

Can Transcendental Philosophy Endorse Fallibilism?

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The aim of this paper is to apply Charles S. Peirce's pragmatic method to establishing if proponents of transcendental arguments could hold the conclusions of their arguments to be fallibly known. I will thus propose a pragmatic clarification of the concepts of *a priority*, *necessity*, and *infallibility* in order to ascertain if these concepts are unavoidably related or not. I will argue that an a priori knowable necessary proposition is not in principle indubitable, whereas a proposition infallibly known is so. Finally, I will apply these reflections to transcendental philosophy.

1. Introduction

I wish to establish whether proponents of transcendental arguments could coherently hold the conclusions of their arguments to be fallibly known. Transcendental arguments are characterized by proposing an a priori line of reasoning and by claiming a necessary status for their conclusions. In so doing, they commonly aim to establish that some aspects of our thinking are *conditions of possibility* of knowledge and experience.¹ Do these characteristics also entail the claim of infallibility for transcendental arguments? This is precisely the question that the paper intends to answer.

It is evident that, in order to answer the latter question, the concepts of *a priority*, *necessity*, and *infallibility* need to be clarified. Accordingly, I would like to face the problem by proposing what Charles S. Peirce called a *pragmatic clarification* of these concepts. By pragmatic clarification I mean an elucidation of the meaning of a concept that renders explicit the practical consequences that would follow if that concept could truly be attributed to something. If a stone were truly hard, then it would follow that I could break a window with it. This is an attempt to express more clearly what Peirce asserted in his 1878 paper "How to Make Our Ideas Clear."² I think that it is particularly helpful to consider this problem from a pragmatic standpoint, since the construction of a transcendental argument is a kind of 'practice' itself.³

As I said above, my purpose is to determine whether the search for a priority and necessity would also entail the pursuit of infallibility for a proponent of transcendental arguments. Thus, by means of a pragmatic clarification we need to establish if the claim of infallibility entails different and

independent practical consequences from the claims of a priority and necessity. That is to say, if the practical consequences expected in relation with the claim of a priority and necessity do verify, does this immediately imply the claim of infallibility? On the other hand, if the practical consequences expected in relation with the claim of infallibility do not take place, does this immediately imply the lack of a priority and necessity? A positive answer to this latter question is the most easy thing to expect, at least with respect to the claim of necessity. However, the problem is not so easy as it seems at first sight.

I will begin to face these problems by clarifying what a transcendental argument is. We will see that there are at least two very different ways to account for what a transcendental argument is. We will thus need to consider both these kinds of transcendental arguments with respect to our pragmatic clarifications. After this elucidation on the scope and methods of transcendental arguments, I will seek some insights on the concepts of a priority, necessity and infallibility in the philosophies of Immanuel Kant and Charles S. Peirce, that is: the philosophers who became famous for transcendental philosophy and pragmatic clarifications respectively. We will see that their writings will be insufficient for our purposes. Then, I will introduce my own attempt at a pragmatic clarification on the concepts at issue. We will see how only one kind of transcendental argument here identified will be able to coherently endorse a fallibilistic standpoint in its quest for a priority and necessity.

2. What is a Transcendental Argument?

Transcendental arguments are often understood as means of providing a refutation of sceptical challenges. It was Peter Strawson who inaugurated this way of considering the aim and methods of transcendental arguments. His 1959 book *Individuals* and his 1966 interpretation of Kant's first Critique *The Bounds of Sense* inaugurated a new era for transcendental philosophy.⁴ These books were so influential that they still lie at the basis of today's widespread understanding of transcendental philosophy, especially in the English speaking world. This is not to say that it is easy to find a common description of anti-sceptical transcendental arguments. For example, they might aim to face very different sceptical challenges: in fact there exist various ways to advance scepticism on the existence of external objects, on causation, etc. Moreover, various kinds of 'modest' transcendental arguments are being proposed today,⁵ the latter being alternative solutions with respect to those projects claiming to establish the actual existence of real external objects.

This multiplicity of ways of understanding anti-sceptical transcendental arguments notwithstanding, I think a minimal common description of their characteristics can be proposed. First of all, they all begin by establishing a proposition that not even the sceptic could coherently deny, as long as he/she is posing a doubt. Then, they offer a proof that the same proposition doubted by the sceptic is implied in the proposition that not even the sceptic could deny. If this were so, the sceptic cannot coherently doubt the proposition in question, otherwise he/she would contradict the same proposition he/she could not deny.

Thus, anti-sceptical transcendental arguments establish the necessity of their conclusions by showing that we *cannot coherently believe some propositions to be mistaken*.⁶ The latter claim in particular will be relevant for our purpose in this study. We might schematize the steps of a transcendental argument of this kind as follows:

The sceptic doubts P,

The sceptic cannot coherently doubt Q, as long as he is posing a doubt,

But Q involves P,

Therefore, the sceptic cannot coherently doubt P.

This is a sketchy way of presenting anti-sceptical transcendental arguments, but it captures some very central characteristics of their structure. Yet, this is not the only way to understand the aims and methods of transcendental philosophy. As I stressed above, Strawson introduced this way of refuting the sceptic by proposing an innovative reading of Kant's first *Critique*. The latter reading is widely contrasted by Kant scholars as authoritative as Henry Allison, Graham Bird, and Wolfgang Carl.⁷ If it is true that this way of arguing cannot be attributed to Kant, it means that there exists at least another way to understand transcendental arguments, that is: the way proposed by the inventor of transcendental philosophy in the modern sense.

Following the latter reading of Kant, his purpose was not essentially that of refuting the sceptic, a purpose he reserved for limited sections of his first *Critique*. On the contrary, he wanted to disentangle the subjective conditions of possibility of our knowledge: a knowledge that was not in doubt. He wished to recognize those conditions of possibility in order to prevent their misuse in speculative metaphysics.⁸ Thus, Kantian transcendental arguments aim to show, by means of a priori reasoning, not so much *that*, but *how* some features of our knowledge are necessary and a priori.⁹ Take for example causality. Kant never doubted that causality was an objective a priori and necessary feature of our knowledge. He wanted just to establish where the subjective source of that knowledge lay. We can summarize the procedure of Kantian transcendental arguments as follows:

Our knowledge presents characteristics A, B, C, etc. that are necessary and a priori,

A, B, C, etc. cannot but rest on subjective conditions X, Y, Z, etc.,

Therefore, X, Y, Z, etc. are subjective conditions of our knowledge.

Unlike anti-sceptical transcendental arguments, Kantian transcendental arguments do not aim to establish the necessity of their conclusions by showing

that some propositions cannot coherently be believed to be mistaken. On the contrary, they assume the necessity and a priority of some elements of our knowledge and then try to establish their source in the subjective conditions of knowledge.¹⁰ The necessity in question is assumed on the grounds of the use we make in mathematics, the physical sciences, everyday life, of concepts like space and causality. Then, this necessity is traced back to the subjective conditions of forming judgements on those issues. Even if these conditions are 'subjective', their relation to the aforementioned concepts can be treated and argued for objectively, by showing how there could be no objective knowledge as we assume there is, if there would not be such conditions. It is so evident that Kantian transcendental arguments do not aim to establish their necessity on the grounds of an impossibility to coherently doubt something as anti-sceptical transcendental arguments do. They argue that it is necessary to recognize some subjective conditions in order to account for some a priori knowable necessary propositions that are essential in our knowledge.

As far as we have distinguished two different kinds of transcendental arguments, we must now establish if fallibilism can be coherently held by both of them. Thus, in the next section we will begin with our clarifications on the concepts of a priority, necessity, and infallibility and then later we will use these clarifications in order to answer the question at issue.

3. Kant and Peirce on A Priority, Necessity, and Infallibility

Before we undertake our pragmatic clarification, I wish to analyze Kant's and Peirce's treatments of a priority, necessity and infallibility. As is well known, Kant is the inventor of transcendental philosophy in the modern sense and Peirce was the first who proposed the pragmatic maxim as a means to clarify concepts. For this reason their insights into this topic need to be considered.

For Kant, necessity, together with universality, was a sign of the a priori character of a representation. He stressed that if a judgment shows necessity and strict universality, it cannot but derive such characteristics from its being a priori.¹¹ Thus, it is evident that necessity and a priority were for Kant strictly related concepts.¹² A priority meant for Kant that a proposition could be known 'by reason alone', and could not be derived from observation. For him, that was also the only possible source of necessity.

Even if Kant did not directly address the problem of infallibility, it seems that he thought this characteristic to be implied by a priority. In fact, he argued that by establishing the a priori and necessary status of some judgements, his philosophy was also able to provide apodictic certainty.¹³ Thus, Kant thought that by establishing the a priori nature of a judgment one was also able to recognize its necessary status and warrant its infallibility. However, Kant did not provide any argument to sustain the latter claim. Of course, the clarification of the concepts of a priority, necessity and infallibility was not one of his aims. Thus, we should not blame him for not having offered us such a clarification. Moreover, it is not impossible to find in Kant's own work the instruments to

develop a defensible position on the relationships among a priority, necessity and infallibility, but this would mean going beyond Kant himself.¹⁴

We will not be any luckier by turning to Peirce's treatment of the concepts of a priority, necessity and infallibility. Peirce's emphasis on fallibilism notwithstanding, he never provided a detailed analysis of how this concept relates to necessity and a priority. We might find some insights in his account of the relationship between necessity and fallibility in the a priori reasoning of mathematics.¹⁵ For Peirce, mathematics stands out as being a science totally detached from particular observation. With particular observation I mean inductive observation of the natural world. Peirce considered mathematics as being observational, but in a quite different sense. He thought that in mathematics it was essential to observe a diagram constructed a priori from a theorem. Mathematics is thus iconic and observational, but does not rely on a posteriori experience. As such, it is able to seek necessary relations with an a priori procedure. In considering the possibility of attributing necessity and infallibility to the propositions obtained through this a priori way of arguing, Peirce had a contrary aim with respect to Kant. He did want to preserve the possibility of treating a priori knowable mathematical propositions as necessary, but he also wanted to claim fallibility for every such proposition. The result is not a clarification on how far necessity, a priority and infallibility are overlapping concepts. On the contrary, Peirce only stressed that we must treat a priori knowable mathematical propositions as necessary as long as we have not any reason to doubt them, even if the proposition could be mistaken and thus subject to fallibilism.¹⁶ This makes sense, but is not enough for our purposes. If the proposition came to be doubted, would this be sufficient to claim it is not necessary or a priori? If, for some reasons, we fell into a genuine doubt on some very basic mathematical propositions, e.g. that twice two is four (following one of Peirce's own example), and then re-established their truth, would this be enough to discard the claim of necessity for those propositions? And what about infallibility: could we continue to stress that our knowledge of those propositions is infallible? It is exactly these questions that Peirce's formulation of the problem does not help to answer.

Kant's and Peirce's treatment of the concepts of apriority, necessity and infallibility have helped us in focusing the problem at hand. However, they didn't offer any hint on how to pursue a clarification on these concepts. Thus, we must now turn to our attempt at a pragmatic clarification.

4. A Pragmatic Clarification

According to our rephrasing of Peirce's pragmatic maxim, a pragmatic clarification needs to render explicit the practical consequences that would follow if the concept at issue could truly be attributed to something.¹⁷ Recalling one of Peirce's own examples, if I could truly say that a stone is hard, it means that it would resist being scratched by many other substances.¹⁸ Thus, pragmatic clarifications build conditional sentences in which the antecedent indicates the concept at issue and the consequent the practical consequences that would

follow if it were truly attributable to something. As far as our aim is a clarification of the concepts of a priority, necessity, and infallibility, we should obtain conditionals of this kind for each of them.

A priority is an epistemic concept that concerns the way in which we get to know something. We say that we know a proposition a priori if we do not need observation and inductive generalization to obtain that knowledge. On the contrary, we can get to know that proposition just by means of reasoning. Mathematics is arguably the best example of a priori inquiry. Leaving apart the nature and justification of mathematical proofs, mathematics is able to reach conclusions by developing its reasoning regardless of inductive information. This does not entail that mathematical truths are necessary or that our knowledge of them is infallible. In fact, there are many examples of mathematical and geometric propositions that were considered necessary in the past and that are now refuted.¹⁹ A priority only describes the way in which mathematical knowledge is obtained.

These considerations can easily be turned into a pragmatic clarification of the concept at hand. In order to do that, we should only ask: which practical consequences should we expect if the concept of a priority could truly be attributed to our knowledge of a proposition? According to what we have just said above, we should expect that that proposition could be argued for and sustained by reason alone. Rearticulating some of Peirce's examples, we can get to know that twice two is four, or that the sum of the angles of a triangle is 180° in a Euclidean space, without making use of inductive sampling and generalization. Thus, the practical consequences that the concept of a priority entails concern the ways in which we should expect the proposition in question to be obtained and defended. If a proposition were truly a priori knowable, it could be obtained and defended by reason alone.²⁰ This confirms that a priority does not imply necessity, insofar as, as we noticed in reference to mathematics, our a priori way of arguing can also be mistaken.

One might wonder about the appropriateness of the pragmatic method to clarify the concept of a priority. He/she could ask if a pragmatic clarification could really highlight a positive content for the concept of a priority, since the pragmatic method is often understood as an undertaking that brings concepts back to their roots in our experience. This seems incompatible with our clarification of a priority which, as we have just said, is attributed to concepts that can be obtained independently from experience. To answer this objection, it is useful to recall that Clarence I. Lewis, one of the main figures in the pragmatist tradition, proposed long ago what he called the *pragmatic a priori*. He introduced this view of the a priori to criticize previous conceptions, but also to point out the active and essential role of mind in experience. His conception of apriority thus introduced a pragmatic explanation of the fixation of a priori concepts, one that put emphasis on the process of hypothesis and verification through which these concepts are established.²¹ His conception allowed also room for modifications in our a priori concepts, even though he held these modifications not to be arbitrarily imposed. As Lewis' pragmatic a priori shows, an application of the pragmatic method to the concept of a priority is not only

plausible, but it has also been undertaken by a classical figure in the pragmatist tradition.

Let us now turn to the concept of necessity. Necessity can be attributed to both a priori and a posteriori knowable propositions. This is easily shown by the necessity we ascribe both to mathematical truths and physical constants. As we have just stressed, a priority and a posteriority tell us something about the way in which something gets to be known. Thus, if we can establish necessary propositions by means of both a priori and a posteriori inquiry, this means that necessity must concern something different than our epistemic means.

Since it is easy to confound necessity with a priority, I will first consider the case in which necessity is ascribed to a posteriori knowable propositions. When we ascribe necessity to propositions we know a posteriori, e.g. the proposition asserting the value of the gravitational constant, their necessity seems to come from general facts about the external world. If this is true, necessity is not an epistemic attribute, but is something that concerns the status of the class of objects to which the proposition refers. This is quite easily shown for propositions concerning physical constants, as far as in this case necessity is established on the basis of experimental data on the class of objects at issue. However, this thesis seems also appropriate to describe the a priori inquiries of mathematics. In this field of study, necessity concerns characteristics ascribable to mathematical and geometrical objects.²²

In saying that necessity concerns the status of the class of objects to which the proposition in question refers, we are espousing a view on necessity very similar to that of Saul Kripke. In his book *Naming and Necessity* Kripke holds that necessity concerns the metaphysical status of the object a proposition is intended to describe and tells us that it would be as it is in all possible worlds.²³ However, according to this formulation, physical laws are contingent, since they do not hold in all possible worlds. Accordingly, when dealing with a posteriori knowable propositions Kripke ascribes necessity only to rigid designators (e.g. Water is H₂O, Hesperus is Phosphorus). We need now to introduce some distinctions for the sake of clarity. We can speak of metaphysical necessity only when a proposition holds in all possible worlds. Within metaphysically necessary propositions, we can distinguish analytic truths, which can be equated to logical necessities, and synthetic truths, which are nothing but those propositions described by Kripke's rigid designators.²⁴ Strictly speaking, physical necessity is thus metaphysically contingent, insofar as it does not hold in all possible worlds. However, like metaphysical necessity, physical necessity is not an epistemic notion, but concerns the objects referred to in the propositions in question. Moreover, the domain in which the propositions are claimed to hold necessarily is delineated very clearly. This is evident if we use a conditional of the following kind to address the necessity of a physical law: Necessarily, if a possible world had the same physical characteristics as ours then physical law L would apply to it. This conditional limits the validity of physical laws to the possible worlds that have the same characteristics as ours and is thus capable of clearly setting the limits in which physical necessity applies. In so doing, it is also able to express physical necessity in a conditional

proposition that holds in all possible worlds, thus mimicking metaphysical necessity. We should also keep in mind that, as far as transcendental necessity only applies to a world known through our human cognitive capacities, we should construct a similar conditional to account for it. We need now turn our reflections on the concept of necessity into a pragmatic conditional.

Metaphysically necessary propositions attribute properties that would hold in all possible worlds. Moreover, we can express physical and transcendental necessities in conditional propositions holding in all possible worlds. If all these propositions really hold in all possible worlds, we should expect that we could not find any instance, both through empirical and logical inquiry, that falsifies those propositions. This results in the following conditional sentence which allow us to offer a unique pragmatic clarification for the various types of necessity here presented:²⁵ if a proposition were truly necessary, we could not find any instance that falsifies it.²⁶ This is equally true for propositions concerning a priori and empirical truths. If twice two were necessarily 4, or if water were necessarily H₂O,²⁷ we could not find any instances that falsify those sentences. The only difference consists in the methods we would use to find the falsifying instance: in one case logical and a priori, in the other empirical and a posteriori.²⁸

It should be kept in mind that this is very different from saying that if a proposition were truly necessary we could not *believe* it is falsified by any instance. Necessity concerns the objects of propositions and not our beliefs about those objects. Thus, the objective status of the claim of necessity is confirmed by the fact that a necessary proposition needs not be in principle indubitable. Doubt concerns our beliefs and not the objective value of a proposition. It is perfectly possible to believe a necessary proposition to be false and this would not affect its necessity at all. If, for example, some new experiment in physics caused us to doubt the universality we currently ascribe to the gravitational constant, but then that experiment were proved to be invalid, we would have no reason to doubt the necessary status of the proposition asserting the value of the gravitational constant. Similarly, a reiterated wrong calculation can cause us to doubt a mathematical truth, but this does not affect at all the necessary status of that truth. This means that the necessary status we ascribe to the proposition is dependent upon the evidence we show for believing that the objects the proposition describes cannot but be so,²⁹ and not on the indubitability of the proposition in question. This fact will be relevant for our inquiry into the compatibility of transcendental arguments with fallibilism.

The last concept that we have now to clarify is infallibility. In contemporary epistemology, it is easier to find analysis of the concept of fallibility. Accordingly, fallibility is defined in reference to one's justification for believing a proposition. A fallible justification is one that is compatible with the falsity of the belief in question.³⁰ In other words, my justification for believing P leaves open the possibility that P is false. This seems to imply that an infallible justification would be incompatible with the falsity of the belief in question. That is to say, my justification for believing Q is enough for establishing that Q cannot be false. I think that expressing infallibility in this

way does not help in clarifying the concept. It would render it very similar to logical necessity. In fact, when we stress the necessity of a proposition on the basis of an a priori argument we are equally affirming that the proposition cannot be false (it holds in all possible worlds).

When we say that our knowledge of a proposition is fallible, we stress that we have no definitive warrant that what we now believe will not come to be doubted or rejected in the future.³¹ We ascribe this fallibility also to our knowledge of propositions that we now believe are necessary, like those for example in mathematics. We do so because there are many mathematical truths that were considered a priori necessary, but were then discovered to be false. Why do we continue to claim mathematics is necessary, while denying it is infallible? The relevant difference lies in the fact that infallibility is something that is not attributed to the *objects* of a proposition (like necessity), but to the *beliefs* we have about those objects. Infallibility does not concern the truth of a proposition, but its impossibility to be believed to be false by us.³² To say that our knowledge of a proposition is infallible is equal to taking an outer perspective on the proposition itself and say that we have a definite warrant to assert it cannot ever be believed to be false by us.³³ We use the expression 'it cannot ever be believed to be false' because infallibility is a thesis that concerns our actual beliefs and their permanence in the future. The impossibility referred to here is not psychological (since a doubt grounded only on psychological facts like hallucinations or dementia would not constitute a valid doubt), but neither strictly logical. In fact, if a proposition came to be generally recognized as false on the basis of a logically invalid argument, but that argument were considered sufficient to prove its falsity, this would be enough for claiming that our knowledge of that proposition is fallible. Infallibility is thus an epistemic claim stressing that a proposition cannot ever be recognized as false by rational inquirers.

On the contrary, when we say that a mathematical proposition is necessary, we are providing evidence that the objects it describes cannot but be so. We are thus developing our knowledge of mathematical objects. If the evidence we were required to provide were equivalent to warranting that our proposition could not ever be believed to be false, we would not be able to claim necessity for any mathematical proposition.

This point is quite significant, since it implies that our knowledge of a proposition, in order to be infallible, must show that this proposition cannot be doubted. If the proposition could be doubted, we could not provide a definite warrant that it could not ever be believed to be false. This is not so in the case of necessity. We saw that it is perfectly possible that a necessary proposition is believed to be false. So, a necessary proposition is not *in principle* indubitable. On the other hand, a proposition infallibly known, insofar as we need to provide a definite warrant that it cannot ever be believed to be false, has to be *in principle* indubitable.

The result of these reflections on the concept of infallibility is a pragmatic conditional of this kind: if a proposition were truly infallibly known, it could not ever be doubted (or it could not ever be believed to be false).³⁴ This seems to

imply the following conditional for fallibility: if a proposition were truly fallibly known, it could be doubted (or it could be believed to be false).

Recall the pragmatic conditional linked to the concept of necessity (if a proposition were truly necessary, we could not find any instance that falsifies it). It is easy to show how these conditionals have different practical implications. The necessity of a proposition can be doubted, and then re-established thanks to further investigation. This is possible because our doubt is a subjective standpoint on the objects our proposition describes. When we have good reasons to give up doubting, the fact that we did doubt the proposition does not affect the possibility of ascribing necessity again, since necessity is something we ascribe to objects and not to our beliefs. On the contrary, infallibility is something that we ascribe to our believing something, asserting that there is a definite warrant that a proposition cannot ever be believed to be false. Thus, if we came to doubt a supposedly indubitable proposition, and then had good reasons to give up doubting, we could not re-establish the claim of infallibility for our belief in that proposition, since that proposition could not be held to be indubitable any more.

To sum up, infallibility is a much stronger claim with respect to necessity. It stresses that a proposition is *in principle* indubitable (it cannot ever be believed to be false), while necessity allows the possibility of doubt.

We could claim that a proposition is necessary while denying that our knowledge of it is infallible.³⁵ This seems to follow from the fact that a necessary proposition is not in principle indubitable, while a proposition infallibly known is so. Of course, the fact that a proposition is doubted can possibly result in its refutation, and this obviously would prove false the previous contention of necessity (the possibility of re-establishment for the necessary status of that proposition would still be open, though). However, if we have good reasons to believe in the necessary status of a proposition and no reason to believe in its contingency,³⁶ we are allowed to stress it is necessary, even if it is impossible for us to know if future research will prove our contention to be false. This is possible because by claiming necessity we are not asserting that the proposition is in principle indubitable. On the contrary, we are expressing our thesis on the status of the objects the proposition refers to and we are claiming we have good reasons to believe our thesis is right and no reason to believe it is false. The fact that the propositions we claim to be necessary are not in principle indubitable (and thus infallibly known) means that we could also be wrong on their necessity. But, as far as the contention of necessity is an attempt to grasp their objective status, we are allowed to claim necessity, as long as we provide sufficient evidence to do so. We can say that water is necessarily H₂O, even if we cannot assure that this proposition will not be refuted by future research. Again, this proposition expresses a well confirmed thesis on the status of the objects it refers to, but it cannot be held to be infallibly known.

The case of infallibility is really different. Infallibility does not express our attempt to know some objects, but is a claim that concerns our beliefs on those objects. In order to maintain that our knowledge of a proposition is infallible it is thus insufficient to have good reasons to do so. One should give

proofs that no rational inquirer could actually come to doubt the proposition in question.

The pragmatic clarifications we have here provided helped us in clarifying the use we make of the concepts of a priority, necessity and infallibility. Especially concerning the latter two, we have been able to identify the practical consequences that would follow concerning *dubitability* and *indubitability*. This opens a path to reflect upon the main problem of this study, that is: is it possible for a proponent of transcendental argument to endorse fallibilism? Would the a priori necessity he/she claims for his/her argument be in conflict with this endorsement? We should attempt to answer these questions in the next section.

5. Transcendental Philosophy and Fallibilism

Following our analyses of the concepts of necessity and infallibility, it is possible to claim necessity for a proposition while not claiming that our belief in it is infallible, since the latter contention would entail a really stronger position. By stressing infallibility, we would be claiming that the proposition in question could not ever be doubted. On the contrary, by stressing necessity, we would be maintaining that the objects we are considering in our proposition cannot but be as they are.³⁷ We would not be saying that the proposition in question is in principle indubitable. In fact, necessary propositions can also be believed to be false, even if they are not. Of course, we might be wrong in stressing necessity, and the proposition we claimed to be necessary could be actually false, or only contingent. However, if we have good reason to believe we are right and no reason to believe we are not, we can assert our proposition is necessary, as long as this is the only way to carry on research.

We have now to consider if these conclusions can be also attributed to the contention of necessity claimed by transcendental arguments. The first thing to notice is that transcendental arguments aim to establish necessity by means of an a priori line of reasoning. This does not seem to be a problem, since, as we have stressed in the previous section, a priority is an epistemic concept that concerns the way in which we get to know something. It does not make any difference for the necessity we claim for a proposition if it is known a priori or not. Necessity is a claim concerning the status of the objects considered. If we consider the a priori reasoning of mathematics for example, necessity is something we ascribe to mathematical objects.

Keeping this point in mind, let us come back to our analysis of transcendental arguments. In the second section of this paper, we recognized two kinds of transcendental arguments that we called respectively anti-sceptical and Kantian transcendental arguments. We need now establish if what we stressed about necessity and fallibilism in general also applies to them.

I will take into consideration Kantian transcendental arguments first. I argued that Kantian transcendental arguments assume that there are necessary and a priori elements in our knowledge. Then, they establish which subjective conditions are necessary to account for the presence of those elements.³⁸ They

do so by demonstrating that there could not be such elements in our knowledge if there were not these conditions. I stressed that, in pursuing this examination of our knowledge and its conditions, transcendental arguments take an objective standpoint on the issue, even if they seek to identify subjective conditions. Kantian transcendental arguments do not analytically derive their conclusions from the fact that we cannot deny we are reflective subjects (this seems to be the point of view of anti-sceptical transcendental arguments). On the contrary, they consider some objects of knowledge and trace back their origins to the subjective point of view we have on those objects. Thus, they seek to establish an objective relationship between those objects and their conditions.

As far as Kantian transcendental arguments share the same objective standpoint that we have attributed to claims of necessity in general,³⁹ they allow the possibility of doubt as well. If we had good reason to doubt that character A of our knowledge depended necessarily on subjective condition X, but then we found better reasons to discard that doubt, there would be no reason to avoid the re-establishment of the claim of necessity for condition X. Therefore, as far as we stressed that fallibilism claims that a proposition is not in principle indubitable, successful Kantian transcendental arguments can be considered necessary even though their conclusions are held to be fallibly known. They can be considered necessary inasmuch as they show sufficient evidence for believing in a necessary relation among their objects of interest,⁴⁰ but their conclusions can be held to be fallibly known, insofar as they can in principle be doubted.

Let us now turn to the other kind of transcendental arguments. Following our reconstruction of their way of arguing, anti-sceptical transcendental arguments argue that we cannot coherently believe some propositions to be false. They do so by showing that propositions concerning objects of knowledge are logically entailed in an indubitable proposition concerning our reflective standpoint. If this is true, it means that anti-sceptical transcendental arguments argue for the necessity of their conclusions by stressing that they are known *infallibly*, since, according to our pragmatic clarification of the concept of infallibility, saying that our knowledge of a proposition is infallible is equivalent to saying that it cannot ever be doubted. Thus, it would be contradictory to say that an anti-sceptical transcendental argument is necessary even though its conclusions are known only fallibly, since it seeks to establish necessity on the basis of our impossibility to believe something to be false, i.e. on infallibility.

To be fair, in the case of infallibility the impossibility of doubting a proposition is not psychological, but neither strictly logical. As we have asserted above, the impossibility referred to is a claim stressing that a proposition cannot ever be recognized as false by rational inquirers. On the contrary, in the case of anti-sceptical transcendental arguments the impossibility of doubting a proposition is logical. Sceptics would be in contradiction if they doubted the proposition in question. However, sceptics normally address questions that nobody would actually believe to be false. Thus, by providing a logical refutation of the possibility of posing a sceptical doubt, anti-sceptical transcendental arguments seek to establish that neither the sceptic could coherently believe the proposition in question to be false. This logical procedure

is thus used to prove that the proposition in question is a proposition that could not ever be recognized as false by rational inquirers. Accordingly, anti-sceptical transcendental arguments seek to establish the necessity of their conclusions by claiming infallibility. So, they cannot be fallibilist about their arguments.

It could be argued that proponents of anti-sceptical transcendental arguments can consider their claims to be fallible on the meta-level, that is by analyzing their arguments in a reflective way. I do not think that this is a possible solution though. It would be quite odd to claim that the necessity of a proposition is proved by showing that our belief in it is infallible and then sustain that this proof itself is fallible on the meta-level. This consideration parallels a reflexive question that could be posed to fallibilist transcendental philosophers concerning the possibility to be fallibilist about that fallibilism itself. I do not think that this kind of reflexive questions can help us in resolving the problem. This is not to say that reflexive questions are always question begging. I just want to suggest that in this case they do not offer an alternative solution to the issue.

6. Conclusion

The aim of this paper was to establish if proponents of transcendental arguments can coherently hold the conclusions of their arguments to be fallibly known. In order to answer this question, we have proposed a pragmatic clarification of the concepts of a priority, necessity and infallibility. In view of those clarifications, we were able to stress that a proposition could be claimed to be a priori knowable, necessary and fallibly known, insofar as a priority concerns only the way in which we get to know that proposition, and necessity concerns the status of the objects that such proposition aims to describe. On the contrary, infallibility claims that a proposition could not ever be doubted. A necessary proposition could in principle be doubted (and then be re-established), while an infallibly known proposition would be in principle indubitable.

We applied these reflections to the descriptions of transcendental arguments we provided at the beginning of the paper. In that context, we recognized two kinds of transcendental arguments that we called anti-sceptical and Kantian. We argued that Kantian transcendental arguments can coherently be held to be necessary while stressing that our believing in their conclusions is fallible, since by claiming necessity they express their position on the status of the objects they refer to. In stressing necessity in this way, they do not need to be in principle indubitable, and infallibility is precisely a claim of indubitability. This was not so for anti-sceptical transcendental arguments, which seek to establish necessity for some propositions doubted by the sceptic by showing that they are in principle indubitable. As far as infallibility is a claim of indubitability and anti-sceptical transcendental arguments seek to establish necessity through indubitability, they cannot coherently be held to be necessary while stressing that our believing in their conclusions is fallible.

Coming back to our original problem, it follows from what we stressed that only proponents of Kantian transcendental arguments can coherently hold the conclusions of their arguments to be fallibly known.

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NOTES

1. Of course, one can propose transcendental arguments aiming at establishing conditions of possibility concerning other issues, say for example meaning, or reference. That said, we should keep in mind that the most part of transcendental arguments address conditions of possibility for knowledge and experience.

2. "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object." (Peirce, W 3:266).

3. Moreover, an emphasis on the practical consequences of a concept will be able to show what a critic should do in order to challenge the claim of a priority, necessity, and fallibility. If he/she would be able to show that some of these practical consequences do not hold, then the claim would be refuted.

4. Strawson 1959, 1966. See Gava (forthcoming) for a more detailed analysis of Strawson's interpretation of Kant.

5. See Stern 1999.

6. Accordingly, Barry Stroud (1994) argues that anti-sceptical transcendental arguments cannot make the step from beliefs to reality, insofar as they concern relations internal to our system of beliefs, and not the link between beliefs and reality.

7. See Allison 1983; Bird 2006; Carl 1992.

8. In this respect, Kant's project is similar to the 'therapeutic' philosophy of Wittgenstein. Wittgenstein, during his entire philosophical career, conceived philosophy as a therapeutic undertaking. This means that for him philosophy had not to propose a theory, but had to eliminate false beliefs generated by unclarity in our language. Similarly, Kant wanted to resolve inescapable controversies about metaphysics by means of an analysis of how we form those ideas, not by proposing his own theory on those objects.

9. In fact, Kant considered "how are synthetic a priori judgments possible?" (KrV, B 19) the main question his first *Critique* had to answer. The question was not: are synthetic a priori judgments possible? See Collins 1999, 91–100.

10. See Carl 2006, 187; Collins 1999, 93. I defend this interpretation of Kant more fully in Gava (forthcoming).

11. “*First*, then, if a proposition is thought along with its *necessity*, it is an *a priori* judgment; if it is, moreover, also not derived from any proposition except one that in turn is valid as a necessary proposition, then it is absolutely *a priori*. *Second*: Experience never gives its judgments true or strict but only assumed and comparative *universality* (through induction), so properly it must be said: as far as we have yet perceived, there is no exception to this or that rule. Thus if a judgment is thought in strict universality, i.e., in such a way that no exception at all is allowed to be possible, then it is not derived from experience, but is rather valid absolutely *a priori*. ... Necessity and strict universality are therefore secure indications of an *a priori* cognition” (KrV, B 3–4).

12. This would not probably be confirmed by contemporary philosophers. Saul Kripke (1980) argues that we can have contingent a priori knowable, just as necessary a posteriori knowable, propositions.

13. “As far as *certainty* is concerned, I have myself pronounced the judgment that in this kind of inquiry it is in no way allowed to *hold opinions*, and that anything that even looks like a hypothesis is a forbidden commodity, which should not be put up for sale even at the lowest price but must be confiscated as soon as it is discovered. For every cognition that is supposed to be certain *a priori* proclaims that it wants to be held for absolutely necessary, and even more is this true of a determination of all pure cognitions *a priori*, which is to be the standard and thus even the example of all apodictic (philosophical) certainty” (KrV, A xv).

14. See Westphal (2004) for an account of Kant’s philosophy compatible with fallibilism.

15. Joseph Margolis (1998, 2007) has argued that fallibilism is the linchpin for understanding Peirce’s philosophy as a whole.

16. “Mathematical reasoning holds. Why should it not? It relates only to the creations of the mind, concerning which there is no obstacle to our learning whatever is true of them. The method of this book, therefore, is to accept the reasonings of pure mathematics as beyond all doubt. It is fallible, as everything human is fallible. Twice two may perhaps not be four. ... As a fact, I have not the slightest doubt that twice two is four; nor have you. Then let us not pretend to doubt mathematical demonstrations of mathematical propositions so long as they are not open to mathematical criticism and have been submitted to sufficient examination and revision” (CP 2.192).

17. Christopher Hookway (2004) showed that Peircean pragmatic clarifications are much more complex than this. However, for our purposes it will be sufficient to limit ourselves to this formulation.

18. Peirce, W 3:266.

19. One of Peirce’s preferred examples is the proposition asserting that the sum of the angles of a triangle is 180° . This proposition does not hold in non-Euclidean geometries. In his book *In Defence of Pure Reason*, Laurence Bonjour (1998, 110–5) argues that there can be false, and thus fallible, a priori justification.

20. This entails that a critic, in order to discard the attribution of a priority, needs only to show that some inductive considerations did take place in the process of obtaining the proposition in question.

21. See Lewis 1956, chaps. 7–8.

22. In this paper I will ignore the problem whether a priori knowledge, especially in mathematics, is analytic or synthetic.

23. Kripke 1980, 35–9.

24. The synthetic truths here referred to are of course a posteriori truths. I do not want to raise here the problem about the existence of synthetic a priori truths, which would deviate the attention from the chief argument of this paper. Here, I just would like to point out that synthetic a priori truths cannot be considered metaphysically necessary

in the sense here presented, since they limit their validity to a world known through human cognitive capacities.

25. Of course, in the case of physical and transcendental necessities this pragmatic clarification only holds if the proposition in question is expressed in a conditional sentence that holds in all possible worlds. Thus, in the case of physical necessity for example, the pragmatic clarification should have this form: if the proposition asserting “necessarily, if a possible world had the same physical characteristics as ours then physical law L would apply to it” were truly necessary, then we could not find any instance that falsifies it.

26. This entails that a critic, in order to discard the attribution of necessity, needs to give good reasons to believe that there are possible instances that falsify the proposition in question. Of course, if these reasons were rejected there would be no problem for the contention of necessity.

27. See Kripke 1980; Putnam 1975.

28. Christopher Hookway correctly suggested to me that mathematics is fallible as far as it is subject to errors, while observational sciences are both subject to errors and to new experimental evidence. It is true that experimental evidence can manifest mathematical mistakes. However, those mistakes have to be accounted for without reference to the particular evidence that renders them clear. Consequently, the origin of their error must be placed more in the a priori argument, than in the experimental evidence.

29. To be precise, in the case of physical and transcendental necessity we should give evidence that the objects the proposition describes cannot but be so in a physical world like ours, or in a world known through cognitive capacities like ours.

30. Leite 2010.

31. This seems to be more in line with Peirce’s concept of fallibilism. Christopher Hookway (2007, 20) gives a similar description of this doctrine.

32. Accordingly, Susan Haack (1979) stresses that fallibility and infallibility are not characters that are directly imputable to a proposition, but just to our believing it.

33. In this respect, Lisa Warenski (2009, 417–8) stresses that fallibilism is a second order claim on our knowledge.

34. This entails that a critic, in order to discard the attribution of infallibility, needs only to show that a genuine doubt on the proposition is, or has been, possible.

35. Christopher Hookway (2007) considered a different, but related, problem with respect to fallibilism. He argued against Richard Rorty and Donald Davidson that truth can be an aim of inquiry even if we endorse fallibilism.

36. When I speak of ‘good reasons to believe’ or ‘evidence’, I am aware of using vague formulations. This follows from the fact that we can claim necessity both in a priori and a posteriori inquiry and the burden of proof is really different in these domains. My point is that also in case of a priori reasoning, an argument, in order to be considered valid, does not need to stress that it is impossible that anybody will come to coherently doubt the argument in question.

37. Again, in the case of physical and transcendental necessity, the contention that the objects cannot but be so must be limited to the relevant domains.

38. As I have already stressed, the necessity of Kantian transcendental arguments holds only in a world subject to human cognitive capacities. Thus, in order to apply our pragmatic clarification of necessity to them, we must use a conditional similar to that we used for physical laws: Necessarily, if a possible world were subject to the human cognitive constitution, it would be subject to subjective conditions X, Y, Z, etc. Graham Bird (2006, 77–82) stresses that, following Kripke’s schema, Kant’s transcendental judgments should be considered contingent a priori truths.

39. Thus, Kantian transcendental arguments identify epistemic conditions (they are conditions dependent on our subjective standpoint) with objective implications (they are in a necessary relation with the objects of our knowledge).

40. Of course, as we asserted above, we might be wrong in claiming necessity, but as long as we have evidence to believe our thesis to be right and no reason to believe our thesis to be wrong, we are allowed to do so.

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