Spinoza on Counterpossible Inferences

A counterpossible is a conditional with an impossible antecedent. One very common form of philosophical reasoning involves using counterpossibles to show that an opposing view has unacceptable consequences.[[1]](#footnote-1) For example, a Platonist might argue that *if* there were no universals—a state of affairs which she deems to be impossible—*then* there would be nothing to explain the resemblances that hold between objects. Spinoza is no stranger to this kind of reasoning. In fact, many of his most important arguments, for his most important theses, rely on it. For example, despite his firm belief in the intrinsic impossibility of finite substances, he claims that *if* a finite substance existed, *then* it would have been limited by something of the same nature as it (E1p8d).[[2]](#footnote-2) Insofar as these kinds of inferences are common in the *Ethics,* they constitute an important part of Spinoza’s geometrical method.

 Nevertheless, Spinoza faces a puzzle concerning the justifiability of such inferences, and one that seems unique to him. [[3]](#footnote-3) The puzzle revolves around his apparent acceptance of the following three claims:

 (A) Counterpossible inference-making can generate knowledge.

 (B) Knowledge-producing inferences involve an intellectual transition between ideas.

 (C) The impossibilities involved in counterpossibles are unthinkable.

These three claims appear to be jointly inconsistent. So, if counterpossible inferences can produce knowledge, then Spinoza faces a choice: either he must explain how we have ideas of the impossibilities or he must explain how making counterpossible inferences can lead to knowledge even if we can’t form *ideas* about the content of the inference. Absent either explanation, it seems that the use of counterpossible inferences in the *Ethics* is unjustified by Spinoza’s own lights.[[4]](#footnote-4)

I will argue that there is a reasonable interpretation on which Spinoza rejects (B). On the account that I attribute to him, the contents of the counterpossibles of the *Ethics* are unthinkable linguistic expressions. One can make knowledge-producing inferences involving these expressions because language allows for the substitution of terms taken to be equivalent, even when the expression in which the substitution occurs is unthinkable. The justifiability of counterpossible inferences is therefore grounded in norms of language use rather than in the intellectual transitions between ideas. The paper will proceed as follows. In sections I and II, I further motivate (A) and (B). In section III, I motivate (C) in detail. The joint aim of these sections is to show that the puzzle lies deep in Spinoza’s work. In Section IV, I consider and reject two potential ways to understand counterpossibles as intellectual transitions between ideas. In section V, I defend my linguistic account of counterpossible inferences. One important takeaway of my account is that Spinoza’s use of the geometrical method is concerned in part with correcting the specifically *linguistic* errors of his opponents.

**I. Motivating (A)**

Spinoza is, on most accounts, a necessitarian.[[5]](#footnote-5) That is, he believes that the universe could not have been any different than it actually is. One consequence of necessitarianism is thatevery *counterfactual* is also a counterpossible. This applies even to mundane counterfactuals such as *if I had not had oatmeal for breakfast, then I would have had toast.* After all, every counterfactual has a counter-to-fact antecedent and anything counter-to-fact is, for Spinoza, impossible. This might make it seem as if the puzzle constituted by (A)-(C) is a puzzle that results from Spinoza’s necessitarianism. This impression is misleading, however. Spinoza distinguishes between two different classes of impossibility and the puzzle centers on counterpossibles involving a class that one can accept—that most *do* accept—without accepting necessitarianism. Spinoza writes: “a thing is…called impossible…either [1] because its essence, or definition, involves a contradiction, or [2] because there is no external cause which has been determined to produce such a thing” (E1p33s1, my numbering).[[6]](#footnote-6) The first class of impossibility pertains to things whose nature or definition aloneentails a proposition of the [P and not-P] form. Following standard usage in Spinoza circles, one can call these impossibilities “*per se* impossibilities”. The square circle is an example: “the very nature of a square circle indicates the reason why it does not exist, viz. because it involves a contradiction” (E1p11d).[[7]](#footnote-7) The second class of impossibility pertains to those things which are in themselves logically consistent but whose existencewould be inconsistent with the rest of what exists:

The reason why a square or triangle exists, or why it does not exist, does not follow from the nature of these things, but from the order of the whole of corporeal Nature. For from this [order] it must follow either that the triangle necessarily exists now or that it is impossible to exist now. (E1p11d)

We can call this second class of impossibilities “*per se* possible impossibilities,” because they are possible at least in and of themselves (though they are still all-things-considered impossible). The counterpossibles relevant to the puzzle are those with *per se* impossible antecedents.[[8]](#footnote-8)

Let’s return to the claim that counterpossible inferences can generate knowledge. That Spinoza thinks it can is evident from two things. First, he says as much: “when the mind attends to a fictitiousthingwhich is false by its very nature, so that it considers it carefully, and understands it, and deduces from it in good order the things to be deduced, it will easily bring its falsity to light” (G II 23/C I 28,).[[9]](#footnote-9) That which is false by its very nature is a *per se* impossibility, and Spinoza is here saying that it’s possible to produce new knowledge by inferring those things that one is licensed to infer from considering the impossibility in question. These inferences are counterpossible inferences. The second reason to think Spinoza believes (A) is that he regularly uses conditionals in the *reductio* arguments of the *Ethics*, especially in Part One, and many of these involve *per se* impossible antecedents. Here are some examples.

*E1p5d*

In his proof of E1p5—that distinct substances cannot share attributes—Spinoza relies on the following conditionals, all of which have *per se* impossible antecedents:

“If there were two or more distinct substances, they would have to be distinguished from one another either by a difference in their attributes, or by a difference in their affections.”

“If [these distinct subsyances are distinguished] only by a difference in their attributes, then it will be conceded that there is only one [substance] of the same attribute.”

“But if [two substances are distinguished only] by a difference in their affections…if the affections are put to one side and the substance considered in itself [and] truly, then one [substance] cannot be conceived to be distinguished from another.”

*E1p6c*

In his alternative proof that created substances are impossible, Spinoza uses the following conditional: “if a substance could be produced by something else, the knowledge of it would have to depend on the knowledge of its cause (by A4). And so (by D3) it would not be a substance.” Created substances are *per se* impossible, and so this constitutes a counterpossible conditional with a *per se* impossible antecedent.

*E1p8d*

Ep1p8 states that “every substance is necessarily infinite”. In his proof, Spinoza argues as follows:

Of [substance’s] nature, therefore, it will exist either as finite or as infinite. But not as finite. For then (by D2) it would have to be limited by something else of the same nature, which would also have to exist necessarily (by P7), and so there would be two substances of the same attribute, which is absurd (by P5).

There are three counterpossibles here, each involving the same *per se* impossible antecedent (finite substances): if finite substance existed, then it would be limited by something of the same nature; if finite substance existed, then it would exist necessarily; and if finite substance existed, then it would share an attribute with another substance. The use of counterpossible inferences doesn’t stop at E1p8. Others appear in the proofs of E1p11, E1p12, Ep13, E1p14, E1p17, E1p21, E1p25, E1p26, and E1p33, for instance. But you get the idea. I would venture that, at least in the first half of Part One, this is Spinoza’s main argumentative strategy. Given that so much of the *Ethics* depends on the success of Part One, it would be odd for Spinoza to rely on counterpossible inferences unless he believed such inferences could generate knowledge.

**II. Motivating (B)**

But what is one doing when one makes a counterpossible inference, especially a justifiable one? Spinoza seems to describe the inferential process as fundamentally mental: “when the *mind attends* to a fictitious thing which is false by its very nature, so that *it considers* it carefully, and *understands* it, and deduces from it in good order the things to be deduced, it will easily bring its falsity to light” (G II 23/C I 28, my emphasis). This should come as no surprise. Counterpossible inferences, at least those of the *Ethics*, are parts of a demonstration and Spinoza claims that “the eyes of the mind, by which it sees and observes things, are the demonstrations themselves” (E5p23s). This claim—that demonstrative inferences are mental in nature—has a strong Spinozistic motivation. Specifically, the intellect has two features that seem to make it uniquely capable of demonstration. First, only the intellect is general in form.[[10]](#footnote-10) This is important because demonstration is general in form in that it does not apply to merely this or that instance of a phenomenon, but to all instances of it. Second, only the intellect can understand *why* a thing is the way it is, and the point of methodologically sound philosophy is “to demonstrate the things we put forward *by reasons perceived clearly and distinctly by the intellect*” (G I 196/C I 273, my emphasis) [[11]](#footnote-11) So, demonstration requires understanding causes and while the intellect can do that (E2p42), the imagination cannot. It can grasp *that* something is, but not *why* it is.[[12]](#footnote-12) This is the reason Spinoza describes the imagination as representing “conclusions without premises” (E2p28d).[[13]](#footnote-13)

Since demonstrative inference-making in general is intellectual in nature, we should expect counterpossible inferences to be intellectual as well.[[14]](#footnote-14) But what does this intellectual activity actually operate on? That is, what does one have in mind when one thinks about an impossibility and infers what follows from it? There *is* no impossibility itself, of course. But whenever there are true *ideas*, then there must exist some *thing* which corresponds to the idea (E1a6). If counterpossible inferences involve true ideas—which they must if they are intellectual transitions between ideas (E2p42)—then we need to find the object of that idea. There is reason to identify *essences of impossibilities* as the object of thought here. The reason is two-fold. First, Spinoza says that we think about things that don’t exist by thinking of their formal essences: “the ideas of singular things, or of modes, that do not exist must be comprehended in God’s infinite idea in the same way as the formal essences of the singular things, or modes, are contained in God’s attributes” (E2p8). These so-called formal essences are, roughly, the blueprints that exist even if the thing’s actual essence, or conatus, does not exist (E5p23).[[15]](#footnote-15) Second, he at times refers to essences of *per se* impossibilities, such as when he talks about the essence of a square circle as its own cause for non-existence. So, while there are no actual essences of impossibilities, the formal essences of impossibilities would seem to be a natural fit for what one thinks about when one thinks about impossibilities. By way of illustration, consider how this picture of counterpossible inferences would work when applied to one of Spinoza’s uses of counterpossibles. In his alternative proof that one substance cannot be produced by another (E1p6), he uses the following counterpossible: “if a substance could be produced by something else, the knowledge of it would have to depend on the knowledge of its cause.” According to the picture laid out here, one first gets a mental handle on the essence of a created substance. Then one infers, on the basis of features of that essence, that a created substance (i) would be conceived through itself (given that it is a substance) and (ii) would be conceived through another (given that it is created and hence depends on its cause). Putting (A) and (B) together, this inference produces knowledge because it reveals that created substances are impossible, and the inference is intellectual insofar as it relies on forming ideas of the essence of a created substance.

**III. Motivating (C)**

 This is where problems begin. Spinoza thinks that contradictions are unthinkable.[[16]](#footnote-16) The most explicit statement to this effect appears in the early CM. Spinoza, following standard usage of the term[[17]](#footnote-17), defines a chimaera as a self-contradictory being: “By the term Chimaera…I understand that whose nature involves an explicit contradiction” (G I 233/C I 299). He then claims that chimaeras cannot be objects of either the intellect or the imagination, but are instead merely linguistic:

[I]t should be noted that we may properly call a Chimaera a verbal being [*ens verbale*][[18]](#footnote-18)because it is neither in the intellect nor in the imagination. For it cannot be expressed except in words. E.g., we can, indeed, express a square Circle in words, but we cannot imagine it in any way, much less understand it. So a Chimaera is nothing but a word, and impossibility cannot be numbered among the affections of being. G I 241/C I 307

That is, we cannot form an idea, whether intellectual or imaginative, of a contradictory being. It is something that exists only in language, e.g., in the linguistic expression “square circle”. A little later Spinoza confirms this view of contradictions when he explains that the conjunction of two independently thinkable, but jointly inconsistent, beings results in a chimaera:

If we were to conceive the whole order of nature, we should discover that many things *whose nature we perceive clearly and distinctly*, that is, whose essence is necessarily such [clear and distinct], cannot in any way exist. For we should find the existence of such things in nature to be just as impossible as we now know the passage of a large elephant through the eye of a needle to be, *although we perceive the nature of each of them clearly*. So the existence of those things would be only a chimaera. G I 241-242/C I 308, my emphasis

A large elephant and an eye of a needle are each *per se* possible and therefore thinkable, but the one passing through the other is not. Instead, it is a chimaera—an unthinkable *ens verbale*.[[19]](#footnote-19)

This denial that contradictions can be the objects of thought reappears in the *Ethics,* albeit in the context of a discussion of essences. As quoted earlier, Spinoza claims that we can think of non-existents by thinking of their formal essences (E2p8). If there are thinkable contradictions, then must be formal essences of contradictions which are the object of that thought. But Spinoza denies that there could be any contradictory essences:

For the definition of any thing affirms, and does not deny, the thing’s essence, or it posits the thing’s essence, and does not take it away. So while we attend only to the thing itself, and not to external causes, we shall not be able to find anything in it which can destroy it, q.e.d. E3p4d[[20]](#footnote-20)

Since a contradictory essence would be the very reason for the non-existence of what it is an essence *of*, it follows that there are no contradictory essences. It is not hard to see why Spinoza would find himself denying contradictory essences.[[21]](#footnote-21) By the time of E3p4, Spinoza feels he has proven that monism is true, and yet there is no space for inconsistent essences in a monistic framework. Everything (including essences) is an expression of God’s nature (E1p15, E1p25) and God’s nature is necessarily affirmative insofar as his nature is nothing but the power to produce himself and his modes (E1p34, E2p3s). A contradictory essence, because it is an inherent denial of existence, could not express affirmative God’s nature. So, there could be no essence of such a thing. Since there are no contradictory essences, there is no way to *think* of a contradictory being. As Spinoza says in the TdIE, “the relation between…ideas is the same as the relation between the formal essences of those ideas” (G II 16/C I 19). Since there are no formal essences of contradictions, contradictions are unthinkable. They are, as Spinoza puts it, mere words.

 Let’s look at Spinoza’s claim that contradictions are unthinkable in a bit more detail. The notion of unthinkability here is ambiguous, at least at this stage. It could mean that we cannot form an *adequate* idea of a contradiction, though we can form an *inadequate* idea of one. Or it could mean that we cannot form *any* idea of a contradiction, adequate or not. I think there is good evidence in favor of the second, stronger claim. First, in the CM passage, Spinoza states that contradictions cannot be thought of *or* imagined. In the *Ethics*, the imagination is the seat of inadequate ideas (E2p40s2) since it is nothing but the mind’s awareness of the body’s interaction with other bodies (E2p17s). But Spinoza ascribes to this picture of imagination in the CM as well: “But as imagining is nothing but being aware of the traces found in the brain from the motion of the spirits aroused in the senses by objects, such an awareness can only be a confused affirmation” (G I 234/ C I 300). If Spinoza were merely denying that there are adequate ideas of contradictions, then it would be odd to mention the imagination in his discussion of chimeras. So, the most natural reading of the CM passage is the stronger reading: we cannot form even inadequate ideas of contradictions.

Second, in the TdIE Spinoza draws an implicit distinction between (i) utterances whose subject-predicate form corresponds to a unified idea and (ii) utterances whose subject-predicate form fails to correspond to a unified idea. Contradictions fall into the latter category: “if by chance we should saythat men are changed into beasts, that is said very generally, so that there is in the mind no concept, i.e., idea, *or* connection of subject and predicate” (G II 24/C I 28).[[22]](#footnote-22) That is, when someone says “men are changed into beasts,” her words have a subject-predicate form, but there no unification of the corresponding ideas of men, beast and change. Rather, her mental activity amounts to an unstructured mental lump. The only way there could be inadequate ideas *of* contradictions in Spinoza is if the lump qualifies as an inadequate idea of a contradiction. The question then is—does this mental lump which accompanies contradictory utterances qualify as an inadequate idea *of* a contradiction or not? I do not see how it can. In general, contents of thought that occur simultaneously remain in lump-form unless there is an act of the mind which unites them. I am know thinking of this paper and thinking of my dinner. But my simultaneous ideas of my dinner and of this paper are not unified in an idea *of* an edible paper or *of* a Spinozistic dinner. Rather, they are still lumpish. This is true even if each *part* of the lump is conceived clearly and adequately. This claim that the idea is not an idea of a contradiction because it lacks unity isn’t to suggest that there is a perfect correlation between the structural features of ideas and those of language. There need be no idea corresponding to a dash, for instance. But there at least needs to be a correlation between the subject-form of a linguistic expression and the unity of a complex idea for the content of that idea to be the content that is expressed in the linguistic expression. After all, every idea is a judgment (E2p49) and the lump involves no judgment (or at least none not already accounted for by the parts of the lump).[[23]](#footnote-23) Without a unity that corresponds to the subject-predicate form of the linguistic expression, the lump is not an idea *of* the contradiction that appears in the words (the “P and not-P” expression).

Of course it might happen that a person *thinks* that they are thinking of something contradictory when they say “men are changed into beasts” or “suppose there is a square circle”. But this does not suffice to show that they possess an inadequate idea of a contradiction. First, we do not know the contents of our inadequate ideas well: “The ideas of the affections of the human body [i.e., imaginative ideas], insofar as they are related only to the human mind, are not clear and distinct, but confused” (E2p28). So, the mere fact that a person thinks that they have an idea of a contradictiondoes not mean that they have an idea of one. Second, Spinoza thinks that language has a unique capacity to mislead us: “it is not to be doubted that words, as much as the imagination, can be the cause of many and great errors, unless we are very wary of them” (G II 33/C 38). There are many reasons for this, but one involves the fact that language has a flexibility that thought does not: “philosophers preoccupied with words, *or* grammar, should fall into such errors. For they judge the things from the words, not the words from the things” (G I 235/C I 301).[[24]](#footnote-24) Given that people often make philosophical judgments on the basis of features of language, it is only natural that the subject-predicate form of an utterance would lead one to think that there is a similar structure to their thought when they make the utterance.[[25]](#footnote-25) In sum, there is no reason to think, and plenty of reasons to deny, that the mental lump is an inadequate idea of a contradiction. So, there is strong evidence that Spinoza not only thinks that we cannot adequately think of contradictions, but that we cannot inadequately think of them either.

 Let’s return to the puzzle of counterpossible inferences. Spinoza uses counterpossible inferences in an attempt to produce knowledge—most directly about God, but also about ourselves and our happiness. Inference-making in general is a mental activity whereby the intellect forms an idea of the antecedent and deduces that which is deducible from it. But many of the counterpossible inferences involve unthinkable impossibilities. This is deeply problematic for Spinoza’s method. If counterpossibles are unthinkable, then there is nothing for the intellect to operate on when making a counterpossible inference. If there’s nothing for the intellect to operate on, then it’s not clear how counterpossibles can produce knowledge. Counterpossible conditionals, if unthinkable, are not even *true* or *false*. After all, truth and falsity are features of ideas and impossibilities cannot be the object of ideas. I am not sure if Spinoza was aware of this puzzle in the context of the *Ethics*, but he seems to have recognized something like it in another context:

[An] idea is objectively in the same way as its object is really. So if there were something in Nature which did not interact with other things, and if there were an objective essence of that thing which would have to agree completely with its formal essence, then that objective essence would not interact with other ideas, i.e., *we could infer nothing about it*. G II 16/C I 20, my emphasis

In a similar way, it seems that we cannot infer things from contradictions if the mind cannot think the essences of those contradictions and it cannot think those essences because there are no essences of contradictions to think. How then can counterpossible inferences generate any knowledge? That is the puzzle.

**IV. Two Mentalistic Strategies**

In the literature on Spinoza there are at least two potential strategies for explaining how counterpossible inferences can generate knowledge even if all inference-making is an inherently mental activity.[[26]](#footnote-26) The first comes from Lin’s (2007) defense of the existence of counterfactual truths— truths about what would have happened—within Spinoza’s necessitarian system. The defense is founded on the distinction, outlined earlier, between two difference classes of impossibility. With this distinction in mind, Lin explains how there are counterfactual truths even if everything is necessary:

while a counterfactual situation in which I took a lethal [high] [[27]](#footnote-27) dose of cyanide yet lived is made impossible by the *ordo naturae*, it is also impossible given my nature and the nature of cyanide. A counterfactual situation in which I ate an apple and lived is also made impossible by the *ordo naturae*, but it is not made impossible by my nature and the nature of apples. In this sense, then, we can speak of a counterfactual situation that is possible *per se*—i.e., not made impossible by the natures of the involved individuals—without implying that such situations are possible *tout court*. 283-4

The counterfactual *if I had taken a high dose of cyanide, then I would have lived* is false because my nature and the nature of cyanide are inconsistent with each other. However, the counterfactual *if I had eaten an apple, then I would have lived* is true, on Lin’s account, because the situation of having eaten an apple and living is *per se* possible. That is, the situation in which I eat an apple and live is logically consistent—the natures of myself and apples don’t preclude it. It is only inconsistent when it is conjoined to the rest of the universe. Because the situation is logically consistent, it can express God’s nature. Because it can express God’s nature, there can be an essence of it contained in God’s attributes. Because there is an essence of it contained in God’s attributes, it is therefore thinkable. Because it is thinkable, the standard story of inference-making can apply to it: inferences track relations between ideas. [[28]](#footnote-28) Furthermore, these sorts of inferences can generate knowledge, e.g., knowledge about what would have happened to me had I eaten an apple.

 Despite its merits, there is an inherent limitation to Lin’s account. His account is based on the idea that there is a realm of the possible (albeit only *per se* possible and not all-things-considered possible) where things’ natures govern what *would* happen even if they *didn’t* happen. This realm of the possible, as we’ve seen, is contained in God’s attributes (E2p8). But as we’ve also seen, many of the most important arguments of the *Ethics*, especially in Part One, rely on counterpossibles involving *per se* impossibilities, i.e., unthinkable contradictions. For example, the inferences used in the demonstrations of E1p8 and E1p6 both rely on counterpossibles involving finite and created substances, respectively. Those things, because contradictory, have no essences and so do not reside in the realm of God’s attributes—*that* realm is restricted to the *per se* possible. Now one might be tempted to modify the account and add a realm of the *per se* impossible where things’ natures govern what would, *per impossible*, happen.[[29]](#footnote-29) But this is not a promising strategy for Spinoza. There can be no such realm because everything, including essences, must be conceived through God’s self-affirming nature (E1p15, E1p25). So, Lin’s account has the potential to explain how some counterpossibles function, viz. those involving *per se* possible sequences of modes, such as the mode of my eating an apple. But his account cannot capture how counterpossibles with contradictory antecedents can generate knowledge. [[30]](#footnote-30) Since so many of the counterpossibles of the *Ethics* involve contradictory antecedents, Lin’s account cannot explain the inferences of the *Ethics*.

The second potential mentalistic strategy comes from Aaron Garrett (2003).[[31]](#footnote-31) There is a longstanding problem facing Spinoza’s use of the geometrical method: that method is only as good as its definitions, but its definitions seem to depart from standard philosophical usage. For example, Spinoza defines God as having infinite attributes (E1d6) and he defines an attribute as what the intellect perceives of substance as constituting its essence (E1d4). The Cartesian reader would likely reject both definitions, since she thinks that God has one and only one attribute—Thought—and that attributes are what *do* constitute the essence of substance, not what is *perceived* to constitute its essence. If the reader rejects the definitions, then is little reason to accept any of the propositions which are supposed to follow from them. Garrett attempts to solve this problem by arguing that the definitions are general enough to capture simultaneously *both* standard uses of the terms *and* Spinoza’s more esoteric uses. That is, standard uses of the terms defined and Spinoza’s esoteric interpretations of them, though incompatible with each other, are nonetheless both compatible with the explicit definitions of the *Ethics,* given the latter’s generality. For example, the definition of substance as that which is and is conceived through itself (E1d3) is general enough to capture what the more specific Aristotelian, Cartesian, and Spinozistic conceptions of substance have in common: all three conceptions of substance construe substances as “in themselves” in a way that contrasts with modes and accidents, which are “in another”. This starting point of general definitions is necessary because Spinoza needs some entry point into the ideas of his readers. That is, on Garrett’s view, language is ultimately such a poor guide to true knowledge that a treatise written in a natural language can result in a grasp of philosophical truths only if it points to ideas in the mind. By starting out with general definitions, Spinoza can make sure his arguments access ideas in the mind of the reader. The definitions become less general—coming eventually, Spinoza hopes, to capture only the specific Spinozistic interpretations of them—as the *Ethics* proceeds. Garrett explains:

The definitions offered at the beginning of the work are the definitions of those things they claim to define. But they are also definitions written in language for the purpose of communicating to those with like ideas. As this is the case, they are written in highly abstract terminology that can at best point to ideas which others already have, either in a partial and confused manner or adequately. If they have these ideas only in a partial or confused manner—which would likely be the case for many readers—then these readers will either draw a confused understanding from the definitions, or find a way to better understand the definitions. 165

The ideal outcome—transitioning to a better, Spinozistic understanding of the definitions—is possible because the proofs of the Ethics lead the reader to see what *their* specific interpretations of the general definitions commit them to, namely contradictions. The aim of thegeometrical method is therefore therapy: to get the reader to see that *their* specific interpretations of the general definitions are faulty and confused, and then to proceed to clean and improve the partially true idea that was there all along.

 So, where do the counterpossible inferences of the *Ethics* fit into this therapy? They are the mechanism for forcing the reader to consider revising her way of understanding the definitions. That is, if the inference is justifiable, then it forces the reader to entertain a different specific interpretation of the definitions. Consider the conditional “if a created substance existed, then it would be both conceived through itself and not conceived through itself”. The antecedent is, on Garrett’s view, a bit of language that refers to a partially true idea in the mind of the reader. The idea is partially true idea insofar as it is the acceptance of the very general definition of substance, namely substance as a thing that is conceived through itself. But the idea is *only* partially true insofar as it involves a mistaken *specific* interpretation of the definition, e.g., that being an ultimate subject of predication is sufficient for thing’s being conceived through itself. The conditional is the mental crank that turned and which causes the reader, ideally, to see the errors of her ways, i.e., she sees what her confused ideas commit her to and thus comes to understand the definitions in the specific Spinozistic sense. This picture of counterpossible reasoning is a rejection of (C) in the puzzle. On Garrett’s view, counterpossible inferences are thinkable precisely because they involve highly general definitions and highly general definitions are thinkable even if specific interpretations are not.

 There are two potential problems with the therapeutic account of counterpossibles. The first concerns the validity the counterpossible inferences, as the therapeutic interpretation understands them. For Spinoza’s geometrical method to be successful, the counterpossible inferences have to be valid: the consequents must actually follow from the antecedents. In other words, the conditionals that Spinoza uses need to be justifiable in the sense that Spinoza needs to be able to explain why a commitment to the truth of the antecedent commits one to the truth of the consequent. Of course, no interpretation can rescue the validity of all the inferences of the *Ethics*, including all the counterpossible inferences. The objection here is that the therapeutic interpretation renders *too many* of the inferences invalid. To see why, consider again the way the general definitions are supposed to work, on Garrett’s view. The reader has a bad, but partially true, idea of the thing in question. For example, the Cartesian reader has a bad, but partially true, idea of substance: she conceives of it as that which is the ultimate subject of predication and that which can exist independently of everything else (except, as in the case of finite substances, God). The definition of substance—defined at a level of generality sufficient to capture the Cartesian conception, as well as other conceptions—is then applied to this bad idea to derive its absurd consequences. Let’s consider a simple example: the alternative proof of E1p6. Spinoza has his reader suppose that a created substance exists. The Cartesian will have no trouble with such a supposition—she takes it to be a description of herself. Spinoza then applies the definition of substance: a created substance will be conceived through itself. The Cartesian reader will agree: she, a created substance, is conceived through herself insofar as she is the ultimate subject of her predicates and she can exist independently of anything else (save God). Spinoza then applies axiom 4—“knowledge of an effect depends on and involves knowledge of the cause”—to derive the second conclusion: a created substance will be conceived through something else (its creator). So, we have a contradiction: a created substance would be both conceived through itself and not conceived through itself. They are therefore impossible. But the Cartesian is not going to be moved by this argument. If axiom 4 is interpreted strongly to mean that effects depend on their causes as modes depend on their substances, then she will just deny the axiom. If it is interpreted weakly to mean that effects depend on their causes in some more general sense that includes how created substances depend on God, then she will accept it. She may even accept describing that general notion of dependence as “conception through another”. But she will now deny that there is a contradiction. Rather, the notion of conception is ambiguous: created substances are conceived1 through God and they are conceived2 through themselves. The only way to generate a contradiction is for the definition of substance to be more specific—to match the stronger version of axiom 4 just mentioned. So Garrett’s interpretation faces a dilemma. On the one hand, the definitions need to be general to generate buy-in from the reader. On the other hand, they need to be specific for the counterpossible inferences to be valid. So, either the definitions are interpreted specifically from the start, but at the cost of being therapeutic, or they are interpreted generally from the start, at the cost of the inferences being invalid. So, Garrett’s interpretation can reject (C) and claim that counterpossible inferences are thinkable. But it comes at the cost of (A). [[32]](#footnote-32)

 The second problem is independent of the first. It concerns the potential of the therapeutic interpretation to explain the use of counterpossible inferences in the PCP. That work aims to demonstrate various Cartesian doctrines in geometrical fashion. Many of these doctrines are incompatible with Spinoza’s system, both as it appears in the *Ethics* and as it appears at the time of the PCP’s publication (1663). For example, the PCP aims to demonstrate that God is incorporeal (G I 176-7/C I 260), that the will is free (G I 173/C I 256-7), and that the body and the soul interact (G I 179/C I 261), among other anti-Spinozistic doctrines. Because many of these doctrines are, in Spinoza’s view, necessarily false, any time that some further proposition is derived from them, the derivation amounts to a counterpossible inference. For example, Spinoza’s infers from God’s incorporeal nature that extended substance is not God (G I 179/C I 261).[[33]](#footnote-33) Not only does Spinoza use counterpossible inferences in the PCP, but he arguably uses them to generate knowledge: namely knowledge about the relationships between various Cartesian doctrines. So, while the emendative story that Garrett tells serves a clear purpose—potentially explaining why the reader of the *Ethics* will accept the definitions—it is ultimately orthogonal to the question which is at the center of the puzzle of counterpossibles. Namely, what does Spinoza think one is doing when one uses counterpossible inferences and could this practice be justified by Spinoza’s lights?

**V. A Linguistic Account of Counterpossible Inferences**

Let’s return to the puzzle. Spinoza seems to accept each of the following three claims:

 (A) Counterpossible inference-making can generate knowledge.

 (B) Knowledge-producing inferences involve an intellectual transition between ideas.

 (C) The impossibilities involved in counterpossibles are unthinkable.

And yet it doesn’t appear that he *can* accept all three. I’ve looked at two potential strategies for avoiding the puzzle which involve a rejection of (C). I’ve argued that both strategies have serious flaws as accounts of the counterpossible inferences of the *Ethics*. At this point, one option is to simply admit an inconsistency in Spinoza’s system. Bennett (1984) expresses his openness to this option when he writes that “Spinoza was no logician; his modal thinking seems to have been neither skilful nor knowledgeable” (124). I think there is a real possibility that Spinoza’s views on counterpossible inference-making are genuinely inconsistent. But this interpretative option should be a last resort. In this section, I will defend a linguistic account of counterpossible inferences. It involves a rejection of (B) insofar as it grants that some genuinely knowledge-producing inferences do not involve a transition between ideas.

 As I argued in section III, we cannot even say of counterpossible conditionals that they are true or false, since truth and falsity are ideational notions and impossibilities cannot be taken up in ideas. But even if Spinoza thinks impossibilities are unthinkable and therefore neither true nor false, he clearly thinks some counterpossible inferences are justifiable and other aren’t. So, we should avoid talk of truth and talk instead about counterpossible inferences as justified or not. It is tempting to answer that an inference is justified when it’s valid and unjustified when it’s not, so Spinoza’s counterpossible inferences are justified iff they are valid. But as a way of interpreting Spinoza, this answer will likely create more problems than it’s worth. First, Spinoza never offers any definition of validity and the standard modal definition of validity—an argument is valid iff necessarily, if the premises are true, then the conclusion is also true—is hard to fit into Spinoza’s necessitarian framework.[[34]](#footnote-34) Second, the concept of validity is notoriously unwieldy in hyperintensional contexts, such as those involving counterpossible inferences.[[35]](#footnote-35) I suggest we set aside the issue of whether there is a general notion of justified inference in Spinoza and instead focus on the question of whether Spinoza can explain why inferences that do not involve the transition between ideas can count as justified.

 This question is not to be confused with the question of whether things other than ideas *follow from* things other than ideas. The answer to *that* question is clear. For example, finite modes of extension follow from finite modes of extension, mediate infinite modes of extension follow from other infinite modes, the immediate infinite mode of extension follows from the attribute of extension, and so on. But this “following from” relation is not the kind of thing that can be used to justify non-ideational inferences of the sort that counterpossible inferences are an instance of. To see why, consider that a mode follows from its substance (E1p16) and not vice versa (E1p4), and yet Spinoza thinks that God’s existence can be justifiably *inferred* from the existence of finite modes:

if what exists now are only finite beings, then finite beings are more powerful than an absolutely infinite Being. So, either nothing exists or an absolutely infinite Being also exists. Therefore, an absolutely infinite Being—that is, God—necessarily exists, q.e.d. E1p11s

This inference would be unavailable for Spinoza if justified inferences depended on the following-from relation. [[36]](#footnote-36) So, what we need is some way to explain when an inference is justified that doesn’t depend on either (i) an intellectual transition between ideas or (ii) the presence of a relevant following-from relation.

In this spirit, I propose a linguistic notion of justified inference. I do not mean to suggest that only inferences that fit the pattern that follows are justified, but rather that fitting the pattern is sufficient for an inference to be justified. Call any instance of justified inference that proceeds on the basis of language, rather than on the basis of ideas of essences, a *linguistic derivation*. On my account, linguistic derivation is possible because there is a norm of substitution whereby certain linguistic expressions can be substituted for each other. The most common instance of this is that of accepted equivalences. So, if one writes or says “X is Y”, then one can substitute what is accepted to be the equivalent of “X” or “Y” to derive a conclusion. For example, if one accepts that the expression “squares” is equivalent to the expression “four-sided two-dimensional figures with equal interior angles and equal sides,” then one can derive from “squares are rectangles”, using substitution, the expression “four-sided two-dimensional figures with equal interior angles and equal sides are rectangles”. To use a simpler example, we can replace “is a bachelor” with “is unmarried and of eligible age” and derive the expression “John is unmarried and of eligible age” from the expression “John is a bachelor”. Often these linguistic substitutions occur because there is a mental underpinning justifying them, e.g., the concept of bachelor, the concept of being unmarried, and so on. So linguistic derivation is compatible with a transition between ideas, even a transition between ideas of essences (e.g., the essence of bachelorhood). But, strictly speaking, for linguistic derivation to be possible all that is necessary is that certain expressions are accepted as equivalent and that a substitution norm exists. These conditions can be met even if there is no idea justifying that accepted equivalence.[[37]](#footnote-37) All that matters is *that* the terms are accepted as equivalent or substitutable.

Importantly, what counts as an accepted equivalence depends on who is involved, as well as the context. For example, a Cartesian will have a different set of accepted equivalences than the Aristotelian. Furthermore, one might accept something as equivalent that they wouldn’t accept as equivalent in another context. For example, within one context “flat” is accepted as equivalent to “has no bumps visible to unaided perception”, whereas in another context “flat” is accepted as “has no bumps visible to aided or unaided perception”. Accepted equivalencies vary within Spinoza’s corpus as well. In the *Ethics*, he accepts “substance” as equivalent to “that which is and is conceived through itself”, but in the PCP he accepts as “substance” as equivalent to “that which is the bearer of properties, qualities, or attributes, of which one has a real idea” (G I 150/C I 239, paraphrased).[[38]](#footnote-38) But given an accepted equivalence, substitution is permitted.

Why should we apply such an account of linguistic derivation to Spinoza’s use of the geometrical method? There are three main reasons. First, it can explain how the counterpossible inferences of the *Ethics* function. Consider E1p8d, where Spinoza demonstrates the infinitude of substance:

Of [substance’s] nature, therefore, it will exist either as finite or as infinite. But not as finite. For then (by D2) it would have to be limited by something else of the same nature, which would also have to exist necessarily (by P7), and so there would be two substances of the same attribute, which is absurd (by P5).

There are at least three counterpossible inferences here, but let’s focus on the first inference, since the relevant equivalency is nearer to the surface. The inference is this: if a substance is finite, then it is limited by something of the same nature. On my interpretation, the inference is justified because the expression “finite” is accepted, in the context of the *Ethics,* to be equivalent to the expression “would be limited by something else of the same nature” So, the derivation is possible even if nobody can form an idea that appropriately corresponds in unity to the linguistic expression “finite substance”. Consider also the alternative proof of E1p6: “if a substance could be produced by something else, the knowledge of it would have to depend on the knowledge of its cause (by A4). And so (by D3) it would not be a substance.” There are two inferences here: if a substance were produced, then it would depend on another, and if a substance were produced, then it would not depend on another. Both inferences can be explained by the substitution of accepted equivalencies. In the first case, “produced” is swapped out for “depends on another” via E1a4. In the second case, “substance” is swapped out for “does not depend on another” via E1d3. This derivation can occur even if nobody can form an idea that appropriately corresponds in unity to the linguistic expression “produced substance”. So, the substitutional account of linguistic derivation can explain how the counterpossible functions without ever having to rely on ideas of essences of impossibilities and the transition between those ideas. The only ideas that are required for linguistic derivation to occur are the ideas of the physical words on the page, the idea that is the awareness of the norm of substitution, and the idea that is awareness of accepted equivalences. On my account, though he would reject Hobbes’ general account of reasoning, Spinoza does ascribe to the Hobbesian view of reasoning at least with regards to counterpossible inferences: “REASON…is nothing *Reckoning* (that is, Adding and Subtracting) of the Consequences of generall names agreed upon” (*Leviathan,* ch. 5; EW iii.9).

The second reason in favor of the linguistic account is that it can explain how the counterpossible inferences of the PCP function. Lin’s account cannot explain them since it applies only to *per se* possible counterpossibles and the counterpossibles of the PCP are *per se* impossible. Garrett’s account, insofar as its driven by the idea of emendation, does not apply to the PCP since the PCP is not an emendative work. But the linguistic account can. Consider the inference that is used in the proof of God’s incorporeality: “Body is the immediate subject of local motion (D7). So, if God were corporeal, he would be divided into parts” (G I 176/ C I 260). How can Spinoza justify this inference, if nobody can form an idea that appropriately corresponds in unity to the linguistic expression “God is incorporeal”? Well, he defines corporeality partly in terms of local motion (G I 150/C I 239) and he defines local motion partly in terms of parts (G I 181/C I 263). So, by replacing the expression “were corporeal” with the expression “[would be] the immediate subject of extension and attributes which presuppose extension, like…local motion” and then the second with the expression “[would have] parts,” we can derive the expression “then God would be divided into parts” from the expression “if God were corporeal.”[[39]](#footnote-39) Again, all this can be justified as an inference even if nobody can form an idea, not even an inadequate one, of God having parts. By explaining the counterpossibles of both the *Ethics* and the PCP, the substitution account of linguistic derivation achieves two things. First, it provides a unified understanding of the geometrical method’s basic mechanisms across distinct works—the same method of inference is present, it’s just that the accepted equivalences have changed. Second, it provides a way to judge, on Spinozistic grounds, whether derivations the of the PCP are justified. This cannot be said of the mentalistic strategies: if derivation is always an intellectual transition between ideas of essences, then there is no way for Spinoza to tell if his derivations of the Cartesian system are faithful to Cartesianism or not.[[40]](#footnote-40)

Finally, the substitutional account offers a potential answer to a difficult question: why did Spinoza choose to write the *Ethics*? After all, the *Ethics* is written in a natural language and Spinoza treats language as a principal cause of error. For example, he says in the TdIE that “it is not to be doubted that words, as much as the imagination, can be the cause of many and great errors, unless we are very wary of them” (G II 33/C 38). He adds in the TTP that only “what is perceived with a pure mind, without words and images, is understood” (G III 64/C II 133).[[41]](#footnote-41) This distrust of language has at least three sources. First, language is tied up with abstraction and abstraction involves overlooking the differences between individuals (E2p40s1). Second, because language gets its meaning through association (E2p18s), the meanings of the terms of each person will often differ from the meanings of others as their associations differ. This not only makes communication difficult, but also increases the likelihood of merely verbal disputes. Third, as we saw in section III, due to the relative autonomy of language, there is a tendency to create unthinkable linguistic expressions—well-formed linguistic expressions which have no well-formed mental counterpart. If the attempt to communicate eternal truths in language will only lead to error, why even bother? My account offers the following answer: a written treatise is potentially productive because the errors of the readers are in part *linguistic* errors. That is, the readers of the *Ethics* have many false ideas, but some of those false ideas concern the content of their own words. For example, many think that “finite substance” expresses a thought. According to Spinoza, they are under this impression because they are using language as a guide to reality: “preoccupied with words or grammar, [they] should fall into such error [because] they judge the things from the words, not the words from the things” (G I 235/C I 301). That is, some linguistic expressions are more than gibberish[[42]](#footnote-42), since they are well-formed, but less than thinkable.[[43]](#footnote-43) So the first task of the *Ethics* is not to correct the reader’s inadequate ideas about *substance* (etc.), assuming that she even has such ideas. Rather, the first task involves showing the reader that the linguistic expressions she accepts as thinkable—“finite substance”—are in fact unthinkable. The way that Spinoza tries to achieve this goal is through linguistic derivation: by showing, via substitution of accepted equivalencies, that the reader is committed to accepting contradictory linguistic expressions. It is only once this ground has been cleared that Spinoza is in any position to show what follows from true and adequate ideas.[[44]](#footnote-44)

**VI. Conclusion**

 Let me end by remarking on what all this means for how we understand Spinoza’s attitude towards language. According to the standard narrative, Spinoza is deeply suspicious of the reliability of language for philosophical inquiry, for reasons just mentioned. But since counterpossible inferences play an essential role in the geometrical method, Spinoza must trust language after all, at least insofar as it is necessary for the work that counterpossible inferences do. This trust manifests itself in at least two places. First, Spinoza seems to believe in the power of language to express intellectual ideas of definitions, at least to a degree.[[45]](#footnote-45) After all, if language could not express intellectual definitions, then there would be no difference between the derivations of the *Ethics* and the PCP. Second, the counterpossible inferences of the *Ethics* all end with a contradiction which is supposed to follow from some view that Spinoza’s readers will be sympathetic to. But a contradiction is just a particular, unthinkable structure of certain linguistic expressions, i.e., the “P and not-P” structure. There is simply nothing more to a contradiction than that. Specifically, there is no *bad idea* that counts as the idea one asserts when one asserts “P and not-P.” If being caught with bad ideas is the only basis for changing one’s mind, then the contradictions that Spinoza derives from his opponents’ views cannot serve as a basis for them to change their minds. But if there is a *linguistic* norm that speakers refrain from asserting expressions with a “P and not-P” structure—a norm that applies independently of ideas underlying those assertions—then it can serve as the basis on which Spinoza can hope to change his opponents’ minds. If my interpretation is right, then Spinoza’s geometrical method requires leaning on this norm. So, even if language-less intellectual intuition is the ultimate goal of good philosophy, as Spinoza no doubt believes, language plays a role in Spinoza’s method similar to the one that it plays in the early Wittgenstein: the ladder which is kicked away only after it has been used.

 Bibliography

Allison, Henry. *Benedict de Spinoza: An Introduction.* New Haven: Yale University Press, 1987.

Aristotle. *The Complete Works of Aristotle*, Volumes I and II, Barnes, J., ed. Princeton: Princeton University Press, 1984.

Ashworth, E.J. “Chimeras and Imaginary Objects: A Study in the Post-Medieval Theory of Signification.” *Vivarium* 15 (1977): 57-77.

Barry, Galen. “Spinoza and the Logical Limits of Mental Representation.” *Journal of Modern Philosophy*, 1(2019): 1–16.

Bennett, Jonathan. *A Study of Spinoza's Ethics*. Indianapolis: Hackett Publishing, 1984.

Brogaard, Berit and John Salerno. “Remarks on Counterpossibles.” *Synthese* 190 (2013): 639-60.

Curley, Edwin. *Spinoza’s Metaphysics: An Essay in Interpretation*. Cambridge: Harvard University Press, 1969.

Curley, Edwin, and Gregory Walski. “Spinoza's Necessitarianism Reconsidered.” In *New Essays on the Rationalists*, edited by R Gennaro and C. Huenemann, 241-62. Oxford: Oxford University Press, 1999.

Della Rocca, Michael. *Representation and the Mind-Body Problem in Spinoza*. Oxford: Oxford University Press, 1996.

Descartes, Rene. *OEuvres.* C. Adam and P. Tannery, eds; B. Rochot and P. Costabel, rev. edn. Paris: Vrin-CNRS, 1964-1974.

---. *The Philosophical Writings of Descartes*, Volumes I and II. J.Cottingham, R. Stoothoff and D. Murdoch, trans. and eds. Cambridge: Cambridge University Press, 1984.

Doyle, John. “Another God, Chimarae, Goat-Stags, and Man-Lions: A Seventeenth Century Debate about Impossible Objects.” *Review of Metaphysics* 48: 771-808.

Garber, Daniel. “Descartes and Spinoza on Persistence and Conatus.” *Studia Spinozana* 10 (1994): 43-67.

Garrett, Aaron. *Meaning in Spinoza’s Method*. Cambridge: Cambridge University Press, 2003.

---. “The Virtues of Geometry.” In *The Oxford Handbook of Spinoza*, edited by Michael Della Rocca, 18-44. New York: Oxford University Press, 2018.

Garrett, Don “Spinoza’s Necessitarianism.” In *God and Nature in Spinoza's Metaphysics*, edited by Yirmiyahu Yovel, 191-218. Leiden: E.J. Brill, 1991.

---. “Spinoza on the Essence of the Body and the Part of the Mind that is Eternal.” *Cambridge Companion to Spinoza’s* Ethics, ed. Olli Koistinen. Cambridge: Cambridge University Press, 2009.

Hubner, Karolina. “On the Significance of Formal Causes in Spinoza’s Metaphysics.” *Archiv für Geschichte der*). *Philosophie* 97 (2015): 196-233.

Laerke, Mogens. “Aspects of Spinoza’s Theory of Essence: Formal Essence, Non-Existence and Two Types of Actuality.” In *The Actual and the Possible: Modality and Metaphysics in Modern Philosophy*, edited by Mark Sinclair, 11–44. Oxford: Oxford University Press, 2017.

---. “Spinoza’s Language.” *Journal of the History of Philosophy* 52 (2014): 519-547

---. “The Problem of *Alloglossia*: Leibniz on Spinoza’s Innovative Use of Philosophical Language.” *British Journal for the History of Philosophy* 17 (2009): 939-53.

Lin, Martin. “Rationalism and Necessitarianism.” *Noûs* 46 (2012): 418-48.

---. “Spinoza’s Arguments for the Existence of God.” *Philosophy and Phenomenological Research* 75 (2007): 269–97.

Martin, Christopher. “A New Challenge to the Necessitarian Reading of Spinoza,” in *Oxford Studies in Early Modern Philosophy* (V). Ed. Steven Nadler and Daniel Garber. Oxford: Oxford University Press, 2010: 25-70.

---. “The Framework of Essences in Spinoza.” *British Journal for the History of Philosophy* 16 (2008): 489—509.

---. “Spinoza’s Formal Mechanism.” *Pacific Philosophical Quarterly* 99 (2018): 151-181.

Mason, Richard. “Spinoza on Modality.” *The Philosophical Quarterly* 36 (1986): 313-42.

Miller, Jon. “Spinoza’s Possibilities.” *The Review of Metaphysics* 54 (2001): 779-814.

Newlands, Samuel. “Another Kind of Spinozistic Monism.” *Noûs* 44 (2010): 469–502.

---. “Leibniz and the Ground of Possibility.” *The Philosophical Review,* Vol. 122 (2013): 155-187.

---. *Reconceiving Spinoza*. Oxford: Oxford University Press, 2018.

---. “The Harmony of Spinoza and Leibniz.” *Philosophy and Phenomenological Research* 81 (2012): 64–104.

Nolan, Daniel. “Impossible Worlds: A Modest Approach.” *Notre Dame Journal of Formal Logic* 38 (1997): 535-72.

Novotny, Daniel. *Ens rationis from Suárez to Caramuel: a study in scholasticism of the Baroque Era*. New York: Fordham University Press, 2013.

Roberts, Louise Nisbet. “A Chimera is a Chimera: A Medieval Tautology.” *Journal of the History of Ideas* 21 (1960): 273-8.

Savan, David. “Spinoza and Language.” *The Philosophical Review* 67 (1958): 212-25

Schmaltz, Tad. “Spinoza on Eternity and Duration: The 1663 Connection,” in Y. Melamed (ed.), *The Young Spinoza. A metaphysician in the making*, New York: Oxford University Press, 2015.

Scribano, Emanuela. *Guida alla lettura dell'Etica di Spinoza*, Roma-Bari: Editori Laterza, 2008.

Spade, Paul Vincent and Yrjönsuuri, Mikko, "Medieval Theories of *Obligationes*", *The Stanford Encyclopedia of Philosophy*(Winter 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2017/entries/obligationes/>.

Spinoza. *Opera*. Ed. by Carl Gebhardt. Heidelberg: Carl Winter, 1925.

---.*The Collected Works of Spinoza*, volumes I and II. Translated by Edwin Curley. Princeton: Princeton University Press, 1985/2016.

Verbeek, Theo. “<<Zijn>> en <<Niet-Zijn>> in Spinoza’s *Cogitata Metaphysica*.” *Spinoza en de Scholastiek*. Gunther Coppens (ed.). Leuven: Acco, 2003. 91-103.

Viljanen, Valterri. *Spinoza’s Geometry of Power*. Oxford: Oxford University Press, 2011.

Ward, Thomas. “Spinoza on the Essences of Modes.” *British Journal for the History of Philosophy* 19 (2011): 19-46.

Yovel, Yirmiyahu. “Spinoza: The Psychology of the Multitude and the Uses of Language.” *Studia Spinozana* 1 (1985): 305-33.

---. *Spinoza and Other Heretics, Volume 1: The Marrano of Reason*. Princeton, NJ: Princeton University Press, 1989.

1. It’s a kind of inference that appears as earlier as Aristotle. See, for instance, his *Prior Analytics* I.13.32. It is especially popular in the medieval period under the guise of “obligations”. See Spade and Yrjonsuuri (2014) for a helpful overview. [↑](#footnote-ref-1)
2. Abbreviations are as follows. Spinoza: E = *Ethics* (d = definition; a = axiom; p= proposition; d = demonstration; c = corollary; s = scholium); TdIE = *Treatise on the Emendation of the Intellect*; CM = *Metaphysical Thoughts*; KV = *Short Treatise*; PCP = *Principles of Cartesian Philosophy*; TTP = *Theologico-Political Treatise*;G = *Opera*, ed. by Gebhardt; C = *The Collected Works of Spinoza*, two volumes, trans. by Curley. [↑](#footnote-ref-2)
3. As we’ll see in the next section, the puzzle has little to do with Spinoza’s necessitarianism. For examples of puzzles which are independent of Spinoza, see Nolan (1997) and the opening section of Brogaard and Salerno (2013). [↑](#footnote-ref-3)
4. Mason (1986: 322) claims that since the conditions necessary for the truth of the antecedent never obtain, Spinoza would therefore not be worried about the semantics of counterfactuals. But insofar as counterfactuals play a key role in his methodology, Spinoza has good reason to care about their semantics. [↑](#footnote-ref-4)
5. Recent exceptions include Curley and Walski (1999) and Martin (2010). Bennett (1984) argues that Spinoza is simply inconsistent on the matter. Newlands (2010) argues that Spinoza is both a necessitarian and an anti-necessitarian, depending on the level of description given. [↑](#footnote-ref-5)
6. He makes the same distinction in the CM (I 240/C 306). See Lin (2012), Lin (2007: 283-284), Griffin (2012), Newlands (2010: 73; 2018: ch. 4) for recent discussion of these passages and their implications for Spinoza’s necessitarianism. [↑](#footnote-ref-6)
7. Spinoza does not say what contradiction is present in a square circle, but it’s easy enough to name one: a square circle (i) has some interior angles (given that it is a square) and yet (ii) does not have any interior angles (given that it is a circle). [↑](#footnote-ref-7)
8. This isn’t to say counterpossible inferences involving *per se* possible antecedents cannot generate knowledge, but only that they are not part of the puzzle outlined here. [↑](#footnote-ref-8)
9. Miller (2001: 794) takes this passage to suggest a hypothetico-deductive method of reasoning. I agree, but it remains to be seen how it works, given Spinoza’s other commitments. [↑](#footnote-ref-9)
10. The imagination is limited to a person’s particular experiences: “things which have been represented to us through the senses [are] confused, mutilated, and without order for the intellect; for that reason I have become accustomed to call such perceptions knowledge from random experience” (E2p40s2). See Garrett (2018: 24-6). [↑](#footnote-ref-10)
11. Spinoza is likely getting this causal picture of intellection at least partly from Hobbes (*De Corpore* 1.5). [↑](#footnote-ref-11)
12. The distinctive feature of imaginative cognition is that it represents objects only on the basis of changes that happen to the body (E2p17s) and causal information is lost when we cognize objects through changes they cause in our body (E2p25). See Della Rocca (1996: ch. 4) for discussion of how this causal information is lost. [↑](#footnote-ref-12)
13. Non-intellectual cognition can at most signal the occasion of a cause or the need to investigate causes: “senses can only determine the intellect to inquire into this matter rather than that one” (G I 196/C I 273). For example, the senses can tell me that my hand hurts after the bee landed on it, but the intellect is necessary for explaining why the two events are related. [↑](#footnote-ref-13)
14. Intellectual representation discovers causes, so we should expect that counterpossible inferences do so as well. Specifically, counterpossible inferences are intended to demonstrate that the cause of a thing’s non-existence lies in itself. (E1p11d). [↑](#footnote-ref-14)
15. This interpretation is not the only game in town, though it is perhaps the currently standard interpretation. Laerke (2017) calls it the *Platonizing* interpretation. He includes among the Platonizing interpretations those by Martin (2008), Garrett (2009), Ward (2011), Schmaltz (2015), Viljanen (2011), and Scribano (2008). [↑](#footnote-ref-15)
16. For a full defense of this claim, see Barry (2019). [↑](#footnote-ref-16)
17. See Ashworth (1977), Roberts (1960), Doyle (1995), and Novotny (2013) for discussions of the problem of chimaeras in the Scholastic period. The technical use of ‘chimaera’ to mean a self-contradictory being seems to come from Buridan’s *Sophisms on Meaning and Truth*. See [redacted] for an in-depth discussion of chimaeras in Spinoza. [↑](#footnote-ref-17)
18. This is a play on *ens rationis*: a being that exists only in the mind. [↑](#footnote-ref-18)
19. In the TdIE Spinoza adds that “we cannot feign, so long as we are thinking, that we are thinking and not thinking; in the same way, after we know the nature of body, we cannot feign an infinite fly, or after we know the nature of the soul, we cannot feign that it is square. Though there is nothing that cannot be put into words” (G II 22/C I 26-7). [↑](#footnote-ref-19)
20. See also his claim in the TdIE that all good definitions are affirmative (G II 35/C I 40). [↑](#footnote-ref-20)
21. Some consider the restriction of essences to consistent essences a mere stipulation on Spinoza’s part(see Garber 1994: 60). [↑](#footnote-ref-21)
22. Descartes agrees: “Even though we can with the utmost clarity imagine the head of a lion joined to the body of a goat…we do not clearly perceive the link, so to speak, which joins the parts together” (AT V 160/CSM III 343-4). [↑](#footnote-ref-22)
23. It does not help to add an idea of addition to the lump containing the idea of beasts, change, and men, or to the lump containing ideas of a square and a circle. All that accomplishes is to make the lump bigger. It is still a disunified mental lump. [↑](#footnote-ref-23)
24. Spinoza notes this frequent mismatch in structure between language and thought in the TdIE when he describes definitions: “Every definition must be affirmative. I mean intellectual affirmation—it matters little whether the definition is verbally affirmative; because of the poverty of language it will sometimes perhaps [only] be able to expressed negatively, though it is understood affirmatively” (G II 35/C I 40). [↑](#footnote-ref-24)
25. Spinoza in fact offers two alternative explanations of what’s really happening when a person falsely claims, on the basis of their utterances, that they’re imagining a contradiction (G II 21-2/C I 26). The first explanation is that the person is occluding part of the contradiction from their attention. The second is that they’re alternating between ideas that correspond to two different meanings of the term in question. [↑](#footnote-ref-25)
26. Neither author applies their respective interpretation explicitly to the puzzle at hand, so I take responsibility for any misunderstanding of their positions. [↑](#footnote-ref-26)
27. We ought to replace “lethal” with “high” to make the conditional non-trivial. Lin also emphasizes the role of *per se* possibilities in making sense of counterfactual reasoning in Leibniz (2012: 445). [↑](#footnote-ref-27)
28. Newlands (2013: 161) claims that all modal truths are grounded in facts about essences, but he doesn’t explicitly apply that claim to modal truths expressed by counterfactual conditionals. Given that truths about what *would* happen are modal truths, Newlands likely would understand counterfactual truths in a way similar to Lin. [↑](#footnote-ref-28)
29. This is basic motivation behind the positing of impossible worlds. See Nolan (1997). [↑](#footnote-ref-29)
30. One might want an account of counterpossibles in Spinoza to be able to explain *all* counterpossibles in Spinoza. But once we recognize the radically different nature of the counterpossibles involving *per se* impossibilities and those involving *per se* possibilities, I am less inclined to think that there is a unified account to be had. [↑](#footnote-ref-30)
31. The strategy that follows is better thought of as “Garretian” rather than something Garrett explicitly defends. [↑](#footnote-ref-31)
32. Garrett (2018) and (2003: ch. 4) emphasizes the role of ideational decomposition in Spinoza’s method. It is possible that emendation occurs via decomposition rather than deduction. This would amount to a rejection of (A) in the puzzle. [↑](#footnote-ref-32)
33. Interestingly, Spinoza sometimes uses inferences which are *not* counterpossibles for him, but which are counterpossible for Descartes. For example, in his proof of God’s incorporeality, he argues that if God were corporeal, then he would be divisible (G I 176/C I 260). Since Spinoza believes that God is necessarily corporeal (E2p3), the antecedent is necessarily true. [↑](#footnote-ref-33)
34. On the standard understanding of validity, an inference from x to y is valid iff it is impossible that x exist or hold or be true and yet y not exist or hold or be true. Since everything is necessary within Spinoza’s universe, an inference from any x to any y is a valid inference. Garrett (1991) argues for a relevance logic interpretation. [↑](#footnote-ref-34)
35. See Nolan (1997) and Brogaard and Salerno (2013). [↑](#footnote-ref-35)
36. For defense, or at least endorsement, of the claim that the following-from relation is that of logical entailment, see Bennett (1984: ch. 8.3), Curley (1969: 45fn), Garrett (1991: 194), and Allison (1987: 71). Hubner (2015) offers criticisms of that interpretation. [↑](#footnote-ref-36)
37. Linguistic derivation is, in this way, roughly analogous to syntactic notions of logical consequence insofar as both are concerned only with whether or not there are rules which allow certain inferences. [↑](#footnote-ref-37)
38. Spinoza needs his reader to accept his proposed equivalences. But that is a separate issue from the issue of how linguistic derivation works. [↑](#footnote-ref-38)
39. Of course, some grammar would need to be modified along the way, but grammatical modifications do not require that one has an idea of the entities the words purport to express. [↑](#footnote-ref-39)
40. There is an important difference between the method of the PCP and those of the *Ethics*. The definitions involved in the derivations of the PCP do not correspond to any ideas (at least those definitions which are anti-Spinozistic). However, the linguistic derivations of the *Ethics* begin with definitions that have the potential to be expressed in ideas. As Garrett (and Gueroult before him) point out, there’s nothing to prevent a definition from constituting both (i) an attempt to capture the ordinary use of a word and (ii) an attempt to capture the nature of the thing defined (2003: 150). [↑](#footnote-ref-40)
41. See Savan (1958) for potential problems with Spinoza’s view of language. Laerke (2014) and (2009) contain discussions of seventeenth- and eighteenth-century concerns with Spinoza’s use of language. Yovel (1985) and (1989) discuss Spinoza’s rhetorical uses of language. [↑](#footnote-ref-41)
42. Doyle (1995) notes that the distinction between contradictions and mere gibberish can be traced to the Stoics. [↑](#footnote-ref-42)
43. It is this autonomy of language from thought which even explains the ability to lie (G I 83/C 124). [↑](#footnote-ref-43)
44. Garrett and I both defend a therapeutic reading of the *Ethics*, though locate that therapy at different places (in language vs. in ideas). [↑](#footnote-ref-44)
45. Spinoza of course admits that written and spoken language can express *imaginative* ideas, e.g. words can express imaginative ideas by being associated with them (E2p18s)..In the TTP, Spinoza describes the meaning of religious language as grounded in its use (G III 160/C II 250). It may be that use occurs via the mechanism of association. But even if it is a distinct mechanism at work, it’s clear language can express imaginative ideas, viz. through association. [↑](#footnote-ref-45)