Pažinimo filosofija

PUTNAMIAN ANTI-ENVATTOR VER. 3.00: NEW FEATURES – SAME RESULTS

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The paper is devoted to a discussion and critical evaluation of antisceptical arguments in epistemology that are based on causal theory of reference, with the special focus upon the revised version of the Hilary Putnam's Brain-in-a-Vat argument presented by Olaf Müller. Müller claims that his argument is based on the metaphysically neutral principles of semantic externalism and disquotation, however more thorough analysis of these principles and of the possibility to use them for antisceptical purposes reveals the flaw in his argument. It seems that Müller reaches his conclusion by confusing the syntactically identical, though semantically distinct utterances in BIV language, non-BIV language, and metalanguage. The reconstruction and analysis of Müller's argument shows that his argument, provided that its premises are formulated carefully so as not to beg the question against the sceptic, fails to establish anything more than the original version provided by Putnam.

Keywords: *scepticism, Olaf Müller, semantic externalism, disquotation, brain-in-a-Vat.*

I.

> *Morpheus:* Have you ever had a dream, Neo, that you were so sure was real? What if you were unable to wake from that dream? How would you know the difference between the dream world and the real world?
> *The Matrix*

One can encounter or entertain many sorts of sceptical ideas in her life: from casual – scepticism about the quality of Korean cars, scepticism about her own ability to pass the comprehensive exam, scepticism about Lithuanian basketball team winning gold at the Olympics – to philosophical – scepticism about our beliefs of values, scepticism about other minds, scepticism about our knowledge of the external world. Funny enough, few philosophers and even less non-philosophers seem to take the philosophical sceptical scenarios as actual, but the mere possibility or conceivability of such scenarios is sufficient for putting certain beliefs in jeopardy. And once the doubt takes the shape of the sceptical hypothesis, one cannot escape the uncertainty until she finds a way to convince herself that the horrifying hypothesis is self-refuting, self-contradictory, and thus that the doubt it raises is nonsensical and harmless.

Scepticism about our knowledge of the external world is probably the most extreme one. Since it seems to render all our propositions about the external world (including our own bodies) false, or at least, to make their truth values undecidable, and thus leave us without any possibility of knowledge it is precisely the one urging for such cure. Such scepticism draws upon the fact that our actual perceptual experience is subjectively indistinguishable from some perfect hallucination, some illusory sense impressions. This indistinguishability is also exploited by the sense-datum theorists of perception, who use an argument from illusion to establish the existence of sense-data, the veil that bars us from direct access to the objects of the external world. The sceptical scenarios might also involve dreams, powerful demons, evil or mad scientists or anything having the ability to deceive us that we would find acceptable, and would not be able to rule out by means that fall beyond any doubt cast by the scenario itself.

The interchangeability of appearance and reality has been escalated by Eastern thinkers, like Chuang Tzu, who once woke up after having a dream that he was a happy butterfly pleased with itself and "*did not know* whether it was Tzu dreaming that he was a butterfly or the butterfly dreaming that he was Tzu" (my emphasis). Modern Western tradition usually refers to Descartes' first of the *Meditations*, where he conceives of a notorious Demon, deceiving him to such an extent that "there is no earth, no heaven, no extended body, no magnitude, no place, and that nevertheless [I possess the perceptions of all these things and that] they seem to me to exist just exactly as I now see them" (Descartes 1993: 48). The result of the thought experiment is the same – whatever we might come to believe about the external world is brought within the sphere of the doubtful.

However, fairly recent advances of computer science and neurophysiolgy have allowed for a more elegant description of the sceptical scenario, which we obtain from Hilary Putnam. The sceptic imagined here "argues that on the basis of our own beliefs about the brain, etc., it follows that we might all be brains in a vat" (Putnam 1994: 284). Putnam invites one to imagine that

> a human being has been subjected to an operation by an evil scientist. The person's brain has been removed from the body and placed in a vat of nutrients which keeps the brain alive. The nerve endings have been connected to a super-scientific computer which causes the person whose brain it is to have the illusion that everything is perfectly normal. (1981: 5–6)

Were this sci-fi story actually true, almost no utterance or thought of this brain in a vat (henceforth BIV) would be true, and thus, it would never attain true knowledge of the external world.

II.

> *Morpheus:* Unfortunately, no one can be told what the Matrix is. You have to see it yourself. *The Matrix*

While sketching the hypothetical story about envattment Putnam does not intend to bring our knowledge within the sphere of the doubtful. What he actually tries to achieve is a proof that such hypothesis (modified to the extent that there are no

external objects apart from automatic machinery tending a vat full of brains, and that all the brains of all sentient beings are envatted) is intrinsically false and does not express a genuine possibility. On the basis of semantic externalism, Putnam derives the conditional that if the possible world of BIVs is "really the actual one, and we are really brains in a vat, then what we now mean by 'we are brains in a vat' is that *we are brains in a vat in the image* or something of that kind" (1981: 15), and since the latter is false *ex hypothesi*, the sceptical scenario is qualified as self-refuting and false. However, it seems that Putnam's original argument can only prove the unthinkability or inconceivability of the scenario by BIVs, since according to sceptical hypothesis and causal theory of reference BIVs lack conceptual devices for doing so. As Putnam himself states, "if we are Brains in a Vat, we cannot *think* that we are, except in the bracketed sense [we are Brains in a Vat]; and this bracketed thought does not have reference conditions that would make it *true*. So it is not possible after all that we are Brains in a Vat" (1981: 50–51). So far – so good, but how does inconceivability of the hypothesis entail its falseness remains unexplicated. It is difficult to see what kind of reasoning enables Putnam to dis-bracket the hypothetical proposition in the conclusion just quoted, rather than concluding that we cannot be [Brains-in-a-Vat]? Unless one finds a way to account for this obscure step, she should conclude that Putnam's argument, rather than refuting scepticism proves that "if externalism were true, *genuine sceptical worries* will not be expressed by thoughts such as the thought that I may be a brain-in-a-vat" (Sawyer 1999), but nothing more. So if there is any lesson to be learnt from Putnam's argument, I suppose, it is that the unthinkability of the sceptical hypothesis is all that semantic externalism and disquotation amounts to, and we still lack assurance "that we are on to the right categories in terms of which to depict the most general features of the world and our place in it" (Wright 1994: 240).

Putnam's anti-sceptic argument based on his causal theory of reference and principle of disquotation has been examined, restated and reformulated several times by Putnam and by fellow philosophers. I would not go into details and bugs which can be located in the earlier versions of the argument due to Putnam (1981), Wright (1994) or others. I prefer to focus on the latest version of the argument against the possibility of our eternal envattment (to my knowledge), which is due to Olaf Müller (2001). And even though Müller triumphantly claims that his version does not beg the question against the sceptic, the argument doesn't sound straightforwardly convincing. Shouldn't one be extremely careful with the antisceptic arguments? After all, isn't it the case that some false antisceptical argument might make us falsely believe that we know we are not BIVs (which we supposedly don't), just as the evil scientist or the super-computer within the sceptical scenario is convincing us that the impressions produced by stimulation on our afferent nerves is veridical experience (which it supposedly is not)? Therefore, in what follows I am willing to take the risk of becoming an uninteresting sceptic (as Putnam calls them) and to bring the argument within the sphere of the doubt-

ful and try to identify the premise of the argument that possibly violates the original sceptical scenario or our cognitive norms. My hypothesis is that Müller's argument against the sceptic fails to establish anything more than the original version provided by Putnam.

III.

Neo: Mr Wizard! Get me the hell out of here! *The Matrix*

Before engaging in construction of the antisceptic argument, Müller defines the dialectical situation, so to prevent the sceptic he's about to defeat from changing his hypothesis or premises after the argumentation is accomplished and the decisive conclusion established. For the remainder of his paper he restricts his attention to the following scenario (S):

> The external world is almost empty. There exist only four distinct objects (and, of course, their parts plus the mereological sums thereof): One computer, one brain, one vat of nutrients, and one cable. These four objects do not overlap. They are arranged as follows: The brain is placed in the vat and connected to the computer by means of the cable. The subject's sensory impressions are identical to (supervene on / are nomologically related to – or what have you) brain processes caused by the connected computer. (2001: 300)

According to Müller, such scenario can be proven self-refuting, on the basis of semantic externalism, disquotation, and an often overlooked fact that "while evaluating Putnam's argument, we need not worry about the *existence* of the external world: according to the brain-in-a-vat scenario, there are external objects, if only a few, <…> for example, brains and vats" (2001: 300).

My view is that Müller applies the two principles and the fact two carelessly: I will try to show that the more thourough analysis of externalism and disquotation and of the possibility of their application for antisceptic purposes reveals the flaw in his agument. It also seems that Müller reaches his conlusion by confusing the syntactically identical, though semantically different utterances of metalanguage, BIV language and non-BIV language. This confusion can be avoided by distinguishing clearly between the three, however, at the cost of the validy of the argument under discussion.

As already mentioned, Müller, following Putnam, relies for his antisceptic strategy on the causal theory of reference and on the principle of disquotation. He points out early, that sceptic "has no good *a priori* chance of convincing us that an appeal to disquotation and externalism amounts to begging the question against the skeptic", and that this is so, because "neither of them was designed specifically for the discussion with the skeptic" (2001: 301). Well, it might be the case, but there would be nothing wrong in checking whether the principles appealed to are really metaphysically neutral in the given context.

Let me start with semantic externalism, since it is traditionally identified as essential to Putnamian anti-sceptical strategy. Semantic externalism is, put crudely, "the thesis that the contents of at least many of my thoughts depend at least on part on environmental factors" (Warfield 1999: 82). Putnam reaches this thesis while trying to set up the condition for reference, and supports it with his thought experiments. As Putnam shows, it is conceivable for there to

be "a case in which someone thinks words which are in fact descriptions of trees in some language *and* simultaneously has appropriate mental images, but *neither* understands the words *nor* knows what a tree is" (Putnam 1981: 4–5). Further analysis of reference takes Putnam to conclusion that reference depends on one's causal interaction with what one intends to refer to and one's ability to use that with which one intends to refer in an appropriate way. In other words, no mental images, words or symbols intrinsically refer to something any more than ant's trace left on the sand represents Winston Churchill.

Causal semantics, as Müller rightly mentions, was derived with no anti-sceptical intentions, and was developed in Putnam's earlier work on the semantics of natural kind terms. Causal semantics opposes the descriptive theories of reference and is based on realism about natural kinds, which takes nature to be already sorted into natural kinds, each of which is characterised by a sort of essence – the members of a natural kind form an equivalence class with respect to some kind of sameness relation. This relation is characterised by the inner constitution of material objects and it seems to be an empirical question to find out what defining feature the members of a natural kind have in common:

> If I describe something as a *lemon*, or as an *acid*, I indicate that it is likely to have certain characteristics…; but I also indicate that the presence of those characteristics, if they are present, is likely to be accounted for by some 'essential nature' which the thing shares with other members of the natural kind. What the essential nature is is not a matter of language analysis but of scientific theory construction. (Putnam 1975: 140–141)

The central feature of this account is that some descriptions by identifying properties of a natural kind do not supply necessary and sufficient conditions for the extension of a concept: we can never be sure that description does not embrace individuals that belong to some other natural kind.

Here there is no need to look whether causal semantics is true or not and find ourselves entangled in the controversies typical of philosophy of language. Causal theory of reference shares a fairly wide acknowledgement due to the very same thought experiments of Putnam. However, the relatedness of this theory with empirical questions opens up a possibility for a sceptic to ask whether invoking it as a premise does not violate the original scenario, which Müller has fixed for the rest of the day. The problem is that of deciding the questions of reference before deciding major ontological issues, such as existence of an external perceivable reality. "From the perspective of a Cartesian for whom ontology is the most fundamental philosophical field, Putnam's argument indeed begs the question" (Steinitz 1994: 215), since the causal semantics gains its acceptability on the basis of above mentioned realism about natural kinds and their perceptual accessibility.

Of course, Müller realises this danger and carefully reformulates his externalist principle, so to achieve a perfectly neutral formulation. However, what is put in question is the very notion of reference that is used in the argument, and without which the argument does not take off. But, first, it would beg the question against the sceptic who denies the existence of any material world whatsoever, and this has been fixed

before the discussion started: "Putnam's argument does not concern itself with permanent dreams, evil demons and the like, the sceptic cannot use these more traditional hypotheses to launch her charge" (Müller 2001: 300). The very sceptical scenario under discussion, as Müller observers, acknowledges existence of certain material objects and cannot fail to be realistic about causation. Second, the notion of reference applied here is skimmed to such an extent, that it looks pretty formal indeed: "no reference to material objects without causality" (Müller 2001: 304).

So we come up with the formulation that can be secured for the final argument:

> (E) For a word in a given language to refer to tigers, its user must have been in appropriate causal contact with at least one tiger. (Müller 2001: 304)

Let me note, that such a formulation is perfectly acceptable for a sceptic, who would precisely argue, that BIV lacks the mentioned causal connection with any objects of the external material world, and, therefore, cannot achieve any true knowledge about it. The fact that (E) is concerned only with environmental factors of reference, and has nothing to say about the actual external (supposedly real) world, should not be overlooked either. So if anybody hopes that (E) can help her to overthrow the sceptic, this can be granted, provided the application of the statement is correct.

Externalism aside for a moment, let's have a look at how Müller prepares the disquotation principle for his argument. The principle, which he attributes to Alfred Tarski, had not been explicitly invoked by Putnam, but was introduced into semantic anti-sceptical arguments by Noonan (1998) and Brueckner (1999), who attempted to establish the desired conclusion – "I am not a BIV" – drawing upon the differences in disquotational conditions of BIV language and non-BIV language, which is supposedly our actual language.

Müller claims, that the principle

> (D) If, in the language I am actually speaking right now, the word 'tiger' refers to some thing, then it refers (in that language) to tigers. (2001: 303)

is devoid of any ontological commitment to the existence of tigers, and can be derived solely from our notion of reference and our usage of quotation marks. There is nothing the sceptic could say against this principle, if only to point out, that it is acceptable as long as it is read correctly, that is, as long as it can be applied to BIV language just as well as to non-BIV language, since according to the sceptical scenario there is no possibility of knowledge which of the two is the language I am actually speaking right now. To be more explicit, the term mentioned on the left side of the conditional must fall under the same interpretation function as does its occurrence on the right side of the same conditional. It also should be noted, in order to prevent mis-applications of (D), that it equally applies to BIV language, as to any other language we might imagine. I would restate it more formally like this: (D†) If, in some language, the word '*x*' refers to some thing, then it refers (in that language) to *x*. This is very important, since in Tarski's disquotational definition of truth the theorem that "no classical language L1 that is rich in syntactic resources can con-

tain its notion of truth" (Gupta 1998: 266) must be observed, and the relevant notion for L1 can only be formalised in L2, which is obtained as extension of L1 by adding a predicate 'true in L1'. The same goes for the disquotational principle invoked in anti-sceptic arguments. It can only be formulated in some metalanguage, but not in object language itself. This is where the interpretation functions are used. So, in case the language in question is a supposed non-BIV language, then, if the term 'tiger' refers to something, it refers to real tigers existing in space and time; and in case the language in question is a supposed BIV language, then the term 'tiger' refers (if to something at all) to bits and bytes in the computer generating the impulses and producing the simulated experience of the brain.

In any case, what is important, is that "given externalism, unless I somehow know that I am not a BIV, I fail to know that the truth conditions of my utterances are not strange, non-disquotational ones, and I fail to know that my utterances do not express strange non-disquotational belief contents" (Brueckner 1999: 48). On the other hand, as long as the application of the principle (D) does not transcend the restrictions imposed, "I can assume that my language is disquotational independently of whether or not I am a brain-in-a-vat. Even on the assumption I do not know that I am speaking English, say, as opposed to Bivese, if I know that my language is disquotational, I can know that whatever 'Snow is white' means in my language I may identify its truth-conditions by using that very expression" (Sawyer 1999).

The third thing that is essential to Müller's strategy is the fact "that the existence of computers is more than just compatible with the scenario" (Müller 2001: 308). So to say Müller intends to weave his argument around the three statements that do not seem to beg the question against the sceptic: (E), (D) and the existential statement "There are computers".

For the sake of deductive validity of some of his steps, he also introduces additional premise, which he qualifies as a "merely material biconditional":

> (A) There are tigers if and only if, in the language I am actually speaking right now, the word 'tiger' refers to some thing. (2001: 305)

Müller argues, that (A) is acceptable on the basis of the same reasons that make (D) acceptable. Well, this does not seem to violate the sceptical hypothesis, neither does this beg the question, as long as it is formulated in a metaphysically neutral way and does allow for possible true metalinguistic interpretations of (A) as uttered in BIV language, non-BIV language, and any other possible language.

IV.

> *Cypher:* You know, I know this steak doesn't exist. I know that when I put it in my mouth, the Matrix is telling my brain that it is juicy and delicious. After nine years, you know what I realize? [Takes a bite of steak] Ignorance is bliss. *The Matrix*

Let us see now, how the four statements that do not violate the sceptical scenario (S) can lead to overthrowing it. Müller's argument is set up as follows. First he replaces tokens of 'tiger' by tokens of 'computer' everywhere in the premises (E), (D) and (A). This seems

to make no difference, since the premises are concerned with the conditions of reference rather than zoology. On the other hand, it might seem to be problematic, because causal semantics was developed and applies first of all to natural kind terms and proper names, and computers, being artifacts, do not form a natural kind. For the sake of Müller's argument it can be imagined, however, that computers belong to certain natural kind, or that what he means by 'computer' is some hypothetical creature, that by genetic mutations or some other unfortunate accident has come to incorporate vats and brains the sceptic is concerned with.

The argument then proceeds as follows:

> (A*) There are computers if and only if, in the language I am speaking right now, the word 'computer' refers to some thing.
>
> (D*) If, in the language I am actually speaking right now, the word 'computer' refers to some thing, then it refers (in that language) to computers.
>
> (E*) For a word in a given language to refer to computers, its user must have been in appropriate causal contact with at least one computer.
>
> (-1*) There are computers.
>
> (0*) Envatted brains lack appropriate causal contact with computers. (From (S)).
>
> (1*) In the language I am actually speaking right now, the word 'computer' refers to computers. (From (D*), (A*) and (-1*)).
>
> (2*) In the language of an envatted brain, the word 'computer' does not refer to computers. (From (E*) and (0*)).
>
> (3) The language which I am actually speaking right now is different from the language of any envatted brain. (From (1*) and (2*)).
>
> (4) I am not a brain in a vat. (From (3)). (Müller 2001: 307).

I will argue, that, despite of auxiliary premise (A*), either the step from (A*), (D*) and (-1*) to (1*), either the step from (E*) and (0*) to (2*) is not valid in the sense Müller wants it. And even if there is a reading of these steps that renders them valid, such reading then invalidates the subsequent step from (1*) and (2*) to (3), and thus undercuts the whole argument.

My point will be made clear, if some additional notation in the language of the argument is introduced in order to index the semantic differences among different tokens of 'computer'. This will remove the confusion that arises due to syntactical identity of BIV language, non-BIV language and the language of the argument.

Let's stipulate, that in the language of the argument, 'R-computer' will stand for real computers actually existing in space and time; 'B-computer' for the computer-in-the-image, to which BIV's tokening of computer refers, and 'N-computer' will stand for uninterpreted term, whose reference is relative to the language it's uttered in.

The premises of the argument can then be restated thus:

> (A^) There are N-computers if and only if, in the language I am speaking right now, the word 'computer' refers to some thing.
>
> (D^) If, in the language I am actually speaking right now, the word 'computer' refers to some thing, it refers to N-computers.
>
> (E^) For a word in a given language to refer to N-computers, its user must have been in an appropriate causal contact with at least one N-computer.
>
> (-1^a) There are R-computers.
>
> (-1^b) There are B-computers.
>
> (0^) Envatted brains lack appropriate causal contact with R-computers.

The reason why (A^), (D^) and (E^) cannot be stated using determined metalinguistic terms should be clear from the discussion of externalism and disquotation provided above. What can be derived from these premises? Remember that according to the scenario (S), I cannot know whether the language I am actually speaking right now is the language of a BIV or the language of non-BIV. Consequently, I cannot know what is the interpretation of my word 'computer'. Therefore, the step from (A^), (D^) and (-1^) is overdetemined by (-1^a) and (-1^b), and cannot take me to the conclusion that my word 'computer' refers to R-computers. If I knew it did, I would not need the antisceptic argument and this discussion. So, the only possible interpretation of (1*) that does not violate the sceptical scenario, and is not false, is:

(1^) In the language I am actually speaking right now, the word 'computer' refers to some N-computers.

It would be false to read 'computer' in (0*) as B-computer, since it is the only kind of computer with which BIVs have causal connection appropriate for reference. Therefore, (E^) and (0^) yield:

(2^) In the language of an envatted brain, the word 'computer' does not refer to R-computers.

Now since I cannot know whether 'computers' in my language refers to R-computers or B-computers (see (1^)), there is no valid step from (1^) and (2^) to (3). The differences in conditions of reference between BIV and non-BIV can be established without begging the question against the sceptic, but not the differences between BIV language and the language I am actually speaking right now. And hence, the conclusion should be:

(4^) I do not know whether I am a BIV.

Of course, there is another possible reading of the argument that would take us to conclusion that we are not BIVs-in-the-image. But this is irrelevant, since, first, it could take a much simpler argument to establish that, and, second, as Wright puts it, "it does not sustain the conclusionthat in the way we would like, the nightmare is refuted" (1991: 73).

I assume that this also indicates that semantic externalism and disquotation, formulated in a way not begging the question against the sceptic, cannot amount to any stronger conclusion then that of the original argument provided by Putnam (1981), whether supplemented with the fact that there are external objects, or without it.

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PATNEMIŠKASIS ANTISKEPTIKAS, VERSIJA 3.00: NAUJI PAVIDALAI – SENI REZULTATAI

Jonas Dagys

S a n t r a u k a

Straipsnio tikslas – aptarti ir įvertinti epistemologijoje pasitaikančius antiskeptinius argumentus, paremtus kauzaline referencijos teorija. Ypatingas dėmesys skiriamas Hilary Putnamo „smegenų megintuvėlyje“ argumento patobulintam variantui, kurį pasiūlė Olafas Mülleris. Pasak Müllerio, jo patobulintasis argumentas remiasi metafiziškai neutraliais semantinio eksternalizmo ir kabučių panaikinimo (diskvotacijos) principais. Tačiau skrupulingesnė šių principų ir galimybės juos pritaikyti antiskeptinėms reikmėms analizė atskleidžia Müllerio argumentacijos spragas. Jis prieina prie savo išvados supainiodamas sintaksiškai vienodas, tačiau semantiškai skirtingas „smegenų megintuvėlyje“ kalbos, „normalios“ kalbos ir metakalbos ištaras. Müllerio argumento rekonstrukcija ir analizė leidžia tvirtinti, kad jeigu jo prielaidos būtų formuluojamos taip, kad nekliūtų skeptikui, t. y. būtų metafiziškai neutralios, argumentas neįrodytų nieko daugiau nei originalus Putnamo suformuluotas argumentas.

Pagrindiniai žodžiai: skepticizmas, Olaf Müller, semantinis eksternalizmas, kabučių panaikinimas, smegenys mėgintuvėlyje.

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