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Zalabardo on Relativizing the Sensitivity Condition to Methods

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In *Scepticism and Reliable Belief*, José L. Zalabardo seeks a solution to skeptical problems such as the problem of the criterion, problems arising from the regress argument, and problems arising from arguments rooted in skeptical hypotheses. He hopes to do this in terms of a reliabilistic theory of non-inferential knowledge, a theory that features a sensitivity condition of the sort proposed by Robert Nozick (see Nozick 1981):

Nozick-Sensitivity

S's belief that p is Nozick-sensitive just in case S wouldn't believe that p if p were false.

According to Zalabardo, the skeptical arguments he considers pose a threat to our knowledge only if one's knowing that p requires that one have adequate evidence for p. But on a reliabilistic theory of non-inferential knowledge, based, for example, on a condition like *Nozick-Sensitivity*, one can know that p even though one does *not* have adequate evidence for p. Zalabardo means to disarm the skeptical arguments he considers with a reliabilistic theory of this sort.

But Zalabardo parts ways with Nozick at certain key junctions. For example, his sensitivity condition, unlike Nozick's, is meant to be a sufficient condition for non-inferential knowledge (or an element in such a sufficient condition) rather than a necessary condition for knowledge [see Zalabardo (2012), p. 63].¹ In addition, while Nozick relies on a possible-worlds semantics for counterfactuals, Zalabardo prefers a probabilistic semantics. Yet another important place where he parts ways with Nozick is in the role that belief-forming methods play in a theory of knowledge. Methods play a prominent role for Nozick, but they play no role in Zalabardo's theory of knowledge. I argue in this paper that Zalabardo is too quick in dismissing methods of belief formation, and that there is a plausible version of the sensi-

tivity condition that both makes a place for methods and handles the objections that Zalabardo levels against methodized versions of sensitivity.

Nozick recognizes the limitations of his initial statement of the sensitivity condition, which we have formulated as *Nozick-Sensitivity*. There are cases in which intuition tells us that a subject knows that p, but in which the subsubject would believe that p even if p were false. Consider the following case from Nozick:

A grandmother sees her grandson is well when he comes to visit; but if he were sick or dead, others would tell her he was well to spare her upset [Nozick (1981), p. 179].

In this case, it seems clear that the grandmother knows that her grandson is well, since she sees that he is. If he were not well, however, she would nevertheless believe that he is well since others would tell her that he is. Concerns like this led Nozick to revise his sensitivity condition, relativizing it to beliefforming methods:

Methods-1 If p weren't true and S were to use M to arrive at a belief as to whether p, then S wouldn't believe, via M, that p (where M is the belief-forming method S uses in the actual world in forming the belief that p).

Methods-1, when taken as a necessary condition for knowledge, takes care of the concerns raised by the grandmother case. If it weren't true that her grandson is well, and if she were to use the same method she uses in the actual world — vision, let's say — in arriving at a belief as to whether he is well, she would not believe via that method that he is well. There is reason, then, to consider — and perhaps even to embrace — a methodized version of the sensitivity condition.

Zalabardo, however, rejects this methodized version of sensitivity. He reminds us that "many belief-forming methods capable of producing knowledge are what Nozick calls one-sided methods" [p. 58]. A one-sided method cannot recommend that we believe $\sim p$; either it recommends that we believe p or it makes no recommendation. Consider, for example,

a medical test for a condition with virtually no false positives but lots of false negatives. A positive result in the test virtually guarantees that the condition is present, but a negative result provides only very weak support for the hypothesis that the condition is absent, since lots of people with the condition test negative. This test can recommend belief in the proposition that the condition is present, but it can only recommend very weakly belief in the proposition that the condition is not present [Ibid.].

The problem is that, where one-sided methods are concerned, "satisfaction of the method-relative condition can depend on what happens in worlds that are much more remote than those that determine satisfaction of the unrelativized condition" [pp. 59-60]. Consider a case in which a doctor believes that the condition is present in a particular patient. If her belief is based solely on the positive result of the one-sided test described above, then her belief will satisfy the unmethodized sensitivity condition: "in the nearest world in which the condition is absent she won't believe that it is present" [p. 60]. However, "[o]nce we relativize to methods," Zalabardo claims, "what happens in the nearest worlds in which the condition is absent no longer settles the issue. Now we need to look at the nearest worlds in which the condition is absent and the doctor forms a belief as to whether or not the condition is present using the test" [p. 60]. And worlds such as this are extremely remote; they are very far away from the actual world. If the test is to produce a belief as to whether or not the condition is present in patient S, then it must report that S is condition-positive. For (a) if the test were to report that S is condition-negative, then, given all the false negatives the test yields, one would not form a belief as to whether the condition is present in S, and (b) if the test were to report that S is condition-positive, then, given that a positive report "virtually guarantees" that the condition is present [p. 58], one *would* form a belief as to whether the condition is present in S. Given all this, cases in which S is condition-negative and in which one would form a belief as to whether or not the condition is present in S are extremely rare. Worlds corresponding to such cases are therefore extremely distant from the actual world.

Now, their distance from the actual world notwithstanding, what we find in such worlds is that the doctor (that is, the person reviewing the results of the test) does form the belief that *S* is condition-positive, which means, of course, that the doctor's belief is insensitive on *Methods-1*. Given this, and given that we are taking *Methods-1* to be a necessary condition for knowledge, the doctor does not know that the patient is condition-positive; as Zalbardo says, "If in the nearest world in which the condition is absent and the method produces a belief, it produces the belief that the condition is present, the doctor's actual belief won't have the status of knowledge, after all" [p. 60]. This strikes Zalabardo as the wrong result:

If she forms the belief with the method that we have described, the doctor's belief that the condition is present should count as knowledge by virtue of the fact that she won't form the belief that the condition is present in any nearby world in which the condition is absent, independently of what happens in the more remote worlds in which the condition is absent and the method produces a belief [p. 60]. It seems to me that Zalabardo is right about this. Given that we ought to formulate the methodized version of the sensitivity condition as it is formulated in *Methods-1*, and given that *Methods-1* is a necessary condition for knowledge, the doctor does not know that *S* is condition-positive. But the doctor *does* know that *S* is condition-positive. What follows from this is that we must reject the following conjunction: we ought to formulate the methodized version of the sensitivity condition as it is formulated in *Methods-1*, and *Methods-1* is a necessary condition for knowledge.

One way of rejecting this conjunction is to reject its first conjunct. And we can reject that conjunct in several different ways. We might say, for example, that we ought to give a different formulation — a formulation that's different from *Methods-1* — of the methodized sensitivity condition. Rather than doing this, however, Zalabardo maintains that we ought to reject any and all formulations of the methodized sensitivity condition; he maintains, that is, that the sensitivity condition should not be relativized to methods at all. Now, he does consider a few reformulations of the methodized sensitivity condition that might be able to help with the problem of one-sided methods, a problem that doomed *Methods-1*. He considers reformulations that "remove mention of the method employed from the antecedent of the sensitivity subjunctive" $[p. 60]^2$ and formulations that "use a different construal of the notion of forming a belief" so as to include "cases in which S suspends judgement on whether or not p with M" [p. 61]. He argues, however, that neither of these reformulations works. And in spite of his recognizing that "[t]here might be other more promising revisions of the notion [of a methodized sensitivity condition] that achieve the intended result" [p. 63], he chooses not to investigate any of these other revisions. The approach he takes is to reject every methodized version of the sensitivity condition and to maintain that sensitivity should not be relativized to methods at all.

I want to suggest, however, that there is a formulation of the methodized sensitivity condition that gives the right result in the case of one-sided methods. Rather than formulating the methodized sensitivity condition in this way:

Methods-1 If *p* weren't true and *S* were to use *M* to arrive at a belief as to whether *p*, then *S* wouldn't believe, via *M*, that *p*,

we might formulate it like this:

Methods-2 If *p* weren't true, then if *S* were to use *M* to arrive at a belief as to whether *p*, then *S* wouldn't believe, via *M*, that *p*.

In the case of the doctor's belief that the condition is present in a particular patient, *Methods-1* demands that we examine the nearest worlds in which the

following conjunction is true: the condition is absent, and the test produces a belief as to whether or not the condition is present. These worlds are very remote, as we have seen, and so we can side with Zalabardo here and say that the doctor's belief is insensitive when *Methods-1* is the operative version of sensitivity.

But what about Methods-2? It demands in the first place that we examine the nearest worlds in which the condition is not present in the patient. It then demands that we look among all and only those worlds for worlds in which the test produces a belief as to whether the condition is present. But there are no such worlds: the nearest worlds in which the condition is absent are worlds in which the test comes back negative and therefore recommends no belief. The high number of false negatives keeps the doctor, in these nonactual worlds, from forming a belief as to whether the condition is present. But this means that the doctor's (actual-world) belief that the condition is present is sensitive: the nearest worlds in which the condition is absent are worlds in which the test fails to produce a belief as to whether or not the condition is present and therefore fails to produce the belief that the condition is present. Given Methods-2, the doctor's belief is sensitive. We therefore have a plausible response to the problem of one-sided methods: we ought to formulate the methodized version of the sensitivity condition not as it is formulated in *Methods-1* but as it is formulated in *Methods-2*.

The proponent of methodized sensitivity might not be out of the woods just yet, though. Zalabardo gives the following case, which might count against formulating the methodized version of sensitivity as it is formulated in *Methods*-2.³ Suppose that Grandma believes that her grandson is well and that she does so only on the basis of consulting a crystal ball, which "tells her that [her grandson] is well by failing to shatter when lightly stroked with a feather" [p. 61]. But if it were not the case that her grandson is well, others "would remove and destroy her crystal ball" [Ibid.]. It seems that Grandma's belief is *Methods*-2 sensitive in this case — if her grandson were not well, then her crystal ball would produce no belief as to whether or not her grandson is well and, therefore, she would not believe that he is well. Moreover, according to Zalabardo, she does not know that her grandson is well. Given that her belief is sensitive but that she does not have knowledge, Zalabardo concludes that a reformulation like *Methods*-2 "has to be rejected" [Ibid.].

It's not clear, however, exactly why Zalabardo's Grandma case would make it the case that we ought to reject *Methods-2* as a reformulation of the sensitivity condition. If we're looking for a version of the sensitivity condition that will be *necessary* for knowledge, then Zalabardo's case gives us no reason to reject *Methods-2*. Our taking *Methods-2* to be a necessary condition for knowledge is not threatened in the least by a case in which a *Methods-2* sensitive belief fails to count as knowledge.

On the other hand, Zalabardo's case speaks against the claim that *Methods-2* is a *sufficient* condition for knowledge: given both that Grandma's belief is *Methods-2* sensitive and that she doesn't know that her grandson is well, it follows that *Methods-2* is not a sufficient condition for knowledge. One thing to do in response to this would be to embrace *Methods-2* as a reformulation of the sensitivity condition and to refuse to see sensitivity as a sufficient condition for knowledge.⁴ I suspect that most sensitivity theorists would choose this option, as opposed to clinging to the idea that sensitivity is a sufficient condition for knowledge at the expense of a plausible version of sensitivity, since most sensitivity theorists see sensitivity as Nozick did, as a *necessary* condition for knowledge.

Still, there are times when Zalabardo suggests that he thinks that sensitivity should be seen as a sufficient condition for knowledge: he says, for example, that he will "argue that sensitivity [...] is a sufficient condition for knowledge" [p. 63]. If he insists that sensitivity should be seen as a sufficient condition for knowledge, his case seems to give us a reason to reject Methods-2. It is his considered opinion, however, that sensitivity is not all by itself a sufficient condition for knowledge. He says that it is truth-tracking that's sufficient for knowledge [pp. 44 and 111] and that truth-tracking requires three things: "[s]ensitivity, calibrated by adherence" and safety [p. 118].⁵ (Maybe he has this more complex truth-tracking condition in mind when he uses the term 'sensitivity' on page 63?) Let's say that Methods-2 truth-tracking requires Methods-2 sensitivity, calibrated by adherence, and safety. Even here, though, given the conjunctive nature of the Methods-2 truth-tracking condition, the conditional that we are considering in this case—if Grandma's belief satisfies the Methods-2 truth-tracking condition, then she knows that her grandson is well-is not shown to be false simply by a case in which her Methods-2 sensitive belief fails to count as knowledge. Here again, Zalabardo's case gives us no reason to reject Methods-2.

Suppose, however, that the case were supplemented so that Grandma's belief satisfies the *Methods-2* truth-tracking condition, that is, so that her belief is *Methods-2* sensitive, adherent, and safe. In this case, if it were also true that she does not know that her grandson is well, it seems that we would have reason to reject the claim that *Methods-2* truth-tracking is sufficient for knowledge, from which it would follow that *Methods-2* is itself not sufficient for knowledge. Unfortunately, though, Zalabardo's case does not support this conclusion: despite the peculiarity of her crystal-ball-and-feather method, it turns out that Grandma *knows* that her grandson is well. This is because others, who know in more conventional ways whether or not her grandson is well, ensure that she uses the peculiar crystal-ball-and-feather method when and only when her grandson is well. That method is therefore a kind of proxy for the reliable methods used by others for knowing that her grandson is well. As such, the crystal-ball-and-feather method is itself reliable. We can see this

by using Zalabardo's own account of truth-tracking, which includes adherence and safety and in which *Methods*-2 sensitivity is replaced by the following:

Zalabardo-sensitivity Your belief that A is Zalabardo-sensitive just in case "you are unlikely to believe A if A is false" [p. 111].

Grandma's belief that her grandson is well is Zalabardo-sensitive: Zalabardo himself maintains that "if the grandson were unwell or dead, others would make sure that she doesn't find out" [p. 61].⁶ Grandma's belief is also adherent since she is very likely to believe that her grandson is well, given that she bothers to stroke her crystal ball with a feather, if it is true that he's well. After all, if her grandson is well, the crystal ball remains available to her, and it is very unlikely indeed that it will shatter when she strokes it with a feather. Finally, her belief is safe since it is likely to be true that her grandson is well if she believes that he is well. Note here again that others allow her to use the crystal-ball-and-feather method only when her grandson is well, and given that it is extraordinarily unlikely that the crystal ball shatters when she strokes it with a feather, it is extraordinarily likely that she believes that her grandson is well whenever she uses her peculiar method. It seems, then, that Grandma's belief tracks the truth even in Zalabardo's sense, in which case he should embrace the claim that Grandma knows that her grandson is well, thus avoiding having to deny the claim that his notion of truth-tracking is sufficient for non-inferential knowledge. Otherwise — that is, if he insists on saying that Grandma does not know that her grandson is well — his Grandma case will be a counterexample to the claim that his notion of truth-tracking is sufficient for non-inferential knowledge, thus undermining his account of such knowledge. My guess is that Zalabardo will choose to embrace the claim that Grandma knows that her grandson is well. This means, however, that just like the original version of the Grandma case, the supplemented version gives us no reason to reject Methods-2.

Perhaps Zalabardo's case speaks directly against *Methods-2* as a formulation of the sensitivity condition in that *Methods-2* has it that Grandma's belief that her grandson is well *is* sensitive, but intuition has it that her belief is *not* sensitive. But does intuition tell us that Grandma's belief is not sensitive? First of all, it is not at all clear that intuition tells us *anything* about this case. Sensitivity is a theoretical notion in terms of which we might account for our knowledge of the world. We come to the table with intuitions about whether or not we know in certain cases, not with intuitions about whether or not certain beliefs are sensitive. We evaluate the sensitivity condition, as well as accounts of knowledge that we build on its foundation, against our intuitions about whether or not we know. We see this illustrated in Nozick's consideration of the original grandmother case. He proposed *Nozick-Sensitivity* as a necessary condition on knowledge. But that proposal was found to conflict with our intuitions about whether or not the grandmother knows that her grandson is well when she sees him. Given this conflict, Nozick revised the sensitivity condition so that his theory of knowledge was able (or better able) to account for our intuitions about whether there is knowledge in the grandmother case. The sensitivity condition is evaluated not against intuitions about sensitivity itself, but against intuitions about knowledge (coupled with our having proposed that a sensitivity condition belongs, in some way or other, in a theory of knowledge). It just doesn't seem, then, that intuition tells us anything about the sensitivity of Grandma's belief.

Suppose, however, that we do have intuitions about whether or not Grandma's belief is sensitive. No problem arises for Methods-2 if intuition tells us that her belief is sensitive. Methods-2 has a problem only if (and if) intuition tells us that her belief is insensitive. Is this what intuition tells us? Perhaps beliefs formed on the basis of the reports of crystal balls are intuitively insensitive, especially when those reports result from using those crystal balls in ways that are even more epistemically unorthodox — whether or not they "shatter when lightly stroked with a feather" [p. 61] — than the ways they are meant to be used. But here again our intuitions seem to have to do with whether or not beliefs formed on the basis of the reports of crystal balls count as knowledge. Perhaps we have the intuition that such beliefs do not count as knowledge. If so, that intuition might somehow implicate sensitivity's place in a theory of knowledge, which might force us to revise our notion of sensitivity if we want it to have a place in such a theory. Still, our intuition in this case has to do with whether or not a certain belief counts as knowledge and not — or not directly, at least — with whether or not a certain belief is sensitive. Given all this, I conclude that Zalabardo's Grandma case does nothing to show that we should reject Methods-2 as a formulation of the sensitivity condition.

We have seen that there are reformulations of method sensitivity that stand a chance of handling the case of one-sided methods. It might even be the case that *Methods-2* is such a reformulation. But even if *Methods-2* is deficient in some way, the possibility that there is a satisfactory reformulation is one that should be explored. Moreover, given that there is a decent chance that a satisfactory reformulation is available, there is little reason to reject every methodized version of sensitivity or to refuse to consider whether some methodized version of sensitivity is practicable.

In addition, it seems that we have good reason to pursue the possibility of a methodized version of sensitivity. We've already seen one such reason: there's a good chance that some such version of sensitivity can handle the case of one-sided methods. Another reason is this: a theory of knowledge based on a methodized version of sensitivity can disarm all the same skeptical arguments, and in the same way, as Zalabardo's theory: methodized sensitivity theories, just like Zalabardo's theory, will deny the evidential constraint, which gives them the power to disarm any skeptical argument in which that constraint plays a fundamental role. Given all this, there seems little reason to prefer Zalabardo's theory over one whose cornerstone is a methodized version of the sensitivity condition.⁷

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NOTES

¹ Henceforth, I refer to Zalabardo (2012) in the text by page numbers only.

² Compare Luper-Foy (1984), pp. 28-9.

³ Zalabardo gives the case against Luper-Foy (1984)'s reformulation of the sensitivity condition, which "remove[s] mention of the method employed from the antecedent of the sensitivity subjunctive" [p. 60], but the case seems to count equally well against *Methods*-2.

⁴ On this, see Williamson (2000), pp. 154-5.

⁵ Zalabardo says that "adherence can be rendered as the condition that you are very likely to believe A if A is true" [p.111]. He also says that "your belief that A is safe just in case A is likely to be true (unlikely to be false) if you believe it" [p. 115]. He says that sensitivity, adherence, and safety, in addition to being individually necessary conditions for a belief to track the truth, are jointly sufficient conditions for a belief to track the truth [see p. 117].

⁶ Maybe Grandma's satisfying this condition is enough by itself to make it the case that her belief counts as knowledge? Zalabardo sometimes suggests that it *is* enough. He says of the doctor in the one-sided methods case that her belief "should count as knowledge by virtue of the fact that she won't form the belief that the condition is present in any nearby world in which the condition is absent" [p. 60]. If this is all it takes to make it the case that the doctor's belief counts as knowledge, then Grandma's belief ought to count as knowledge too, for, as Zalabardo says, "if [her] grandson were unwell or dead, others would make sure that she doesn't find out" [p. 61].

⁷ I thank Kelly Becker for his very helpful comments on an earlier draft of this paper.

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RESUMEN

En Scepticism and Reliable Belief, José L. Zalabardo busca una solución a los problemas escépticos en términos de una teoría del conocimiento que presenta una condición de sensitivas del tipo propuesto por Robert Nozick: la creencia de S de que p es sensitiva sólo en el caso que S no creería que p si p fuera falsa. Con todo, Zalabardo se distancia de Nozick cuando se llega al papel teórico que desempeñan los métodos de formación de creencias. Tales métodos desempeñan un papel prominente en la teoría de Nozick pero no despeñan papel alguno en la de Zalabardo. En este artículo argumento que Zalabardo rechaza demasiado rápidamente los métodos de formación de creencias y que hay una versión plausible de la condición de sensitividad que hace espacio para los métodos y, a la vez, es capaz de manejar las objeciones que que Zalabardo plantea en contra de las versiones metodizadas de la sensitividad.

PALABRAS CLAVE: escepticismo, sensitividad, métodos de formación de creencias, Nozick.

ABSTRACT

In Scepticism and Reliable Belief, José L. Zalabardo seeks a solution to skeptical problems in terms of a theory of knowledge that features a sensitivity condition of the sort proposed by Robert Nozick: S's belief that p is sensitive just in case S wouldn't believe that p if p were false. Yet Zalabardo parts ways with Nozick when it comes to the theoretical role played by belief-forming methods: methods play a prominent role in Nozick's theory but no role in Zalabardo's. I argue in this paper that Zalabardo is too quick in dismissing methods of belief formation, and that there is a plausible version of the sensitivity condition that both makes a place for methods and handles the objections that Zalabardo levels against methodized versions of sensitivity.

KEYWORDS: Scepticism; Sensitivity; Belief-Forming Methods; Nozick