relevant insufficiently to inferring only themselves to be false, and some are relevant insufficiently to inferring themselves to be false and another similarly. A proposition relevant insufficiently in the first way is a proposition signifying as it is from which, signifying in that way, with its being wholly as it is, it follows in reality or is apt to follow that it itself is false and without this addition that does not follow. An example: suppose that there is only one Socrates and that he only says 'Socrates says a falsehood' and that it principally signifies by imposition that Socrates says a falsehood. Then it follows: Socrates says a falsehood, and he only says 'Socrates says a falsehood', therefore it is false. And it is relevant to inferring in that scenario that 'Socrates says a falsehood' signifies principally as it is.
- (7) A proposition relevant insufficiently in the second way is a proposition relevant to inferring itself to be false and another similarly. An example: suppose that the proposition 'Every proposition is false' only signifies that every proposition is false. And suppose there are many other false propositions. Then from it, signifying wholly to be as it is it follows or is apt to follow that it itself is false and another similarly. And so it is relevant insufficiently to inferring itself and another to be false. The premise is proved like this: every proposition is false, it itself is a proposition, therefore, it itself is false. And in this way it implies itself to be false. It also follows: every proposition is false, a proposition other than it is a proposition, therefore, a proposition other than it is false. And in this way it follows that another proposition is false.
- (8) A proposition not falsifying itself is a proposition having conditions contrary to the conditions of propositions falsifying themselves, such as are universally all propositions false in themselves, as is 'A man is an ass' signifying principally that a man is an ass, and universally of every such proposition.
- (9) Some speak against these divisions, so I leave them for now.⁴

⁴ See §§28-32 and 89-99.

- (10) The third division is this: every insoluble arises from a property of speech or from an act of ours or from a mixture of an act of ours with a property of speech. Properties of speech are these: to be true, to be false, to be necessary, to be impossible, and so on. Acts of ours are two-fold, namely, interior and exterior. The first kind are, e.g., ‘to know’, ‘to comprehend’, ‘to think’, ‘to believe’, ‘to doubt’ and so on. The second kind are ‘to walk’, ‘to write’ and suchlike.
- (11) The last division is this: some propositions signify complexly naturally, others complexly arbitrarily (*artificialiter*).⁵ Of the first kind are propositions in the mind, if there are any. Of the second kind are two-fold: some signify arbitrarily by imposition, some not arbitrarily by imposition. A proposition signifying arbitrarily by imposition is, e.g., ‘God exists’ imposed to signify principally that God exists, and so on. (A proposition signifying by imposition is, e.g., ‘God exists’, if it was imposed by one person to signify that God exists and was imposed by another to signify that a man is an ass. Then in each way it signifies like that.)
- (12) A proposition signifying arbitrarily not by imposition is, e.g., such a proposition as ‘God exists’ imposed to signify principally that God exists when someone conceives by it other than what it was imposed to signify, e.g., that a man is an ass. Then it signifies arbitrarily in that way and not by imposition.
- (13) After that there follow four definitions or descriptions. The first is this: a proposition is a congruent indicative utterance significative either naturally or by an imposition by which it was last imposed to signify complexly.
- (14) The second is this: a true proposition is a proposition not falsifying itself signifying principally as it is either naturally or by an imposition by which it was last imposed to signify.
- (15) Third definition: a false proposition is an utterance falsifying itself or an utterance not falsifying itself signifying principally other than it is either naturally or by an imposition by which it was last imposed to signify.
- (16) The fourth is this: an insoluble as put forward is a proposition signifying principally as it is or other than it is (which is) relevant to inferring itself to be false or unknown or not believed,⁶ and so on.
- (17) Next there follow eight basic principles (*suppositiones*), of which the first is this: every proposition relevant to inferring itself to be false is one falsifying itself.⁷ This is clear from the intention of the Philosopher in the fourth book of the *Metaphysics*⁸ where he claims that these utterances destroy themselves. And it is plain there that the only utterances that he takes to

⁵ Spade’s edition reads ‘*actualiter*’ (actually) in §§11-12, preferring the reading in V* over that in C (*artificialiter*) and V (*accidentaliter*). But in ‘Roger Swyneshed’s theory of insolubilia’ (p.106 and n.12), he opts for ‘artificially’. Pozzi (*Il Mentitore e il Medioevo*, p.182), agrees.

⁶ Pozzi (p.182) adds ‘non’ before ‘creditam’.

⁷ Spade (‘Roger Swyneshed’s theory of insolubilia’, p.108 and n.25) claims that one needs to add the proviso here that the proposition signifies either as it is or other than it is. But see §99: a proposition like ‘This proposition signifies other than it is’ is not relevant to inferring itself to be false, and so does not falsify itself, even though it directly follows that it is false—but only with the added premise that it signifies either as it is or other than it is.

⁸ *Metaphysics* Γ, 1012b13-14.

destroy themselves are utterances relevant to inferring themselves to be false, which is signified by this phrase 'falsifying itself'. And it sounds better in the Latin language to say that such a proposition falsifies itself than destroys itself in that no utterance is destructive of itself nor of anything other than itself. But it sounds better in the Greek language to say that such a proposition destroys itself than falsifies itself. And so the translator uses the verb 'destroy itself' where we use 'falsify itself' in that it applies more truly to such a proposition.

- (18) The second (basic principle) is this: every proposition falsifying itself is a false proposition. This is proved: every proposition falsifying itself signifies as it is or other than it is. If other than it is, therefore it is false by the third definition. If it signifies as it is, then from it, with its being wholly as it is, it follows that it is false.
- (19) The third is this: a proposition verifying itself is a proposition relevant to inferring itself to be true. This is clear by the proof of the previous basic principles. For just as a proposition relevant to inferring itself to be false is said to falsify itself, so a proposition relevant to inferring itself to be true is said to verify itself.
- (20) Fourth: not every proposition verifying itself is true. This is proved like this: suppose that there are many true and many false propositions. Then the proposition 'Every proposition is true' signifying principally that every proposition is true is, as is obvious (*notum*), false. It is clear by the third definition in that it principally signifies other than it is. And that it verifies itself is clear. For it is relevant to inferring itself to be true, because it follows: every proposition is true, it itself is a proposition, therefore, it itself is true.
- (21) The fifth is this: no proposition is its parts. This is clear according to the Philosopher in *Metaphysics Z*,⁹ towards the end, where he points out that the syllable 'ba' is not the letters 'b' and 'a' and that these letters can exist when the syllable doesn't. So the letters are not the syllable, or as is commonly said, no proposition is its parts.
- (22) Sixth: no true proposition is false and vice versa. This is clear in itself.
- (23) Seventh: however someone conceiving a proposition conceives by the proposition, it signifies itself in that way. This is clear from the description of the term 'signify'. For to signify is none other than to represent something to be conceived; but however one conceiving a proposition conceives by the proposition, in that way the proposition represents to be conceived, therefore etc.
- (24) Eighth and last: a spoken or written proposition is true or false only according to such a way as it signifies by imposition. This is clear. For if a spoken or written proposition were true or false according to the fact that someone conceives by it to be in such a way, either this way or that, then a monoglot Latin speaker would know more Greek propositions than the most perfect Greek speaker. This is proved like this: take a monoglot Latin speaker who by everything written that he sees and by every utterance that he hears conceives only that God exists. Take another most perfect Greek speaker who conceives so to be by propositions as

⁹ Spade refers to *Metaphysics Z*, 1041b12-20.

they signify by imposition. Suppose that the Latin speaker hears and sees all the Greek propositions which the Greek speaker sees and hears. Then the Latin speaker knows all these propositions to be true in that he conceives by all the propositions as it is. But the Greek speaker does not, in that by some he conceives as it is and by others other than it is.

- (25) Lastly, from these (basic principles) there follow three theses (*conclusiones*) of which the first is this: some false proposition signifies principally as it is. This is proved like this: some proposition signifying principally as it is falsifies itself, and every proposition falsifying itself is false, therefore, some false proposition principally signifies as it is. The major (premise) is true by what was said in the second division of this section. And the minor is clear by the second basic principle, and from these the conclusion follows and is proved.
- (26) The second thesis: in some formal and valid inference the false follows from the true. This is proved like this: in some formal and valid inference a proposition falsifying itself follows from the true; and anything like that is false, as is clear by the second basic principle, therefore etc. The premise is proved: the following inference is formal and valid: the conclusion of this inference is false, therefore, the conclusion is false. The premise of that inference is true and the conclusion false, which is proved like this: suppose that there is only that inference and no other, and that its premise signifies principally that the conclusion of that inference is false, referring to (the inference) itself by 'this', and that the conclusion signifies principally that the conclusion is false. Supposing that, the conclusion falsifies itself, as is clear. For the conclusion is relevant to inferring itself to be false, therefore, it falsifies itself. The inference is clear by the first basic principle, and the premise is proved like this: from the conclusion with its being wholly as it is it follows that the conclusion is false, therefore, the conclusion is relevant; and the inference is clear by what was said in the second division. The premise is proved, for it follows: the conclusion is false, and there is only that conclusion, therefore, that conclusion is false. That the premise is true is proved, for the premise principally signifies as it is, and it does not falsify itself, therefore, the premise is true. The inference is valid, and the major and minor (premises) are clear on inspection.
- (27) The last thesis (is) that two contradictories mutually contradicting one another are both false. This is proved like this: there are some contradictories of which one principally signifies other than it is and the other falsifies itself, therefore, two contradictories mutually contradicting one another are both false. The inference is clear by the second basic principle and the third definition. The claim is proved like this: take the two contradictories, 'This is false' and 'This is not false', where 'This is false' is referred to by each pronoun, and that 'This is false' principally signifies that this is false, and that 'This is not false' principally signifies that it is not false. Then the first of them is false because it falsifies itself. For it follows: this is false, therefore, this is false. And the second of them is false in that it signifies other than it is, because it signifies that the first proposition is not false, and that is false, therefore, the second is false.

- (28) One argues against these proposals in many ways. First, like this: one of those proposals claims that some proposition is neither true nor false,¹⁰ which is contrary to Aristotle in the *Categories* where he says in one place: “Now it seems that every affirmation is true or false”,¹¹ from which it follows that every affirmative is true or false. And if this is true of these affirmatives, for the same reason it will be true of negatives.
- (29) Again, elsewhere in the same book he says: “An utterance is said to be true or false in that things are or are not”.¹² But whatever proposition is given, thus it is in reality as it signifies or not so. Therefore, whatever proposition is given, it will be true or false.
- (30) Solution: where Aristotle claims authoritatively, “Now it seems” etc., he means to draw a distinction between propositions and the incomplex (terms) from which propositions are composed. Therefore, his point is that every truth or falsehood is an affirmative or negative proposition. And it follows that no incomplex (term) is true or false. Thus the first (appeal to) authority is accommodated.
- (31) For the second, it should be said that it is Aristotle’s meaning that it is (in virtue of) its being in reality as the proposition principally signifies and does not falsify itself that a proposition is true, and it is in (virtue of) its being in reality other than a proposition signifies that it is false.
- (32) Accordingly, it should be understood that every proposition signifying principally as it is or other than it is, whether it is of the present or the past or the future (tense), whether of necessity or of contingency, whose truth depends on the present, is either true or false and no others. From this it is clear that there are many propositions which are neither true nor false, such as ‘This signifies other than it is’, referring to itself and principally signifying in that way, ‘You will be dead tomorrow’, and universally all propositions of future contingency whose truth does not depend on the present.
- (33) One argues against another part of this opinion like this: it claims that some proposition is false which principally signifies as it is,¹³ therefore, for the same reason it has to claim that some (proposition) is true which principally signifies other than it is, and this opinion denies this, therefore, it is wrong.
- (34) Again, this opinion affirms that every proposition falsifying itself is false, therefore, for a similar reason it has to claim that every proposition verifying itself is true, which that opinion denies.
- (35) To the first (argument) it should be said that the inference is not valid. But the premise is true. In as much as, if from some propositions each of which signifies principally as it is, some proposition follows, it signifies as it is; but if from some propositions one of which signifies other than it is and all others as it is, some proposition follows, it does not follow that it signifies as it is. Therefore, since a proposition claiming that a proposition falsifying itself

¹⁰ See §2 and footnote 1.

¹¹ Spade refers to *Categories* 4, 2a6-7: “Each positive or negative statement must either be true or be false” (Loeb trans.).

¹² Spade refers to *Categories* 5, 4b8-10: “For it is by the facts of the case, by their being or not being so, that a statement is called true or false” (Loeb trans.).

¹³ Swyneshed’s first thesis (§25).

signifies as it follows from some propositions each of which signifies principally as it is, it therefore follows that so it will be that a proposition following from them signifies as it is. But it cannot be argued in this way from a proposition verifying itself. For if we take a proposition verifying itself, call it A, and we argue like this: it signifies as it is, therefore, (it is) true, given that it were conceded, then we argue from the other part: it signifies other than it is, therefore, it is true. The inference is simply impossible. For then it does not follow that it is true, although it does follow that it follows from one (proposition) signifying other than it is and others only signifying as it is, because some of them signify other than it is. From this it is clear that this inference is valid: this proposition falsifies itself, therefore, it is false. But this inference is not valid: the proposition verifies itself, therefore, it is true. And in this way we solve both the first and the second objection.

- (36) Again, there is an objection to the last two theses, and first, against the first in line with Aristotle in the first book of the *Prior Analytics* where he deploys such rules as ‘The conclusion is false, so the premise is too’, and ‘The premise is true, so the conclusion is too’. And in consequence one cannot claim that some inference is good and formal whose premise is true and conclusion false, the opposite of which the second thesis claims.
- (37) Here it must be said that what Aristotle means by the first rule is this: if the conclusion does not signify as it is and neither the premise nor the conclusion is relevant to inferring itself not to signify as it is, then the premise does not signify as it is. The second rule may be understood like this: if the premise signifies as it is and neither the premise nor the conclusion is relevant to inferring itself not to signify as it is, then the conclusion signifies as it is.
- (38) Against the (third and) final thesis one argues like this in line with Aristotle in the first book of *De Interpretatione* and in the first book of the *Posterior Analytics* and in many other places. It seems that Aristotle indicates that two contradictories cannot be true or false together, and (the third thesis) claims this, and so it is false.
- (39) Solution: the thesis is true, as it was stated. But Aristotle’s meaning there is that there are no two contradictories mutually contradicting one another each of which signifies as it is or each of which principally signifies other than it is. And in that way Aristotle speaks always by saying that what signifies as it is, is true, and that what signifies other than it is, is false, except in the case of insolubles where he understands by ‘false’ not what signifies other than it is but what undermines itself, that is, falsifying itself, as, e.g., is clear in the fourth book of the *Metaphysics*, where the text says: “But it happens in all such cases that they undermine themselves”,¹⁴ as, for example, with the sentence ‘Everything is false’, where Aristotle understands that such a sentence that is relevant to inferring itself to be false undermines itself, that it, falsifies itself, and all such are false, as was stated.

II

- (40) These things being understood according to Aristotle’s meaning, the result is an understanding of the solution of insolubles. And first I will begin with insolubles that arise from

¹⁴ Spade refers to *Metaphysics* Γ 8, 1012b13-15.

a property of speech, (which are) the easier ones among simple insolubles. So let this proposition 'A falsehood exists' be written and no other besides it. And let it signify principally that a falsehood exists. Then propose 'A falsehood exists'.

If it is denied or doubted, on the contrary: the proposition is true or false, but no proposition is true, so the proposition is false. Accordingly (*et ultra, igitur*), a falsehood exists. The major is evident, and the minor follows from the scenario, and is proved like this: the opposite of the minor is inconsistent with the scenario, therefore, the minor follows from the scenario. The premise is proved: for if the opposite of the minor is not inconsistent with the scenario and it is possible, let the opposite of the minor be added to the scenario. Then it follows that some proposition is true. And it is argued like this: some proposition is true, and there is no proposition except this, 'A falsehood exists'; therefore, it is true. Accordingly, it is as it principally signifies. The inference is clear by the second definition. But according to the scenario it principally signifies that a falsehood exists, therefore, it is the case that a falsehood exists, and there is no proposition other than it, therefore it is false. And in this way it follows that it is true and false, which is impossible.

If 'A falsehood exists' is granted, then it is argued like this: a falsehood exists, and the only proposition is 'A falsehood exists, referring to that one, therefore, it is false. Accordingly, it principally signifies other than it is, and it principally signifies that a falsehood exists, therefore, it is not the case that a falsehood exists, the opposite of which was granted.

- (41) In addition, you granted a falsehood known by you to be false, not following from the scenario for the time for which it was false, therefore, you responded badly.
- (42) In addition, a falsehood exists, and it principally signifies that a falsehood exists, therefore, it is as it principally signifies. Accordingly, it is true.
- (43) For that sophism and for similar ones, the scenario is denied as impossible.
- (44) On the contrary: if the proposition 'A falsehood exists' were written and there were many propositions with it, still it would be possible that someone would see it. Suppose, therefore, that there are many other propositions along with 'A falsehood exists' and that it principally signifies by imposition that a falsehood exists. And let Socrates be one man who for his whole life was taught to comprehend by each proposition that he saw that a falsehood exists. Supposing this, I suppose that Socrates sees this written proposition, 'A falsehood exists' and comprehends by it that a falsehood exists just as he was taught. Then suppose that Socrates continues to see that proposition, and each other proposition is destroyed so that there is none besides it. Supposing this, Socrates comprehends by it that a falsehood exists, therefore, it signifies to him that a falsehood exists. The inference is clear by the seventh basic principle, and to no one else besides Socrates does it signify otherwise, therefore, it signifies only that a falsehood exists; and it is in this way that it was last imposed to signify, therefore, it principally signifies that a falsehood exists, and only that, so the whole scenario is possible.

- (45) In addition, supposing that there is still only that proposition, it can principally signify less by imposition and similarly more, hence, it can principally signify by imposition in that way.
- (46) In addition, the proposition 'God exists' can signify principally that God exists even if it is the only (proposition) . And the proposition 'A man is an ass' can principally signify that a man is an ass even if it is the only (proposition) . And no reason can be given why the one can signify principally even if it is the only (proposition) that is not the same or similar reason why 'A falsehood exists' can signify principally that a falsehood exists even if it is the only (proposition) . Since, therefore, the scenario is possible that 'God exists' principally signifies that God exists even if it is the only (proposition) , it follows that the scenario is possible that 'A falsehood exists' signifies principally that a falsehood exists even if it is the only (proposition) .
- (47) But here a reason can be imagined. For, it is said, although the proposition 'God exists' can exist with no other and it principally signify that God exists, nonetheless from this there does not follow something impossible. But if there was only the proposition 'A falsehood exists' and it signified that a falsehood exists, something impossible would follow. But as will be seen later, that reason is none other than that of those wilfully stupid people who do not know how to respond to an insoluble other than to claim the possible to be impossible.
- (48) The scenario is therefore admitted, and when 'A falsehood exists' is proposed, it is granted. And it is granted that it is false. And the inference 'Therefore, it principally signifies other than it is' is denied. But it is necessary to add to the premise that it does not falsify itself. And that is false, for it follows: a falsehood exists, and 'A falsehood exists' is every proposition, therefore, it is false. And in this way it is relevant to inferring itself to be a falsehood. Accordingly, it is false. The inference is clear by the second basic principle.
- (49) To the second (objection) :¹⁵ the inference is denied and the premise similarly. For the inference made there is not valid in that one can respond well in some posited scenario by granting a falsehood known by me to be false and an impossibility known by me to be impossible, e.g., if it were claimed that the proposition 'God exists' and every such (proposition) signified only that a man is an ass, and this you know well, still 'God exists' should be granted, even though it is false and impossible. And the premise should similarly be denied, for that a falsehood exists follows from the scenario. For it is not consistent with the scenario that it is true; and from the scenario it follows that it is a proposition in the present tense signifying as it is or other than it is, therefore, from the scenario it follows that it is false.
- (50) To the final (objection) :¹⁶ the first inference is granted, namely, a falsehood exists, and it principally signifies that a falsehood exists, therefore, it is as it principally signifies. And the other inference is denied, namely, "accordingly, it is true", in that some proposition falsifying itself signifies principally as it is. The inference is clear by the first thesis, about a proposition falsifying itself, as was stated earlier.

¹⁵ Spade suggests this is a response to the objection in §41.

¹⁶ Spade suggests this is a response to the objection in §42.

- (51) It is argued against this response by (what) Aristotle (says) in the second *Elenchi*, in the chapter on the fallacy of restricted and unrestricted.¹⁷ There insolubilia are solved by that fallacy. But that solution will not work, therefore, it sins against the solution of Aristotle, therefore, it is not valid.
- (52) Here it should be admitted that the inference, this proposition signifies principally as it is, therefore, this proposition is true, is a fallacy of the restricted and unrestricted in that the premise formally falsifies itself. For in order for some proposition to be true it is required that it signifies as it is and does not falsify itself either; but the premise only supports the conclusion according to one part of its significate and not according to the other; so to argue from the premise to the conclusion is a fallacy of the restricted and unrestricted, as when it is argued like this: he is white as regards his teeth, therefore, he is white.
- (53) That this is Aristotle's meaning is manifestly clear in the place where he solves the paralogism based on the scenario when he supposes that someone judges only that he has perjured himself. Then the text is this: "For one who judges himself to have perjured himself judges well that he is perjured but did not judge well".¹⁸ From this text it is clear that the proposition by which he judges is false. For if the proposition was true, and he judged only that, then he would judge only a truth. And consequently, he would not be perjured. Therefore, Aristotle grants that he is perjured when he says "He judges well", in that he judged a proposition signifying as it is. But by the fact that at the end of the text he adds the negative "he does not judge well",¹⁹ it is understood that he does not judge a true proposition so that there is there a fallacy of the restricted and unrestricted: "He judges a proposition signifying as it is principally, therefore, he judges a truth". That is clear from the text following a little later which says: "(Nothing) prevents him from being a liar restrictedly at the same time,"²⁰ where he means to solve the paralogism based on the scenario supposing that Socrates says 'Socrates is a liar'. From this text it follows that it is not impossible for the same person to be a liar and to say a proposition signifying as it is. From this it is clear that it does not follow: I say a proposition signifying as it is, therefore, I speak the truth. But it is a fallacy of the restricted and unrestricted as was averred earlier.
- (54) Another sophism: suppose that there is this proposition and no other: 'No truth exists', and that it principally signifies that no truth exists. Then propose that no truth exists. If it is denied or doubted: on the contrary, no proposition which is not that one is true, nor is that one true, therefore, no truth exists. The major is clear by the scenario and the minor follows from the scenario, which is proved like this: the opposite of the minor is inconsistent with the scenario, therefore, the minor follows from the scenario. The claim is proved like this: for if it is not inconsistent with the scenario, and since it is possible, suppose that it is as it

¹⁷ Spade refers to 180b1-7.

¹⁸ Spade refers to 180a39-b1, and suggests (n.97) correcting the text, in which Pozzi (p.192) follows him.

¹⁹ 'bene' is added by Pozzi (p.192).

²⁰ Spade refers to 180b5-7.

signifies together with the scenario. I argue like this: 'No truth exists' is true, therefore, it is as it principally signifies. The inference is clear by the second definition. And it principally signifies that no truth exists, therefore, it is the case that no truth exists. From this it follows that it is not true.

If it is granted that no truth exists, then (I argue) like this: no truth exists, and it principally signifies in that way, therefore, it is the case that no truth exists. From this it follows that as it is as it principally signifies, it is true. Accordingly, it is true. Moreover, something is true, which is the opposite of what was granted.

(55) Solution: it should be granted that no truth exists. And it should be granted that it is as it principally signifies. And the inference, "accordingly, it is true", should be denied, because it falsifies itself since it is relevant to inferring that it itself is false. For it follows: no truth exists, and the proposition principally signifies as it is or other than it is, therefore, it is false.

(56) Another sophism: suppose that there are only two propositions, e.g., A and B, and let A be a true proposition, and let B be 'Every truth is A'. Then 'Every truth is A' is proposed.

If it is denied or doubted, on the contrary: A is true, and no other proposition besides A is true, therefore, every truth is A. The major is clear by the scenario, and the minor follows (from it). This is proved like this: the opposite of the minor is a possible proposition, and if it is supposed with the scenario it happens to be the opposite of the scenario, therefore, the minor follows from the scenario. The claim is proved like this: suppose the opposite of the minor with the scenario and argue: some proposition is true other than A, and there is no proposition other than A besides B, therefore, B is true; and B principally signifies that every truth is A, therefore, so it is, and B is not A, nor is A B, therefore, B is not true, which is the opposite of one part of the scenario.

If 'Every truth is A' is granted, on the contrary: if every truth is A, and B is not A, and B exists, then B is not true. The inference is clear, and the major is granted, and the minor is possible. Therefore, the conclusion should be granted. And then like this: B is not true, and B is a proposition in the present tense principally signifying as it is or other than it is, therefore, B is false. Accordingly, it is not as B signifies, and B signifies that every truth is A, therefore, it is not the case that every truth is A, the opposite of which was supposed above.

(57) Solution: 'Every truth is A' should be granted. And I grant that B is false. And the inference "accordingly, B signifies other than it is"²¹ should be denied. But it is necessary to add to the premise that B does not falsify itself. And B does falsify itself, as is clear enough.

(58) Similarly, if it is supposed that there are only these three propositions, 'God exists', which is true, 'A man exists', which is true, and 'Every universal proposition is unlike them in truth-value', which principally signifies that every universal proposition is unlike them in truth-value. Suppose that 'them' just refers to the first two. Then 'Every universal proposition is unlike them in truth-value' is proposed.

²¹ Actually what was inferred was "accordingly, it is not as B signifies".

If it is denied or doubted, on the contrary: it is unlike them in truth-value, and it is the only universal proposition, therefore, every universal proposition is unlike them in truth-value. The minor is self-evident, and I prove the major: for this is false, referring to the universal, therefore, it is unlike them in truth-value. The inference is clear from the primary meaning (*ex modo loquendi*).²² The claim is proved like this: it falsifies itself, therefore, it is false. The inference is clear by the second basic principle, and the premise is proved, for it follows: it is unlike them in truth-value, and they are true, therefore, it is false.

If it is granted, then like this: every universal proposition is unlike them in truth-value, and it principally signifies in that way, therefore, it signifies principally as it is. Accordingly, it is true; and they are true, therefore, they are similar in truth-value. Accordingly, it is not unlike them in truth-value, the contrary of which was granted.

(59) Solution: 'Every universal proposition is unlike them in truth-value' should be granted, and it should be granted that it principally signifies in that way, and the inference should be denied: 'accordingly, it is true', in that it signifies itself to be false, as is clear on inspection.

(60) Among conjunctive (insolubles) there is this example: suppose that the conjunction 'God exists and this conjunction is false' is every conjunction, principally signifying that God exists and that that conjunction is false, and that the first part signifies that God exists and the second that that conjunction is false. And suppose that each such demonstrative 'this' refers to that conjunction. Then it is proposed.

If it is granted, then like this: God exists and this conjunction is false. Accordingly, that conjunction signifies other than it is, as before. Accordingly, 'God exists and this conjunction is false' should be denied.

If it is denied or doubted, on the contrary: that conjunction falsifies itself, therefore, that conjunction is false. The premise is clear, for it follows: God exists and this conjunction is false, therefore, that conjunction is false.

(61) Solution: the conjunction should be granted, and it should be granted that it is false. And the inference, 'accordingly, it signifies other than it is' should be denied, in that it falsifies itself,²³ as before.

(62) Among disjunctive (insolubles) there is this example: suppose that this disjunctive (proposition) 'A man is an ass or no disjunction is true' principally signifies like that and that the first part principally signifies that a man is an ass and the second that no disjunction is true. And let there be no other disjunction. Then it must be said that the disjunction is false in that it falsifies itself. But if it is proposed, it should be granted in that it signifies as it is. Then the inference, 'therefore, it is true', should be denied, as before.

²² See, e.g., Strode, *Logica*, cited in Maierù, *Terminologia logica della tarda scolastica*, p.490 n.2: "dicere solemus acceptiones terminorum primarium significationem vel impositionem eorum vel vim vocis, virtutem sermonis, vel usum vel modum loquendi."

²³ Following mss C and V (Spade's designation for Cambridge UL 244(245) and BAV vat.lat.2130 respectively).

- (63) Among exclusives there is this example: let A be the proposition 'God exists', which is true. Let B be the exclusive 'Only A is true'. And let there be no other proposition besides these. And let B principally signify that only A is true. Supposing this, B should be granted, namely, the proposition 'Only A is true', in that it is as it principally signifies. But it should also be said that it is false in that it falsifies itself, as is clear if you think about it.
- (64) Lastly, among exceptives there is this example: let A be the proposition 'No proposition except A is false'. And let there be no other proposition other than A. And let there be only one A, and it signifies principally that no proposition except A is false. Supposing this, A should be granted, namely, that no proposition except A is false. And it should be said that A is false in that it falsifies itself, as before.

III

- (65) Now after this it is fit to solve insolubles arising from acts of ours. For this, it should be recalled that acts of ours as proposed are twofold: some from which insolubles are naturally produced without a property of speech, and others from which insolubles are never naturally produced without a property of speech. Acts of the first are such as to judge, to perjure and similars. Acts of the second are to see, to hear, to say, and similars, which are discussed in the next section.
- (66) So take this sophism: 'Socrates is deceived'. Suppose that there is only one Socrates, who believes this 'Socrates is deceived', and he only is deceived who believes a falsehood. Then 'Socrates is deceived' is proposed.
- If it is denied or doubted, on the contrary: its opposite is inconsistent with the scenario, therefore, it follows from the scenario. I prove the premise: for if it is proposed with the scenario, its contradictory follows from it, therefore, it is inconsistent with the scenario. The claim is proved: suppose that 'Socrates is not deceived' is posited with the scenario. It is argued like this: Socrates is not deceived, and everyone is deceived who believes a falsehood, therefore, Socrates does not believe a falsehood. And then like this: Socrates does not believe a falsehood, and Socrates believes a proposition signifying as it is or other than it is, therefore, Socrates believes a truth, and he only believes 'Socrates is deceived', therefore, 'Socrates is deceived' is true. And that principally signifies that Socrates is deceived, therefore, Socrates is deceived, which is the opposite of the proposition posited with the scenario.
- (67) If 'Socrates is deceived' is granted, then like this: Socrates is deceived, and every such (person) believes a falsehood, therefore, Socrates believes a falsehood. And he only believes 'Socrates is deceived', therefore, 'Socrates is deceived' is false. Accordingly, it signifies other than it is, and it only signifies that Socrates is deceived, therefore, it is not the case that Socrates is deceived, whose opposite was granted.
- (68) Solution: it should be granted that Socrates is deceived, and it should be granted that it is false, and the inference, 'accordingly, it signifies other than it is' should be denied. But it is necessary to add in the premise that it does not falsify itself, which is not so in the given case.

For it follows: Socrates is deceived, therefore, he believes a falsehood, and he only believes 'Socrates is deceived', therefore, it is false.

- (69) It is similar if one supposes that Socrates believes the proposition 'Plato is deceived' and Plato (believes) 'Socrates is not deceived', and they do not believe anything other than these, and that these propositions signify principally in this way. And suppose there is only one Socrates and one Plato. Supposing this, it should be granted that Socrates is not deceived and that Plato is deceived and that 'Plato is deceived' is true and that 'Socrates is not deceived' is false in that it falsifies itself. For it follows: Socrates is not deceived, therefore, he does not believe a falsehood, and he believes a proposition signifying as it is or other than it is, therefore, he believes a truth, and he only believes 'Plato is deceived', therefore, it is true. Accordingly, it is as it principally signifies. And by the scenario it only signifies that Plato is deceived, therefore, it is the case that Plato is deceived. Accordingly, Plato believes a falsehood, and he only believes 'Socrates is not deceived', therefore, 'Socrates is not deceived' is false. And thus it falsifies itself. But what was said by Socrates signifies principally as it is and does not falsify itself, therefore, it is true.
- (70) A similar sophism is this: suppose that Socrates says 'Socrates is lying' and only this and nothing else and that it principally signifies that Socrates is lying, and there is only one Socrates, and that every liar says a falsehood. Then 'Socrates is lying' is proposed.
- If it is denied or doubted, on the contrary: Socrates says a falsehood, therefore, Socrates is lying. The premise is clear from the scenario. For it follows: Socrates says 'Socrates is lying', and it principally signifies that Socrates is lying, and there is only one Socrates, therefore, Socrates says a falsehood, and he only says 'Socrates is lying', therefore, it is false.
- If it is granted, then like this: Socrates is lying, therefore, he says a falsehood, and he only says 'Socrates is lying', therefore, it is false; and it has a contradictory, therefore, its contradictory is true, namely, 'Socrates is not lying'. And it is argued like this: Socrates is not lying, therefore, it is true, and therefore, it is as it principally signifies, that Socrates is not lying, therefore, it is the case that Socrates is not lying, which is the opposite of what was granted.
- (71) Solution: it should be granted that Socrates is lying, and it should be granted that it is false, and it should be granted that it has a contradictory. And the inference, 'therefore, its contradictory is true' should be denied, in that its contradictory signifies other than it is. And thus two contradictories are false at the same time, as is clear from the (third and) final thesis.
- (72) Another sophism, that Socrates only judges this, 'Socrates is perjured', and that there is only one Socrates and that it principally signifies that Socrates is perjured. Supposing this, it should be granted that Socrates is perjured and that 'Socrates is perjured' is false in that it falsifies itself, as is clear enough. Indeed, because the solution in these insolubles is self-evident enough, therefore, I turn to others in which it is more hidden.

IV

- (73) It now remains to describe the solution to insolubles arising from a mixture of acts of ours and a property of speech. Now an insoluble taken this way is of three kinds. One is that in which signs occur signifying by imposition a property of speech and an act from which an insoluble is made. Another is that in which signs occur signifying by imposition a property of speech and the absence of an act from which an insoluble is made. The third is that in which signs occur signifying a property of speech and the presence or absence of an act from which an insoluble is made. An example of the first, e.g., 'Socrates says a falsehood', 'Socrates reads a falsehood', 'Socrates thinks a falsehood' and similar. An example of the second, e.g., 'This proposition is unknown by you', 'Every proposition is unknown', 'Some proposition is not believed'. An example of the third: 'Socrates is white', 'Socrates is sick', 'Socrates is running', positing some scenarios, and similar.
- (74) We discuss these examples in order, and first (examples) of the first. So take this sophism 'Socrates says a falsehood', positing the scenario that there is only one Socrates and that he says only this proposition, 'Socrates says a falsehood' and no other, and that it principally signifies that Socrates says a falsehood. Then 'Socrates says a falsehood' is proposed. If it is denied or doubted, on the contrary: its contradictory is inconsistent with the scenario, therefore, its contradictory should be denied. Accordingly, it should be granted. I prove the premise, because from its contradictory together with the scenario there follows the contradictory of the other part of the scenario, and the scenario is inherently possible, therefore, its contradictory is inconsistent with the scenario. The claim is proved like this: 'Socrates does not say a falsehood' is combined with the scenario. And it is argued like this: Socrates does not say a falsehood, and says a proposition principally signifying as it is or other than it is, therefore, Socrates says a truth. Then like this: Socrates says a truth, and Socrates says this, 'Socrates says a falsehood', therefore, it is true. Accordingly, it is as it principally signifies, and it only signifies that Socrates says a falsehood, therefore, it is the case that Socrates says a falsehood. Accordingly, Socrates says a falsehood, which is the opposite of the proposition posited with the scenario. If 'Socrates says a is granted, then like this: Socrates says a falsehood, and he only says 'Socrates says a falsehood', therefore, it is false; and it has a contradictory, therefore, its contradictory is true, namely, 'Socrates does not say a falsehood'. Accordingly, it is as it principally signifies, and it only signifies that Socrates does not say a falsehood, therefore, it is the case that Socrates does not say (a falsehood) . Accordingly, Socrates does not say a falsehood, which is the opposite of what was earlier granted.
- (75) Solution: it should be granted that Socrates says a falsehood, and it should be granted that it is false. And it should be granted that it has a contradictory. And the inference, "therefore, its contradictory is true" should be denied, because its contradictory signifies other than it is. And that the inference is not valid is clear by the (third and) last thesis.

- (76) Another sophism: suppose that there are only two Socrates and that each of them says the proposition 'Socrates says a falsehood', and that they do not say anything else, and that each of those utterances principally signifies that Socrates says a falsehood. Then 'Socrates says a falsehood' is proposed.

If it is denied or doubted, on the contrary: its contradictory is inconsistent with the scenario; therefore, it follows from the scenario. For from its contradictory together with the scenario the opposite of the other part of the scenario follows; therefore, its contradictory is inconsistent with the scenario. The claim is proved like this: posit its contradictory with the scenario, and argue like this: Socrates does not say a falsehood, and Socrates says a proposition principally signifying as it is or other than it is, therefore, Socrates says a truth; and for the reason that one of them says a truth, each of them says a truth; therefore, each of them says a truth; and each of them says that proposition, 'Socrates says a falsehood' principally signifying that Socrates says a falsehood; therefore, it is the case that Socrates says a falsehood, which is the opposite of one part of the scenario.

If it is granted, then like this: Socrates says a falsehood, and each of the said propositions principally signifies in that way, therefore, each of them principally signifies as it is, and neither falsifies itself, therefore, each of them is true.

- (77) Solution: it is granted that Socrates says a falsehood, and it is granted that each of them signifies principally as it is. And it should be said that each falsifies itself, and this is in this way: Socrates says a falsehood, and each Socrates is one of them, therefore, one of them says a falsehood, and there is no reason why one of them says a falsehood rather than that the other says a falsehood. Therefore, in the given scenario each of them says a falsehood, and these two only say those two things, namely, 'Socrates says a falsehood' and 'Socrates says a falsehood', therefore, both are false. And thus each of them is false and falsifies itself.

- (78) There is a similar sophism: suppose that Socrates says 'Plato says a falsehood' and Plato says 'Socrates does not say a falsehood', and they do not say anything other than this and that these propositions principally signify in this way, and that there is only one Socrates and one Plato. In that scenario, it should be said that Socrates does not say a falsehood and that (what Socrates says) is false in that it falsifies itself. And it should be granted that Plato says a falsehood. And (what Plato says) is true because it signifies as it is and does not falsify itself.

- (79) The (next) sophism is similar in part: suppose that there is only one Socrates and he says only the proposition 'Plato says a falsehood', and there is only one Plato, who says only this, 'Socrates says a falsehood', and that these propositions principally signify in this way. Supposing this, it should be said that Socrates says a falsehood and similarly Plato, and that each of them is false because each of them falsifies itself and indirectly so. For what was said by Socrates falsifies what was said by Plato and directly, and what was said by Plato falsifies what was said by Socrates and directly. And in this way each of them falsifies itself indirectly as is clear in the second division of the first section (§§4-8).

- (80) Having solved insolubles of the first member of this division, it remains (next) to solve insolubles of the second member of the division. Take this sophism: 'Proposition A is unknown'. Suppose as scenario that A is the proposition 'Proposition A is unknown', and that there is only one A, and that the proposition principally signifies that proposition A is unknown. Then 'Proposition A is unknown' is proposed.

If it is denied or doubted, on the contrary: it is inconsistent with the scenario that proposition A is known, and A is a proposition, and the scenario was admitted, therefore, it should be granted that proposition A is unknown. The first premise is proved like this: because from the proposition 'A is known' together with the scenario there follows its opposite, 'A is unknown'; therefore, 'A is known' is inconsistent with the scenario. The claim is proved like this, for it follows: A is known, therefore, it is known to be as A signifies. Accordingly, it is as A signifies, but by the scenario, A principally signifies that A is unknown, therefore A is unknown. And thus from 'A is known' with the scenario its contradictory follows.

If 'A is unknown' is granted, then like this: it is the case that A is unknown, and you firmly consider this proposition and do not doubt whether A is unknown, therefore, you know that A is unknown. Then like this: you know that A is unknown, and you know that A principally signifies like this, therefore, you know that it is as A signifies principally, and you know A principally signifies in this way, therefore, you know A, therefore, A is known, which is the opposite of 'A is unknown' or inconsistent with it.

- (81) (Solution:) having admitted the scenario, 'A is unknown' should be granted, and it should be granted that I know A to signify principally in this way. And the inference, "therefore, I know A" should be denied. But it is necessary to add that A is not relevant to inferring itself not to be known. And if that is added, it should be denied. For it follows directly, A is unknown, therefore, A is unknown.

- (82) A similar sophism is this: suppose that the only proposition is 'Every proposition is unknown', and that it principally signifies in this way that every proposition is unknown, and this is well known. Supposing this, 'Every proposition is unknown' should be granted. And it should be granted that it is known that it is as it signifies. And the inference, 'therefore, it is known', should be denied, because it is relevant to inferring itself to be unknown. Therefore, it is unknown. The premise is proved, for it follows: every proposition is unknown, this is a proposition, so it is unknown. Accordingly, it is unknown.

- (83) Another sophism: suppose that this proposition, 'This is not believed', principally signifies that this is not believed and that 'this' refers to (the proposition) itself. Supposing this, it should be said that this is not believed. And it should be granted that it is believed that it is as it principally signifies and that it is believed that it signifies in this way. And the inference, 'therefore, it is believed', should be denied, because it is relevant to inferring itself not to be believed. And anything like this is not believed.

- (84) Here it should be noted that just as every proposition relevant to inferring itself to be false is false, so too every proposition relevant to inferring itself to be unknown or not believed is

unknown or not believed. And just as not every proposition relevant to inferring itself to be true is true, so too not every proposition relevant to inferring itself to be known or believed is known or believed.

- (85) Having solved insolubles of the second member of the division, insolubles of the third member should be solved. Therefore, take his sophism 'Socrates is sick'. Posit the scenario that every sick man says a falsehood and every healthy man says a truth and only that, and that Socrates only says 'Socrates is sick', which principally signifies in that way. Then 'Socrates is sick' is proposed.

If it is denied or doubted, on the contrary: its opposite is inconsistent with the scenario, therefore, having admitted the scenario it should be granted. The claim is proved like this: from its opposite together with the scenario, the proposition 'Socrates is sick' follows; therefore, the opposite of 'Socrates is sick' is inconsistent with the scenario. The premise is proved like this: it follows: Socrates is not sick, and Socrates is a man, therefore, Socrates is healthy, and every healthy man says a truth, therefore, 'Socrates is sick' is true. Accordingly, it is as it principally signifies, and by the scenario it principally signifies that Socrates is sick.

If 'Socrates is sick' is granted, then like this: Socrates is sick, and every sick man says a falsehood, therefore, Socrates says a falsehood, and he only says 'Socrates is sick', therefore, 'Socrates is sick' is false, and it has a contradictory, therefore, its contradictory, namely, 'Socrates is not sick', is true. Accordingly, it is as it principally signifies, and it signifies principally that Socrates is not sick, therefore, it is the case that Socrates is not sick, which is the opposite of what was granted.

- (86) Solution: having admitted the scenario, it should be granted that Socrates is sick.²⁴ And it should be granted that Socrates says a falsehood. And it should be granted that 'Socrates is sick' is false because it falsifies itself. And it should be granted that it has a contradictory. And the inference, "therefore, its contradictory is true" should be denied, as is clear by the last thesis.
- (87) It is similar if it is supposed that every white man sees a falsehood and no one else (does) and that Socrates sees only 'Socrates is white' and that it principally signifies that Socrates is white, and that there is only one man, namely, Socrates. Supposing this, it should be granted that Socrates is white,²⁵ and it should be granted that 'Socrates is white' is false because it falsifies itself. For it follows: every white man sees a falsehood, Socrates is white, therefore, Socrates sees a falsehood, and he only sees 'Socrates is white', therefore, 'Socrates is white' is false. And thus it is false because it falsifies itself. And its contradictory is false, namely, 'Socrates is not white', because it signifies other than it is.
- (88) It is similar if one supposes that every running man hears a falsehood and only that, and that Socrates hears 'Socrates is running' and nothing else and that it principally signifies that Socrates is running. And suppose that there is only one Socrates. Supposing this, it should be

²⁴ Pozzi (p.194) amends the text to read 'concedendum est quod Socrates est aeger'.

²⁵ Pozzi (p.196) amends the text to read 'concedendum est quod Socrates est albus'.

granted that Socrates is running,²⁶ and it should be granted that (‘Socrates is running’) is false because it falsifies itself, and it is just as in the previous sophism.

- (89) But because these solutions chiefly rest on the claim that some proposition falsifies itself, it is now appropriate to rehearse certain doubts that militate against this, and to dispel them so that the truth may become clear. (First, it is alleged that) from the opinion described above contradictories follow, therefore, it is impossible. The claim is proved like this: for if it is supposed that not every false proposition falsifies itself, nonetheless, it follows from it that every proposition falsifies itself, therefore, (it is impossible). The claim is proved like this: for if there were a false proposition which did not falsify itself, let it be, therefore, for example, ‘A man is an ass’, principally signifying in that way, namely, that a man is an ass. That it falsifies itself is proved like this: for it follows, a man is an ass, and never is a man an ass when ‘A man is an ass’ is not false, therefore, ‘A man is an ass’ is false. And thus from the proposition, ‘A man is an ass’ with others it follows that it is false. And from the others without ‘A man is an ass’ it does not follow, therefore, it is relevant to inferring itself to be false, therefore, it falsifies itself.
- (90) Secondly, like this: some true proposition falsifies itself, therefore, a fortiori every false proposition falsifies itself. The claim is proved like this: if it is supposed that ‘A man is an ass’ principally signifies that no man is an ass, then it is readily seen that it is true. And that it falsifies itself is proved like this: for it follows, a man is an ass, and it principally signifies that no man is an ass; therefore ‘A man is an ass’ is false. So it is relevant to inferring itself to be false, hence it falsifies itself.
- (91) Thirdly, the same thing (is proved) like this: let the proposition ‘This is a proposition’ principally signify that this is a proposition. And let ‘this’ refer to the very proposition ‘This is a proposition’ itself. Supposing this, ‘This is a proposition’ is true. And that it falsifies itself is proved like this: for it follows, this is a proposition, and it is not true, therefore, it is false. So it falsifies itself.
- (92) Fourthly, like this: some proposition falsifying itself does not falsify itself, therefore, that opinion²⁷ is impossible. The claim is proved: suppose that there is only this proposition, ‘No truth exists’, which principally signifies that no truth exists. Then according to this opinion, it falsifies itself. And that it does not falsify itself is proved like this, because if it falsified itself, then it should be argued in this way: no truth exists, and that proposition exists, therefore, it is not true. Accordingly, it is not true, and it is a proposition signifying as it is or other than it is, therefore, it is false. And from this it does not follow that it falsifies itself in that it is irrelevant to inferring itself to be false. For from the other assumptions used in the premises, it follows that it is false, therefore, adding it to the scenario is superfluous. And in consequence, it is irrelevant. The claim is proved like this: for it follows without it: it is not true, and it signifies as

²⁶ Pozzi (p.196) amends the text to read ‘concedendum est quod Sortes est currens’.

²⁷ Following ms C in reading ‘positio’ instead of ‘propositio’, as in Spade’s text. Cf. §89, where Swyneshed’s aim is to consider arguments showing that his opinion is impossible. Nowhere in §92 is it shown that ‘No truth exists’, or any other proposition is impossible.

it is or other than it is, therefore, it is false. From this it is clear that the proposition does not falsify itself in that way, nor in any other way, therefore, it does not falsify itself in any way, whose opposite this opinion claimed.

- (93) Fifthly, like this: some proposition which falsifies itself is neither true nor false, therefore, not every proposition falsifying itself is false, the opposite of which this opinion claims. The premise is proved like this: 'This signifies other than it is' is of this sort. Supposing this, it follows that it is not true nor (is it) false in that it is relevant to inferring itself not to signify as it is and in consequence does not signify as it is nor other than it is. The inference is clear by what was said above. And that it falsifies itself is proved like this: for it follows directly, this signifies other than it is, therefore, this is false.
- (94) Many other objections can be made the solution of which will be clear from the solution of these.
- (95) Hence to the first objection (§89), it is replied like this, denying the main claim. And to the argument, it is denied that 'A man is an ass' falsifies itself. And when it is argued, "A man is an ass, and never is a man an ass when this is not false, therefore, this is false", this inference is denied, and the premise similarly. The inference is not valid for as much as the minor is a tensed (proposition) convertible with this conjunction, 'Never is a man an ass and "A man is an ass" not false'. And it is manifest that this is not valid: a man is an ass, and never is a man an ass and 'A man is an ass' not false, therefore, this is false. But it is necessary to add that this proposition signifies as it is or other than it is. And if it is so added, then it follows without 'A man is an ass' used in the main part. And the premise is similarly false. For that tensed (proposition) is equivalent to a false conjunction. For 'This is not false' is false, referring to 'A man is an ass'.
- (96) To the second (§90), I deny the main claim. And to the inference made, "A man is an ass etc., therefore, it is false", the inference is granted and it should be said that the inference is not valid. But it is granted in that in no scenario supposed should it be granted. And in consequence, whatever possible scenario is posited, it should be granted. That the inference is not valid is manifestly clear if a proposition equivalent to 'A man is an ass' is used. And suppose in its place this, namely, 'No man is an ass', signifying in that way. For it is known that this argument is not valid: no man is an ass, and 'A man is an ass' principally signifies that no man is an ass, therefore, it is false. But rather its opposite follows, that it is true. And the inference converts with the first, therefore, the first is not valid.²⁸
- (97) To the third argument (§91), the main claim is similarly denied and it should be said that 'This is a proposition' does not falsify itself. And when it is argued: "this is a proposition, and it is not true, therefore, it is false", the inference is denied. And (even) given that the inference is valid, the argument would not proceed in that the minor is false, namely, that (the proposition) is not true. Here it should be recalled that a proposition falsifies itself either, as was described, indirectly or directly, indirectly whenever it falsifies something falsifying it,

²⁸ The argument is puzzling. See Spade's comments (p.214 n.85).

directly whenever any proposition signifies as it is or other than it is and from it alone it follows that it is false, or from it with its being wholly as it is, and from it without its being wholly as it is, it does not follow that it is false. From these it is clear that the proposition 'This is a proposition' does not falsify itself in that from it with its being other than it is it follows that it is false. But from this it does not follow that it falsifies itself. But it is necessary for it to falsify itself that from it with its being wholly as it is it follows that it is false. And such is not so in the case given, for the assumed minor with others signifies other than it is in that it signifies that it is not true.

- (98) To the fourth (§92), I deny the claim with the scenario proposed and admitted there. I say that it falsifies itself, but not in the way in which it is argued there, but like this: no truth exists, and it is every proposition signifying as it is or other than it is, referring to 'No truth exists', therefore, it is false. And it should be obvious that it does not follow from the minor alone, and the minor signifies as it is, therefore, the ('No truth exists') falsifies itself.
- (99) To the last objection (§93), I deny the claim. And taking the proposition 'This signifies other than it is', I grant that it is neither true nor false. And I deny that it falsifies itself. I grant that from it, it directly follows that it is false. And I deny the inference, "therefore, it falsifies itself", but it is necessary to add that it signifies as it is or other than it is, which is not so in the case given.

V

- (100) Having completed these (remarks) , it remains to solve some sophisms which appear to be insolubles but are not, e.g., 'A is known', 'This proposition signifies other than it is', 'That proposition does not signify other than it is', 'This proposition does not signify as it is', and similar ones. Therefore, take this sophism, 'A is known'. Suppose as scenario that A is one of 'God exists', which is known, and 'A is unknown', which principally signifies in the way that you well know, and let there be only one A, and it be hidden from you which of them is A. Then 'A is known' is proposed.
- If it is granted or doubted, on the contrary: in no scenario posited should it be invariably denied, and (if not, even) then it is irrelevant, therefore, it should still be denied. The minor is clear in that it does not follow: A is one of them, therefore, A is known.
- If 'A is known' is denied, on the contrary: A is the proposition 'God exists', which is known, therefore, A is known. The inference is good, and the premise is in doubt, therefore, the conclusion should not be denied by you.²⁹
- (100a) Again, if 'A is known' is denied, let 'A is unknown by you' be proposed. Then it should be granted. If it is granted, it is argued like this: It is the case that A is unknown by you, and you have firmly thought about it, and you know in what way in signifies, and you do not doubt whether A is unknown by you, therefore, you know that A is unknown by you. And then like

²⁹ An example of Kilvington's disputational meta-argument, so called by N.Kretzmann in *The Sophismata of Richard Kilvington*, ed. and tr. B. and N. Kretzmann (Cambridge 1990), p.316. See further, n.30 below.

this: you know that A is unknown by you, and you know that the proposition signifies in that way, and it is not relevant to inferring itself to be unknown, therefore, you know it. Having granted this, 'Both of them are known' is proposed.

If it is denied or doubted, on the contrary: 'God exists' is known by you, and 'A is unknown' is known by you, and only these two are referred to by 'them', therefore, each of them is known.

If it is granted, then like this: each of them is known, A is one of them, therefore, A is known. Accordingly, A is known, which was earlier denied.

(101) (Solution:) admitting the scenario, 'A is known' should be denied. And to the first argument (against this response), the first inference should be granted, namely, "A is 'God exists', which is known, therefore, A is known". And the second inference should be denied, namely, "The inference is good and the premise is in doubt for you, therefore, the conclusion should not be denied by you", in that although the premise is in doubt for me, nonetheless, the conclusion³⁰ should be denied by me. And in consequence, it does not follow that the conclusion should be granted.

(102) To the second argument (§100a), 'A is known by me' is similarly denied. And the whole sequence should be granted up to the last move made in the third mood of the first figure (Darii), by granting (it) and denying the premise, namely, the conjunction made from a false assumption (in the scenario and one) that is not relevant.³¹ But if after granting the first conjunct, the first conjunct is added to the second, then after it is proposed, it should be granted that A is known as following from the posit. And then it should be denied that A is 'A is unknown by you' because it is false and without any restriction (it is) inconsistent.

(103) Another sophism: 'This proposition signifies other than it is'. Suppose that it principally signifies in that way, and 'this' refers to that very (proposition). Then 'This proposition signifies other than it is' is proposed.

If it is granted or doubted, on the contrary: from it, together with the scenario, its contradictory follows, therefore, it should be denied. The claim is proved like this: it follows: this proposition signifies other than it is, therefore, it is not as this proposition signifies, and this proposition only signifies that this proposition signifies other than it is, therefore, it is not the case that this proposition signifies other than it is. Accordingly, this proposition does not signify other than it is, which is its opposite.

If it is denied, on the contrary: let 'It does not signify other than it is' be proposed. If it is granted, it is argued like this: it does not signify other than it is, and it signifies complexly, therefore, it signifies as it is. Accordingly, it is as it signifies. And it signifies that it signifies other than it is, therefore, it is the case that it signifies other than it is, which was denied.

(104) Solution: the scenario having been admitted, (the proposition) should be denied. And this inference should be denied: "it does not signify other than it is, and it signifies complexly,

³⁰ Following ms C. Note that Swyneshed is here rejecting the disputational meta-argument, although one might expect him to endorse it.

³¹ Spade (n.32) identifies these as: 'A is one of them' and 'Each of them is known' respectively.

therefore, it signifies as it is". But it is necessary to add that it is not relevant to inferring itself not to signify as it is. And if that is added, it should be denied. For it follows directly from it: it signifies other than it is, therefore, it does not signify as it is.

(105) Against that solution it is argued like this: given that solution, the thesis follows that there are two mutually contradictory contradictories one of which signifies as it is while the other does not signify other than it is. This is proved like this: for 'This proposition does not signify other than it is', where 'this' refers to its contradictory, signifies that it does not signify other than it is. And it is the case that it does not signify other than it is, and that negative (proposition) is not relevant to inferring itself not to signify as it is, therefore, it signifies as it is. But the affirmative contradicting it does not signify other than it is in that it is relevant to inferring itself not to signify as it is. And in this way the thesis follows, which I grant in each scenario whatever where it is the case that each contradicting part is relevant to inferring itself not to signify as it is, just as in the given case. Therefore, (it does not signify other than it is).³²

(106) It is similar if it is supposed that the only (proposition) is 'Every proposition signifies other than it is' and it signifies only in that way. Supposing that scenario, 'Every proposition signifies other than it is' should be denied. And it should be said that it neither signifies as it is nor other than it is, in the earlier scenario, in that it is relevant to inferring itself not to signify as it is.

(107) 'This does not signify as it is' is partially similar. Suppose that 'this' refers to the very same (proposition) and that it signifies only in that way. Then 'This does not signify as it is' is proposed.

If it is denied or doubted, on the contrary: its opposite is not consistent with the scenario. For if it can be added, add it and argue like this: it signifies as it is, therefore, it is as it signifies. And it only signifies that it does not signify as it is, therefore, it is as 'This does not signify as it is' signifies. And in this way the contradictory follows.

If 'This does not signify as it is' is granted, let 'This does not signify as it is' be proposed. Having granted it, argue like this: it is the case that it does not signify as it is, and it principally signifies in this way, therefore, it is as it principally signifies, therefore, it is as it signifies, the opposite of which was granted.

(108) Solution: 'This does not signify as it is' should be granted, and it should be granted that it is the case that it does not signify as it is, and it should be granted that it principally signifies in this way. And the inference, "therefore, it is as it principally signifies" should be denied. But it is necessary to add to the premise that it is not relevant to inferring itself not to signify as it is. And if that is added, it should be denied. For it follows directly, this does not signify as it is, therefore, it does not signify as it is.

(109) It is similar if 'It is not as this proposition principally signifies' is proposed and that it principally signifies in that way, namely, that it is not as this proposition principally signifies, and that 'this'

³² or as it is, for that matter.

refers to the very same (proposition). Supposing this, 'It is not as this proposition principally signifies' should be granted, and it should be said that it does not signify as it is nor other than it is, as in the previous sophism.

- (110) It is similar if it is supposed that the only proposition is 'A falsehood exists' and that it only signifies that a falsehood exists and that every proposition which signifies as it is is true. Then 'A falsehood exists' is proposed.

If it is granted or doubted, on the contrary: it follows: a falsehood exists, and it is every proposition, therefore, it is false. And it follows, therefore, it signifies other than it is. Accordingly, it is not as it signifies, and it only signifies that a falsehood exists, therefore, it is not the case that a falsehood exists. Accordingly, no falsehood exists. And thus from it together with the scenario its contradictory follows.

If 'A falsehood exists' is denied, on the contrary: this proposition exists, and it is not true, and it signifies as it is or other than it is, therefore, it is false. Accordingly, a falsehood exists.

- (111) Solution: the scenario should be admitted and 'A falsehood exists' should be denied. And it should be granted that the proposition exists and that it is not true. And then it should be denied that it signifies as it is or other than it is, in that it is relevant to inferring itself not to signify as it is. For it follows, a falsehood exists, and the only proposition is 'A falsehood exists', therefore, it is false. Accordingly, it signifies other than it is, and so it does not signify as it is, and in consequence, it does not signify as it is nor other than it is in the scenario proposed. But if the scenario is proposed that there is the proposition 'A falsehood exists' and no other and that it principally signifies that a falsehood exists and that every proposition signifying as it is is true and that every proposition signifies as it is or other than it is, then the scenario should not be admitted in that it entails that the same proposition is true and false, which is not possible.

- (112) These comments on insolubles suffice. But if people want to object to the above discussion, they should not take issue with the words, as people do when they are being obstinate, but with the content. But if in these (remarks) what is perfect or consonant with truth was found, it was gathered from the sayings of Aristotle and of other revered masters. If what was less or dissonant with the truth was found, its insufficiency should be impugned only to me. So be it.

Glossary of Technical Terms and Idiomatic Phrases:

antecedens: premise

assumptum: (main) claim

conclusio: thesis

cum totaliter sic esse sicut est: with its being wholly as it is

notum: obvious

artificialiter: arbitrarily

casus: scenario

consequens: conclusion

et ultra, igitur: accordingly

suppositio: basic principle