Hinges, Knowledge, and Rational Epistemic Agency

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I. THE CARTESIAN SKEPTICAL PARADOX

The feature of Cartesian-style arguments is that we cannot know some empirical propositions (such as "I have a body," or "There are external objects") as we may be dreaming, hallucinating, deceived by a demon or be "brains in the vat" (BIV).[1] Therefore, as we are unable to refute these skeptical hypotheses, we are also unable to know propositions that we would otherwise accept as being true if we could rule out these scenarios.

Cartesian arguments are extremely powerful as they rest on the *Closure principle for knowledge.* According to this principle, knowledge is "closed" under known entailment. Roughly speaking, this principle states that if an agent knows a proposition (e.g., that she has two hands), and competently deduces from this proposition a second proposition (e.g., that having hands entails that she is not a BIV), then she also knows the second proposition (that she is not a BIV). More formally:

The "Closure" Principle
If S knows that *p,* and S competently deduces from *p* that *q,* thereby coming to believe that *q* on this basis, while retaining her knowledge that *p,* then S knows that *q.*[2]

Let's take a skeptical hypothesis, SH, such as the BIV hypothesis mentioned above, and M, an empirical proposition like "I have a body" that would entail the falsity of a skeptical hypothesis. We can then state the structure of Cartesian skeptical arguments as follows:

(S1) I do not know not-SH
(S2) If I do not know not-SH, then I do not know M
(SC) I do not know M

Considering that we can repeat this argument for each and every of our empirical knowledge claims, the radical skeptical consequence we can draw from this and similar arguments is that our knowledge is impossible.

II. WITTGENSTEIN ON SKEPTICISM: A MINIMAL READING

A way of dealing with "Cartesian-style" skepticism is to deny the premise S1) of the skeptical argument, thus affirming *contra* the skeptic that we can know the falsity of the relevant skeptical hypothesis. In his "*A Defence of Commonsense*" (henceforth DCS) and "*Proof of the External World*" (henceforth PEW), G. E. Moore famously argued that we can have knowledge of the "commonsense view of the world," that is of propositions such as "I have a body," "There are external objects" or "The earth existed long before my birth" and that this knowledge would offer a direct response against skeptical worries. But, Wittgenstein argues, to say that we simply "know" Moore's "obvious truisms" is somewhat misleading. This is for a number of reasons.

First because in order to say "I know" one should be able, at least in principle, to produce evidence or to offer compelling grounds for his beliefs (Wittgenstein, *On Certainty* 349, 483). However, Moore cannot ground his knowledge-claims with evidence or reasons because *his grounds aren't stronger than what they are supposed to justify* (245). As Wittgenstein points out, if a piece of evidence has to count as compelling grounds for our belief in a certain proposition then that evidence must be more certain than the belief itself. This cannot happen in the case of a Moorean "commonsense certainty" such as "I have two hands" because, at least in normal circumstances, *nothing* is more certain than the fact that we have two hands (Pritchard, forthcoming a, b).

Imagine, for instance (Wittgenstein, *On Certainty* 125), that one attempted to legitimate one's claim to know that p by using the evidence that one has for p (for example, what one sees, what one has been told about p and so on). Now, if the evidence we adduce to support p is less secure than p itself, then this same evidence would be unable to support p (250).

Moreover, Wittgenstein argues, a knowledge-claim can be challenged by, for instance, the appeal to evidence and reasons. More generally, when we challenge

a knowledge claim we can recognize what and if something has gone wrong in the agent's process of knowledge-acquisition. Things are somewhat different in the case of the denials of Moore's "obvious truisms of the commonsense." If, for instance, I believe that I am sitting in my room while I am not, there are no *grounds* which could explain this belief as a mistake—such as an error based on negligence, fatigue, or ignorance. On the contrary, a similar "false belief" would more likely be the result of a sensorial or mental disturbance (Wittgenstein, *On Certainty* 526). As Moyal-Sharrock points out (2004, 74), in fact, for Wittgenstein if someone is holding seriously a denial of Moore's "truisms" (i.e., she believes she has no body or that both her parents were men) we would not investigate the truth-value of her affirmations, but her ability to understand the language she is using or her sanity (155).

If Moore's "commonsense certainties" are not knowable still, argues Wittgenstein, they are immune from rational doubt. This is so because doubts must be based on *grounds*; that is, they have to be internal to a precise practice and must be in a way or another *justified* (310). If they do not, they are constitutively empty. To illustrate this point, Wittgenstein gives the example of a pupil that constantly interrupts a lesson questioning the existence of material objects or the meaning of words. (310) Far from being a legitimate intellectual task, the pupil's doubt will lack any sense and will at most lead to a sort of epistemic paralysis, for she will just be unable to learn the skill or the subject we are trying to teach her (315).

Accordingly, as per Wittgenstein, all reasonable doubts presuppose *certainty* (114-115). That is, the very fact that we usually raise doubts of every sort at the same time shows and implies that we take something for granted. For example, a doubt about the real existence of an historical figure presupposes that we consider certain an "obvious truism of the commonsense" such as "The world existed a long time before my birth." A doubt about the existence of a planet presupposes the absence of any doubt about the existence of the external world and so on (114-115, 514-515).

But, if the statements listed by Moore in DCS are not knowable or doubtable, what is their status? With regard to Moore's "truisms," Wittgenstein introduces a concept that is at the same time pivotal to understand his anti-skeptical strategy and extremely elusive. He suggested that Moore's "commonsense certainties" are, in his words, "hinges"(341-3). These hinges are just apparently normal empirical contingent claims, but on closer inspection, they perform a different, more basic role in our epistemic practices.

III. PRITCHARD ON THE STRUCTURE OF REASON

Wittgenstein's reflections on the structure of reason have influenced a recent "Wittgenstein-inspired" anti-skeptical position, namely Pritchard's "hinge-commitment" strategy. As per Pritchard, Wittgenstein would claim that the same logic of our ways of inquiry presupposes that some propositions are excluded from

doubt; and this is not irrational or based on a sort of blind faith, but rather belongs to the way rational inquiries are put forward (see Wittgenstein, *On Certainty* 342).[3] As a door needs hinges in order to turn, any rational evaluation would then require a prior commitment to an unquestionable proposition/set of "hinges" in order to be possible at all.

A consequence of this thought (Pritchard, "Wittgenstein on Hinges and Radical Sceptisim," 3) is that any form of universal doubt such as the Cartesian skeptical one is constitutively impossible;[4] there is simply no way to pursue an inquiry in which nothing is taken for granted. In other words, the same generality of the Cartesian skeptical challenge is then based on a misleading way of representing the essentially *local* nature of our enquiries.

A proponent of Cartesian skepticism looks for an universal, general evaluation of our beliefs; but crucially there is no such thing as a general evaluation of our beliefs, whether positive (anti-skeptical) or negative (skeptical), for all rational evaluation can take place only in the context of "hinges" which are themselves immune to rational evaluation.

An important consequence of Pritchard's proposal is that it will not affect Closure. Each and every one of our epistemic practices rest on "hinges" that we accept with certainty; a certainty which is the expression of what Pritchard calls "'über-hinge' commitment." This would be an a-rational commitment toward our most basic belief that, as we mentioned above, is not itself opened to rational evaluation; but that importantly *is not a belief*.

In other words, according to Pritchard this commitment would express a fundamental a-rational relationship toward our most basic certainties, a commitment without which no knowledge is possible. Crucially, this commitment is not subject to rational evaluation. For instance, it cannot be confirmed or disconfirmed by evidence and thus it would be *non-propositional* in character (that is to say, they cannot be either true or false). Accordingly, *it is not a belief at all*. This can help us retain both the Closure principle and our confidence in our most basic certainties. Recall the reformulation of the Closure principle we have already encountered *supra*:

> *The Competent Deduction Principle*
> If S knows that *p,* and S competently deduces from *p* that *q*, thereby coming to believe that *q* on this basis, while retaining her knowledge that *p,* then S knows that *q* .

The crucial aspect of this principle to note (Pritchard, "Wittgenstein on Hinges and Radical Sceptisim," 14) is that it involves an agent *forming a belief* on the basis of the relevant competent deduction. The idea behind Closure is in fact that an agent can come to acquire new knowledge via the competent deduction where this means that the belief in question is based on that deduction. Accordingly, if we cannot

rule out a skeptical scenario such as the BIV one, we would be unable to know Moore's "obvious truisms of the commonsense" such as "I have a body" or "There are external object" and thus, given Closure, we would be unable to know anything at all.

But our most basic certainties are not beliefs; rather, they are the expression of *a-rational, non-propositional commitments*. Thus, the skeptic is somewhat right in saying that we do not know Moore's "obvious truisms of the commonsense." But, this will not lead to skeptical conclusions, for our 'hinge commitments' are not beliefs so they cannot be objects of knowledge. Therefore, the skeptical challenge is misguided in the first place.

A first worry that can be raised against this proposal goes as follows. Recall that following Pritchard's account the skeptical challenge is based on a misleading way of representing the nature of our epistemic inquiries. There is nothing like the kind of general enquiry put forward by a Cartesian skeptic, we should rule out skeptical worries for they are at odds with the way in which rational inquiries are put forward.

However, a skeptic can surely grant that our everyday enquiries are essentially *local* in nature and that our ordinary knowledge claims are made within a background of "hinge-commitments." But, this is just a reflection of what epistemic agents do in normal circumstances, and can at most tell us how our psychology works whenever we are involved in a given epistemic practice. Still, the mere fact that ordinarily we take for granted several "hinge commitments" does not necessarily exclude as illegitimate the kind of general, theoretical inquiry put forward by a proponent of Cartesian skepticism. This is because the Cartesian skeptical challenge is first and foremost a philosophical *paradox*, which cannot be dismissed on the basis of pragmatic reflections about the essentially local nature of our everyday epistemic practices.

However, even if we agree with Pritchard that a general evaluation of our beliefs is somewhat impossible and self-refuting there is still another, deep concern that the "hinge commitment strategy" has to face. Recall that following this proposal all our epistemic practices rest on unsupported commitments. If from a side this approach can help us to block the skeptical challenge it will nonetheless have a cost; under the skeptical scrutiny, we will be forced to admit that all our epistemic practices rest on ungrounded presuppositions which are not opened to epistemic evaluation of any sort. When skeptical hypotheses are in play, we are then forced to admit that all our knowledge rest on nothing but *a-rational* presuppositions such as habit, instinct and social or cultural commitments; accordingly, Pritchard's "hinge-commitment" strategy will lead to a more subtle form of skepticism, which undermines the *rationality* of our ways of inquiry. A conclusion which is not more reassuring than skepticism itself.

IV. CERTAINTY VERSUS KNOWLEDGE

Another influential account of Wittgenstein's anti-skeptical strategy is Moyal-Sharrock's "non-epistemic" reading, which goes as follows. Despite their differences, as per Moyal-Sharrock all hinges share a common feature; namely, they are all *rules of grammar* which underpin our "language-games." This is why, she argues, Wittgenstein considers Moore's knowledge claims in both DCS and PEW as misleading if not completely wrong; for differently from empirical beliefs, "hinges" cannot be known. This would be so because our taking them for granted is not based on justification or grounds; for instance, "I cannot say that I have good grounds for the opinion that cats do not grow on trees or that I had a father and a mother" (Wittgenstein, *On Certainty* 282). That is, we hold these beliefs unreflectively, and they are at odds with ordinary knowledge-claims as they are not the result of any inquiry and they cannot be supported by any kind of evidence.

Still, our lack of grounds for holding "hinges" does not entail the dramatic conclusions of the Cartesian skeptic, for our relationship with Moore's "commonsense certainties" is based on training, instinct, repeated exposure (Moyal-Sharrock 9); that is, hinges are the result of pre-rational, still perfectly legitimate commitments and are the expression of what Moyal-Sharrock calls "objective certainty" (15-17). A concept that she sees as constitutively different from knowledge; knowledge-claims, in fact, require grounds and/or justifications, are opened to doubt and can be verified or disconfirmed by evidence. To the contrary, our confidence in the hinges "lie[s] beyond being justified and unjustified; as it were, as something animal." (Wittgenstein, *On Certainty* 359).

That is to say, this certainty is a disposition of absolute, animal confidence that is not the result of reasoning, observation or research but it is rather a basic attitude of unreasoned, unconscious trust that shows itself in our everyday experience. In other words, our confidence in Moore's "obvious truisms of the commonsense" such as "There are external objects" or "I have a body" is not a theoretical or presuppositional certainty but a *practical* certainty that can express itself *only as a way of acting* (Wittgenstein, *On Certainty* 7, 395). For instance, a "hinge" such "I have a body" is disposition of a living creature which manifests itself in *her acting in the certainty of having a body* (Moyal-Sharrock 67), and manifests herself in her acting embodied (walking, eating, not attempting to walk through walls etc).

Following Moyal-Sharrock's account of Wittgenstein's strategy, Cartesian-style skepticism is the result of a *Categorial Mistake.* That is, Cartesian skeptical arguments, even if *prima facie* compelling, rest on a misleading assumption: the skeptic is simply treating "hinges" as empirical, propositional knowledge-claims while on the contrary they express a pre-theoretical animal certainty, which is not subject to epistemic evaluation of any sort.

A consequence of this thought is that Cartesian skeptical scenarios depict a fictional possibility, not a human one; thus, the skeptical challenge is not a sensible

or legitimate doubt but rather an "idle mouthing of words" (174). The mere hypothesis that we might be disembodied brains in the vat has no strength against the objective certainty of "hinges" such as "There are external objects" or "I have a body," as merely thinking that "human beings can fly unaided" has no strength against the fact that human beings cannot fly without help.

Therefore, skeptical beliefs such as "I might be a disembodied BIV" or "I might be the victim of an Evil Deceiver" are nothing but belief-behaviour (176) and the conclusion we can draw from them, namely that our knowledge is impossible, should be regarded as fiction and not as a possibility (170).

Following the "non-epistemic reading," then, Wittgenstein would dismiss Cartesian-style skepticism as the result of a category mistake, based on a confusion between imagined and human/logical possibility. Moreover, according to Moyal-Sharrock, hinge certainties such as "There are external objects" and "I have a body" are *conceptually*, rather than practically, indubitable (161), whereas the empirical *doppelganger* of a hinge (i.e. a sentence made up of the same words as a hinge, but which does not *function* as a hinge) can be doubted. So in ordinary and philosophical contexts "hinges" cannot be doubted but the same sentence used as an empirical proposition in a sci-fi novel can be.

Accordingly, as long as we take skeptical hypotheses as fictional scenarios they make sense; but their apparent intelligibility conflates with human possibility. For instance, the BIV hypothesis is a scenario, but is just a fictional one that cannot be applied to "our human form of life." In the world as we know it, we cannot even sensibly conceive the existence of bodiless brains connected to supercomputers, the existence of Evil Deceivers that systematically deceive us, and so forth (178). Thus, the strength of Cartesian-style skepticism is only apparent. Once we take skeptical hypotheses as mere "philosophical fiction," we should simply dismiss skeptical worries, for a fictional scenario such as the BIV one does not and cannot have any consequence whatsoever on our epistemic practices or more generally on our life.

This part of the "non-epistemic reading" seems weak for a number of reasons. If, from one side, Moyal-Sharrock stresses the conceptual, logical indubitability of Moore's "truisms," she nonetheless seems to grant that the certainty of "hinges" stems from their function in a given context, to the extent that they can be sensibly questioned and doubted in fictional scenarios where they can "play the role" of empirical propositions. But crucially, if "hinges" are "objectively certainty" because of their role in our ordinary life, a skeptic can still argue that in the context of philosophical inquiry Moore's "commonsense certainties" play a role which, similar to the role they play in fictional scenarios, is both at odds with our "human form of life"and still meaningful and legitimate.

More importantly, even if we agree with Moyal-Sharrock on the "nonsensical" nature of skeptical doubts, this has nonetheless no strength against Cartesian style skepticism. Recall the feature of Cartesian skeptical arguments; take a skeptical

hypothesis SH such as the BIV one and M a mundane proposition such as "This is a hand." Now, given the Closure principle, the argument goes as follows:

(S1) I do not know not-SH
(S2) If I do not know not-SH, then I do not know M
Therefore: (SC) I do not know M

In this argument, no doubt is employed, indeed whether an agent is seriously doubting if she has a body or not is completely irrelevant to the skeptical conclusion "I do not know M." Also, a proponent of Cartesian-style skepticism can surely grant that we are not BIV, that we are not constantly deceived by an Evil Genius, or so on. Still, the main issue is that *we cannot know* whether we are victim of a skeptical scenario or not. Thus, given Closure, we would be unable to know anything at all.

Moyal-Sharrock does not explicitly discuss this issue, but her "non-epistemic" reading so construed seems to leave us with two options, neither of which is particularly appealing. If we stress the "non-epistemic" nature of "hinges" while claiming that Cartesian skeptical hypotheses have no strength whatsoever against our knowledge claims, we will be forced to reject a very intuitive principle such as Closure.[5]If, on the other hand, we do not want to reject Closure, it is hard to see how the "non-epistemic" reading can help us to solve the skeptical problem. For the conclusion we can draw from this proposal is that Cartesian skepticism is unlivable and at odds with our everyday experience. Given Closure and the fact that we cannot know the denials of skeptical scenarios, it would be impossible to escape skeptical conclusions.

Nevertheless, there are many promising insights we can draw from Moyal-Sharrock's interpretation of Wittgenstein's thought and especially from the analogy between "hinges" and "rules of grammar," which I will consider in the next section.

V. HINGES AND RULES OF GRAMMAR

Very generally, in the second phase of his thought Wittgenstein calls "rules of grammar" the conditions, the method, necessary for comparing a proposition with reality (Wittgenstein, *Philosophical Investigations* 88). To understand this point, just consider the following propositions:

1. What is red must be colored.
2. Nothing can be red and green all over.
3. All bachelors are unmarried.
4. A proposition is either true or false.

Despite their differences, all these share common features that I will consider in

turn.

First, they are all normative, for they delimit what makes sense *to say*, for instance licensing and prohibiting inferences. Just consider Proposition 1: if p is called red, it is correctly characterized as colored. To say that it is red and to deny that it is colored would be a *misuse of language*, that is a move excluded from a language-game. Similarly Proposition 2, even if it looks as a description of the physics of color, is a rule that we use to exclude the description of an object as being red and green all over. Next, Proposition 3 apparently an empirical description, is not meant to make a true statement of fact about bachelors but rather to explain the meaning of the word "bachelor." Finally, Proposition 4 looks like a description, a generalization about propositions as "All lions are carnivorous" is a generalization about lions. But things are somewhat different, for we use Proposition 4 to define what may be correctly called "a proposition" in logical reasoning; also, it does not exclude a third possibility but rather *exclude as meaningless* the phrase "a proposition which is neither true nor false."

A second feature of Wittgenstein's rules of grammar is that they cannot be confirmed or disconfirmed by reality; rather, they *are ways to make sense of reality*. For instance, no one ever discovered that 1, nor we came to know that Proposition 1 by, say, checking the color of any object that we call "red." In a similar fashion, Proposition 2 cannot possibly be disconfirmed by the existence of something which is red and green all over. Likewise, we would not verify Proposition 3 by investigating the marital status of people identified as bachelors, and no "married bachelor" would possibly disconfirm Proposition 3. Similarly, even if we do perfectly speak of half truths, or rough or approximate truths or of something being partly true or partly false, this does not affect in any way iv), for the objects of such assertions are not cut to the pattern required for logical inference and thus cannot confirm or disconfirm 4) (Hacker and Baker 265).

A third and important feature of Wittgenstein's "rules of grammar" is that they are not propositions, namely they cannot be either true or false; for their "negation" is, more than false, *senseless*. Just consider the following putative statements:

> 1*. p is red and is not colored.
> 2*. p is red and green all over.
> 3*. Some bachelors are married.
> 4*. a proposition is neither true nor false.

Thus, the difference between rules of grammar and their negations is not similar to the difference between true and false statements, *but between a rule of expression and a use of words/symbols which that rule excludes as nonsensical.*

VI. HINGES AND THE BOUNDARIES OF RATIONAL AGENCY

To sum up, Wittgenstein's rules of grammar have three features which make them different from empirical beliefs. Firstly, they are not descriptive but *normative*; secondly, they cannot be confirmed or disconfirmed by reality but rather are *ways to make sense of reality*; finally, they are not propositions as their negations are not false but *senseless*. As I have already mentioned throughout this work, for Wittgenstein "the game of doubting itself presupposes certainty" (Wittgenstein, *On Certainty* 115), that is that something is taken for granted, at least the meaning of words (676). Accordingly, the skeptic's never-ending doubt will deprive her words of their meaning and will at most show her inability to engage in the ordinary "language-game" of asking meaningful questions.

Crucially, not to doubt or deny Moore's "obvious truisms" is not something that we do merely out of practical considerations; rather, it is a constitutive part of "the essence of the language-game" called "epistemic inquiry" (370). As per Wittgenstein, "hinges" such as "there are external objects" and "I have a body" play a basic, foundational role in our system of beliefs, and to take them for granted belongs to *our method of doubt and enquiry* (151). In other words, even if they resemble empirical propositions or their origin is empirical, within our practices they are used as *rules* which enable us to make sense of reality, thus drawing a line between sense and nonsense rather than between truth and falsity.

Thus, to doubt or deny Moore's "obvious truisms of the commonsense" will not only go against our practical rationality, but more crucially will also undermine the same notion of "rational enquiry."

VII. WITTGENSTEINIAN EPISTEMOLOGY AND CARTESIAN SKEPTICISM

As we have seen, then, for Wittgenstein, Moore's "commonsense certainties" are a condition of possibility of any meaningful inquiry; as he puts the matter, "about certain empirical propositions no doubt can exist *if making judgments is to be possible at all"* (Wittgenstein, *On Certainty* 308, my italics). A thought which is stressed in a number of remarks of OC, where Wittgenstein defines "hinges" as "the scaffolding of our thoughts" (211), "foundation-walls" (248), the "substratum of all our enquiring and asserting" (162) "the foundation of all operating with thoughts" (401) and "fundamental principles of human enquiry" (670).

To understand a first promising anti-skeptical consequence of this account, recall the feature of Cartesian-style arguments:

(S1) I do not know not-SH.
(S2) If I do not know not-SH, then I do not know M.
(SC) I do not know M.

Where not-SH can be a "hinge" such as "I have a body" or "There are external objects." This argument seems so compelling as long as we take "hinges" as *propositional beliefs*, which can be either confirmed by evidence or legitimately doubted once we run skeptical arguments. But, even if they resemble empirical contingent propositions "hinges" are non-propositional *rules of grammar*, which enable us to make sense of reality. Accordingly, skeptical hypotheses such as "I might be a disembodied BIV" should not be regarded as sensible philosophical challenges but rather as *nonsensical*, even if prima facie meaningful combinations of signs. To understand this point, recall the putative "negation" of the rules of grammar we have encountered *supra*:

1*. p is red and is not colored
2*. p is red and green all over
3*. Some bachelors are married
4*. a proposition is neither true nor false

As we have already seen above, Wittgenstein's rules of grammar are non-propositional in character, thus they cannot be either true or false; accordingly, their "negation" is not false but senseless, that is an illicit combination of signs.

In a similar fashion, as "hinges" such as "I have a body" or "There are external objects" are not propositional, for they have a normative rather than a descriptive role, then their putative "negation" should be dismissed as an illicit (and not only *fictional* as in Moyal-Sharrock's proposal) combination of signs which is excluded from the practice called "rational epistemic inquiry," as the putative statement 1* p is red and is not colored is a move excluded from any sensible language game with color words.

Another promising consequence of a non-propositional account so construed is that, different from Moyal-Sharrock's reading of *On Certainty*, it will not affect the Closure principle and at the same time will not lead to skeptical conclusions.

Recall that following the non-epistemic reading the certainty of hinges is a pre-rational, animal commitment which is not subject to epistemic evaluation of any sort. Accordingly, following this account we will have either to reject Closure or, with this principle still in play, to agree with the skeptic that our knowledge is impossible. As we have seen while presenting Pritchard's "hinge-commitment" strategy, the crucial aspect of Closure to notice is that it involves an agent *forming a belief* on the basis of the relevant competent deduction. Crucially "hinges" are not the expressions of a propositional attitude such as a *belief in*; rather, they are the expression of non-propositional *rules*.

Accordingly the negations of "hinges," that is skeptical hypotheses such as "I might be a disembodied BIV" or "I might be deceived by an Evil Demon," are not beliefs either. Rather, they are just nonsensical, even if apparently intelligible, combinations of signs, from which no valid inference (e.g. "If I do not know not-

SH, then I do not know M") can be made. In other words, as skeptical hypotheses are as nonsensical as the negations of the rules of grammar we encountered above, then the mere fact that we do not know whether, for instance, we are BIV has no consequence on our knowledge of everyday propositions. Skeptical scenarios are not plausible beliefs or hypotheses, but mere combinations of signs excluded from the practice called "epistemic rational agency."

NOTES

1. See Putnam
2. This is essentially the formulation of the Closure principle defended by Williamson (117) and Hawthorne (29).
3. Compare Wittgenstein, *On Certainty* 342: […] it belongs to the *logic of our scientific investigations* that certain things are indeed not doubted.
4. See ibid. 450 "A doubt that doubted everything would not be a doubt."
5. This line has been most notably proposed by Dretske and Nozick.

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