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✤ recovering the profound metaphysical insights of medieval thinkers for our own philosophical thought is highly desirable, and, despite the vast conceptual changes in the intervening period, is still possible; but

 \diamond this recovery is only possible if we carefully reflect on the logical framework in which those insights were articulated, given the paradigmatic differences between medieval and modern logical theories.

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If you are interested in joining, please contact <u>Gyula Klima</u> (Philosophy, Fordham University) by e-mail at: <u>klima@fordham.edu</u>

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Editor's Note

The present volume collects the proceedings of two different, yet content-wise essentially related sessions, not formally organized by the Society, but all related to recent research into the thought of the great medieval nominalist philosopher, John Buridan.

An attempt to synthesize and somewhat advance this research has been made in my recent monograph *John Buridan*, published by Oxford University Press in 2009. One of the central arguments in that monograph is taken up and criticized in an extremely thought-provoking paper by Claude Panaccio, presented at the APA convention in NYC, in December 2009, followed by my reply.

In the monograph, as it was focused on Buridan's nominalist semantics, I did not have a chance to go in detail into his metaphysics. As it turns out, there is much more to Buridan's nominalism than what transpires in his semantics, as is shown by the exchange I had with Henrik Lagerlund at the UWO Colloquium on Ancient and Medieval Philosophy, and by Calvin Normore's stimulating paper presented at the above-mentioned APA session, concerning Buridan's metaphysics *per se* and its "backwards implications" concerning his logical semantics.

Gyula Klima

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Gyula Klima:

Demon Skepticism and Concept Identity in a Nominalist vs. a Realist Framework^{*}

Introduction: Demon skepticism and concept identity

Let me begin with a cautionary remark: despite the numerous historical references and claims I am going to make in the following discussion, this is not meant to be a historical, scholarly paper. These historical allusions will merely provide some motivation for sorting out the theoretical issue I am interested in, namely, the relationship between the possibility of "Demon skepticism" and the conditions of concept identity in radically different theoretical frameworks.

The historical motivation for this issue (whether it is *actually* historically accurate or not) is that, apparently, the emergence of "Demon skepticism" as a major theme coincides with the emergence of Ockhamist nominalism, despite the fact that the major nominalist thinkers were decidedly non-skeptical, indeed, anti-skeptical. Furthermore, it also appears that in the paradigmatic "moderate realist" conceptual framework of the 13th century, "Demon skepticism" was just not an issue. Hence, the question naturally arises whether there is some systematic, theoretical reason in the 13th-century moderate realist framework that *excludes* the possibility of "Demon skepticism", while there is something else in the nominalist framework that *allows* the emergence of this possibility.

In what follows, I will argue that the nominalist conception introduced certain subtle changes in the identity conditions of concepts that allowed the possibility of "Demon skepticism" excluded by the realist framework.

In order to see the point of this claim, however, we first need to get clear on the relationship between the conditions of concept-identity and "Demon skepticism" in general, at least, a sufficiently "sharpened" version thereof. The "sufficiently sharpened version" I have in mind consists in the claim that *it is possible that all our cognitive acts (and hence all our categorematic concepts) are non-veridical.*

In this description of "Demon skepticism", I take the property of veridicality to be a property of a cognitive act which *does in fact represent what it appears to the subject having this mental act to represent*. For instance, my visual act that appears to represent a donkey standing in front of me is veridical just in case there really is a donkey standing in front of me. Again, my universal intellectual concept of donkeys is veridical just in case it does represent real donkeys, whether

^{*} This is the paper presented at *The 4th Montreal Workshop on Nominalism* (on "Skepticism"), Montreal: UQAM, 2009, Claude Panaccio is referring to below, in his fn. 16.

past, present, future, or merely possible ones, on account of its universal mode of representation. By contrast, my visual act would be non-veridical, if it appeared to represent a donkey standing in front of me, whereas in fact, unbeknownst to me, it would represent a mule, or a merely virtual donkey generated in virtual reality, or even nothing. Again, my universal intellectual concept of donkeys could be non-veridical if it represented not donkeys, but, say, only virtual donkeys in the virtual reality of "the Matrix", whatever those are.

In what follows, I'll take it that the philosophical fables of an omnipotent deceiver, the mad scientist keeping our brains in vats, or the rebellious robots holding us in the virtual reality of "the Matrix" are devised precisely to motivate the acceptance of the possibility that perhaps *all* our cognitive acts are non-veridical in this sense, keeping our consciousness in a state of complete and perfect deception, subjecting all our judgments to *in principle incorrigible error*.

Whether this would indeed be the point of any actually proposed version of "Demon-skepticism" is irrelevant from the point of view of my present concern, namely, the relationship between Demon-skepticism and concept identity. For the present interpretation of the point of Demon-skepticism makes it clear that the possibility of Demon-skepticism can only emerge if the veridicality of our mental acts is contingent, that is to say, if we can have the very same mental acts appearing to represent the very same objects whether or not they in fact represent those objects: for example, I can have the very same intellectual and visual acts appearing to represent donkeys, whether they in fact represent donkeys or perhaps merely the virtual donkeys of the Matrix.

Demon skepticism and concept identity in a realist framework

However, if we take a closer look at this alleged possibility, a little reflection should show that the perfect, in principle undetectable deception it is arguing for is in fact not a genuine possibility for several reasons.

First, on the part of the object itself: A perfectly deceptive object would have to be perfectly similar to something other than itself. To be sure, it is not at all difficult to find naturally deceptive objects, which to the casual observer, on account of their superficial, partial similarity, appear to be something other than they are. Upon a casual look, we can easily mistake a mannequin for a human person on account of its similar visual appearance, but upon closer observation, it is easy to detect the mistake in our judgment, by checking the thing's further properties, which soon betray that it is not a living, breathing, sensing human being. Still, of course, we might enhance the chance for deception by increasing the similarity, say, by producing an android instead of a mannequin, namely, one that exhibits all "vital signs" the mannequin could not exhibit. Thus, eliminating the distinctive characteristics, i.e., those that one of the two things has and the other does not, indefinitely increases the deceptiveness of the deceptive object. However, as long as there is any distinctive characteristic, the distinction of the two things is in principle detectable. On the other hand, if there remains no distinctive characteristic, that means that the two things have all the same characteristics, which means they are not two things, but one and the same. Therefore, there cannot be a perfectly deceptive object that is in principle undetectably similar to another, unless it really is distinct from the other, and so it does have some distinctive characteristics, which, however, are in principle "unreachable" by a cognitive subject. However, since any feature of any object is in principle reachable through its effects, an in principle unreachable distinctive feature of an object would have to be causally

disconnected from the rest of reality, i.e., it would not be a part of reality, so it would not be real. But then it would not be a really distinctive characteristic, which would lead to the same absurdity as before, namely, that the perfectly deceptive object is altogether the same as what it is allegedly "mistaken" for.

Second, perfect deception is impossible on the part of the cognitive subject: For if the subject has only non-veridical concepts, then any judgment he forms with those concepts would be false, as for instance the judgment formed by Neo that there is a donkey in front of him, when his consciousness is merely affected by a virtual donkey, say, a piece of computer code producing in him a visual act resembling the visual act a normal person would have when seeing a real donkey. But then, the perfectly deceived cognitive subject's judgment to the effect that he is a perfectly deceived cognitive subject (in the sense that all his cognitive acts are non-veridical) would also have to be false, which is absurd, because according to the assumption he *is* a perfectly deceived cognitive subject. Thus the assumption, entailing its own denial, cannot be true, that is, despite possible appearances to the contrary, it is not genuinely possible for a cognitive subject to be perfectly deceived in the sense defined.

But the *third*, from our point of view most directly relevant reason why perfect deception is impossible, concerns the moderate realist conception of the *relationship between the cognitive subject and the objects of his cognitive acts*. For, as we could see, Demon-skepticism in the sense defined is possible, only if our simple cognitive acts are merely contingently veridical, leaving open the possibility that perhaps *all* our simple cognitive acts are non-veridical. However, if a certain conception of the identity conditions of these cognitive acts demands that at least some cognitive acts are essentially veridical, that is, their veridicality is part and parcel of their conditions of identity, then this conception directly excludes the possibility of Demonskepticism.

However, this is precisely what we can see in Aquinas and other moderate realist authors, picking up on Aristotle's *dictum* that a cognitive power is not deceived concerning its proper object. However, instead of marshalling historical evidence for this claim, let's just see, in purely speculative terms, what, if anything, moderate realism has to do with the idea of the essential veridicality of some cognitive acts with regard to their proper object.

Formal unity, concept identity and veridicality in a realist framework

The necessary veridicality of simple cognitive acts with regard to their proper objects is a consequence of the Aristotelian idea that the cognitive act is nothing but the form of the object in the cognitive subject in a different mode of existence. One way of demystifying this apparently obscure description is by appealing to the nowadays common idea of encoding and decoding, i.e., the process of transferring the same information through different media in a way that allows it to be reproducible in a numerically different copy. For instance, the recording and playback of a song is an obvious case of this process. The song played back is a copy of the song originally played, where the reproduction of the song is possible by virtue of the preservation of the same information in the record, which in this sense, is but the form of the song originally played (the modulation of airwaves in the studio) in a different mode of existence, say, existing in the form of the pattern of tiny pits on the surface of a music CD encoding the modulation of airwaves.

Without arguing for it, let us just assume for the time being that this "demystification" correctly captures the original Aristotelian idea. However, even granting this perhaps dubious proposal, one may still have doubts whether it would yield the idea of the necessary veridicality of some simple cognitive acts with regard to their proper objects. After all, just as the pattern of pits on the surface of the CD could in principle be produced by something other than the recording apparatus, without the original song actually played in the studio, so the same cognitive act could be produced in the subject without a "matching" object, rendering the act non-veridical, just as the Demon-scenario would suggest. So, apparently, the suggested "demystification" of the Aristotelian idea supports precisely the contingency of the veridicality of cognitive acts and thus the possibility of Demon-skepticism, contrary to what it was devised to illustrate.

However, to proceed from the better known to the lesser known, let us take a closer look at the case of the sound recording. The pattern of tiny pits on the surface of the CD is certainly producible by means other than the recording apparatus. After all, the same kind of laser beam with the same kind of modulation would produce the same pattern, if the modulation of the laser beam were not driven by the modulation of electronic signals driven in turn by the modulation of airwaves hitting the microphones in the recording studio, but, say, by a computer producing the same modulation without any sound whatsoever. However, and this is the important point, in that case the pattern of pits on the surface would not be a record of any sound whatsoever: it may be an ornament, it may be a surface feature, etc., but not a record of some sound. For the pattern of pits to qualify as the record of a song, it has to be part of the system of encoding and preserving information about the actual modulation of air vibrations constituting the song. Indeed, that for the record of a song as such it is essential to encode information about the song whereas it is accidental that it is this pattern of pits in this system of encoding is further confirmed by the fact that if I "rip" the track from the CD onto my computer's hard drive, then I get the same song onto my hard drive (for if it were not the same song, then the RIAA would certainly have no business harassing me for pirating it), but now recorded in a different medium, this time encoded in the pattern of different magnetic polarities on the surface of the disk.

Describing this process in the language of Aristotelian hylomorphism, we can say that the form of the song that first informed air in esse reale, existing as the modulation of air waves, first was received in the matter of the CD in esse intentionale, without the matter it originally informed, merely coinciding with the pattern of pits informing the CD in esse reale, and then again it was received in the matter of the hard disk, in another instance of esse intentionale, again, without the matter of the original, this time coinciding with the pattern of polarities informing the disk in esse reale. Thus, in the whole process, what qualifies any real feature of any medium as the record or encoding of the original form is "the formal unity" of these real features in the sense that the system of encoding secures transferring and preserving the same information throughout the process. If the chain of transferring and preserving the same information is broken, and a merely accidentally similar pattern is produced by some other means, then it may be "misinterpreted" by the next decoder as a recording of some original, but it will never be the same, precisely because it does not fit into the chain in the same way, which is essential for the identity of any encoded bit of information. Thus, to switch to another example, even if a recorded TV program could not be distinguished from the live feed of the same by just looking at the screen, the two are not the same, and their difference is detectable precisely by looking at the process of the transfer of information producing the exact same looking, but essentially different images on the screen.

However, if on the strength of these examples we are willing to interpret the idea of formal unity between cognizer and cognized thing in the sense of the preservation of information, so that this is essential for the identity of the cognitive act insofar as it is an encoding of the form of the object, then it is not hard to see that those simple cognitive acts that are identified precisely in terms of receiving, storing and further processing information about their proper objects will have to be *essentially veridical*. For then these simple cognitive acts, regardless of what firing patterns of neurons in the brain or what spiritual qualities of an immaterial mind realize them, will only count as the cognitive acts encoding information about their proper objects, if they do in fact represent those objects that they appear to represent to the cognitive subject, for they present or represent to the subject precisely the information they received, stored and further processed about their proper object.

Thus, on this conception, the veridical acts of perception, memory, and intellectual apprehension (as opposed to the non-veridical or contingently veridical acts of hallucination, imagination, misremembering, judging, etc.) are essentially, and not merely contingently veridical.

But then, within this conception, the idea of "Demon skepticism" as described earlier is ab ovo excluded. Things are as they appear in our veridical acts of cognition, but sometimes, on account of the similarity of a veridical act of cognition to a non-veridical act or to a veridical act of cognizing something else, we may rashly judge things to be the way they appear to be through the non-veridical, act or to be that other thing. But since the veridical act is essentially veridical, and so it cannot be the same as a non-veridical act or the veridical cognition of something else, we can correct our mistake, by detecting the difference, as when we say, "Oh, I thought the bed was on fire, but it was just a dream" or "Oh, I thought I saw water on the road, but it was just a mirage". But similar observations apply in the more elaborate cases. For instance, in the scenario of "the Matrix", the characters eating the peptide goo in the reality of Zion have to realize that when they say it tastes like chicken, they have no genuine conception of chickens, as the only experiences they have about "chickens" are the virtual "chickens" of the Matrix. They could say they had a conception of chickens through those virtual experiences only if they could look at those virtual experiences as somehow carrying genuine information about genuine chickens, say, if whoever created the program had modeled the virtual chickens after real chickens and presented them as representations of real chickens, in the way a nature video provides us with genuine information about genuine animals in remote lands. However if the virtual, quasiexperiences these people had in the Matrix are merely similar to genuine experiences, but *are not* genuine experiences (whether through direct perception or "mediated perception" as through a documentary), then the concepts abstracted from those quasi-experiences *are not* the concepts of genuine things that would produce similar, but never the same, experiences. Thus, again, when it comes to the identity conditions of intellectual concepts, which on the Aristotelian account would be just further processed, abstracted information about the genuine objects of genuine experiences, it is clear that on this conception they also have to be essentially veridical.

But then, one may ask, how come the idea of "Demon-skepticism" could emerge at all? What is it in the nominalist conception that allowed its emergence?

Concept identity and veridicality in a nominalist ontology

One plausible answer seems to be ontological. After all, if it is the "moderate realist" idea of formal unity that yields the necessary veridicality of some cognitive acts, thereby "blocking" the

emergence of Demon skepticism, then the nominalist rejection of this idea, based on the nominalist aversion to anything having a "less than numerical unity", would remove precisely this obstacle.

However, the situation is more complicated. For even if the idea of formal unity is rejected in a nominalist ontology on account of denying something having a "less than numerical unity", the idea of formal unity between a cognizer and an object of cognition seems to be different from the idea of formal unity between distinct members of the same species. While the idea of formal unity between members of the same species consists in these members being informed by instances of the same form, the idea of the formal unity between cognizer and cognized thing consists in the cognizer being *informed about* an instance or several instances of the same form. So, what unifies these two types of formal unity is not so much the Scotistic ontological idea of there being something of a less than numerical unity, but rather the Avicennean-Thomistic epistemological idea of the possibility of preserving the same information in different modes of existence, whether in esse reale or esse intentionale, without the Scotistic ontological commitment to some positive entity having a mind-independent, less than numerical unity. But even apart from these, perhaps obscure niceties, there seems to be another, non-ontological feature of the nominalist framework that allows the emergence of Demon-skepticism, namely, the feature I will refer to by the fancy phrase: "the separation of phenomenal and semantic content of mental acts". That's a mouthful, so I'd better spend the rest of this paper explaining it.

The separation of phenomenal and semantic contents of mental acts

In a recent, extremely thought-provoking paper on Ockham's externalism, Claude Panaccio argued that despite possible appearances to the contrary, Ockham's absolute concepts do have some aspectuality. These concepts represent their objects to the cognizers possessing them *as having some properties*, although this aspectuality is not part of their semantic content, that is to say, they do *not* represent their objects *in relation to* these qualities, but absolutely, without any connation of any qualities whatsoever. Prompted by these considerations, I would propose a distinction between two types of cognitive content: *phenomenal content* and *semantic content*.

The *phenomenal content* of a cognitive act is what the possessor of the act is becoming aware of by virtue of having the act, the way the represented object of the act appears to the subject, or, in short, what the object of the act appears as to the subject. The semantic content of a cognitive act, on the other hand, is what the act objectively represents by virtue of its information content, regardless of whether the subject of the act becomes aware of it or not, or, in short, what the object of the act is, whether the subject is made aware of it by the act or not. If Panaccio's interpretation of Ockham's doctrine is correct (which I believe to be the case), and my distinction is genuinely applicable to it (which is questionable, but that's not the point now), then we may spot another, non-ontological, but rather epistemological or psychological reason for the possibility of Demon-skepticism within the framework of Ockham's nominalism. For the possible divergence of what I identified as the phenomenal and semantic contents of cognitive acts may clearly allow the possibility of a subject having the same phenomenal contents or states of awareness even if, unbeknownst to the subject, the cognitive acts on account of which the subject has these states of awareness differ widely in their semantic content. For instance, the concept I form of donkeys as a result of my experiences with genuine donkeys will have as its semantic content real donkeys (comprising past, present, future, or merely possible real donkeys,

on account of the universality of the concept), but it will have as its phenomenal content whatever these objects appear to me as, namely, gravish brown, long eared, etc., braving animals. Again, the concept I would form as a result of my exposure to virtual donkeys in the Matrix would have as its semantic content only virtual donkeys, but it would have as its phenomenal content whatever these objects appear to me as, namely, grayish brown, long eared, etc., braying animals. Thus, on this account, I might have cognitive acts of radically different semantic contents, yet, of the same phenomenal content; and so, on account of the divergence between these contents, even if these cognitive acts were not or even could not be the same, I could never know their difference. And if this result is generalizable possibly to all cognitive acts, then we are at once stark in the middle of the modern Demon scenario: I could have the same phenomenal consciousness, whether or not all my cognitive acts are non-veridical. Therefore, even if nominalist authors *postulate* the sameness of semantic content as a necessary condition for the identity of concepts, as many of them did with varying degrees of necessity (mind you, they had to postulate this, unlike the realists, for whom this is just a natural implication of their conception), it would still be possible to have different concepts with different semantic contents, while with the same phenomenal content. Thus, the separation of semantic and phenomenal contents seems to be another, non-ontological feature of the nominalist framework that would allow the emergence of Demon-skepticism.

Semantic and phenomenal contents and concept identity in both frameworks

To make this last point about the separation of phenomenal and semantic contents in the nominalist framework even clearer, I would like to conclude this paper by contrasting the nominalist scenario with how the distinction of these contents would appear in a realist framework. The point of the contrast is that in that framework, these contents would be one and the same: as far as a simple cognitive act is concerned, what its object appears as (its *phenomenal content*) is what the object is (its *semantic content*). To put it simply, the realist framework comes with a "WYSIWYG epistemology", as far as simple, necessarily veridical cognitive acts are concerned.

To be sure, this does not render cognizers absolutely infallible in this framework, but *the source* of their deception is different. For the source of their deception is not the possible nonveridicality of any and possibly all cognitive acts (as it is in the nominalist framework, which thereby allows the possibility of Demon-skepticism), but rather the fact that while our simple, veridical cognitive acts, such as sense perception, or intellectual apprehension, are necessarily veridical, we also have non-veridical, or possibly non-veridical acts, such as imagination, or judgment. Thus, while the object of a simple veridical act always appears as what it is (on account of the identity of phenomenal and semantic contents of a simple perception or apprehension and the formal unity between cognizer and object), it may not always appear to be what it is (on account of the similarity of this phenomenal content to the phenomenal content of another act, representing something else), resulting in a *false judgment*. But the simple, veridical acts are always and necessarily veridical: a mirage always appears as a mirage, just as it is supposed to appear by the laws of optics, and not as water, although on account of its similar appearance, I may misjudge it to be water. Thus, although in this framework there are nonveridical cognitive acts, accounting for error, the simple cognitive acts are essentially veridical, thereby blocking the possibility of Demon-skepticism.

But how can this be true? If I were raised in the virtual reality in the Matrix, wouldn't my concept acquired from exposures to virtual donkeys at least be *phenomenally indistinguishable* from the concept I would acquire through exposures to real donkeys (even if it could not be *the same* on account of the doctrine of formal unity)? Well, if I were raised in the Matrix, I would never acquire a concept of real donkeys, only of virtual donkeys, which are not donkeys. So I would not a have a donkey-concept encoding the quiddity of real donkeys at all from which the virtual donkey-concept would be phenomenally indistinguishable.

On the other hand, if I were to get freed from the Matrix, and were to get exposed to real donkeys, then I would be able to acquire a genuine donkey-concept, which then would certainly be distinguishable from my virtual donkey-concept (even if they could be leading me to some false judgments on account of the perceptual similarity between virtual donkeys and real ones), for then, *at least in principle*, I would be able to trace their different causal origins, accounting for their different contents. The difference will then clearly consist in the fact that my genuine donkey concept has as its (semantic as well as phenomenal) content genuine donkey-essences, while the other would have merely virtual donkey-appearances generated by some computer code, which I can certainly distinguish from each other, just as in "normal, ordinary" reality I have my genuine T-Rex concept from paleontology and another from the movie "Jurassic Park", which, again, I can certainly distinguish from each other.

By contrast, in the nominalist scenario, for want of formal unity establishing a logically necessary connection between cognizer and object, I *could* acquire the same concepts, the same mental acts, regardless of whether I acquire them in virtual or genuine reality, unless there is a *stipulation* concerning the identity conditions of these mental acts in terms of their semantic content. However, on account of the separation of semantic and phenomenal content, that would still leave the *possibility* of having different mental acts acquired in virtual and genuine realities respectively, but with the *same, in principle indistinguishable* phenomenal contents. But this seems precisely to be the ultimate reason for the *possibility* of the emergence of Demon skepticism, eventually giving rise to the idea of "the lonely consciousness" of a Cartesian mind.

Claude Panaccio:

Late Medieval Nominalism and Non-veridical Concepts

Content externalism, as promoted by Hilary Putnam, Tyler Burge and many other prominent analytic philosophers in the last three or four decades, is the thesis that the content of our thoughts at a given moment is not uniquely determined by our internal states at that moment.¹ In its causalist versions, it has often been presented as a deep revolution in philosophy of mind. Yet a number of medievalists have recently stressed the presence of significant externalist tendencies in fourteenth century nominalism, especially in William of Ockham.² Let me simply mention here, to give the most salient example, that Ockham insists, in Book II of his Commentary on the Sentences, that an intuitive cognition, whether intellectual or sensitive, always has a determinate singular thing as its object, although taken in itself it resembles a plurality of singular things, and that what fixes which singular object it is that a given intuitive cognition is a cognition of, is not the internal shape of this cognition, but which determinate thing caused it.³ Two intuitive cognitions, then, could be maximally similar to each other to the point of being indistinguishable by an observing angel; yet, they would have different singular objects if they were caused by different singular things. Which, I take it, is a typical case of causal content externalism, at least for intuitive cognitions. Admittedly, the case for the externalist interpretation of Ockham's — or Buridan's for that matter — theory of general concepts is more indirect, but still quite strong, as it seems to me, insofar as the causal connection with external objects also plays a decisive role in fixing the objects of such general concepts, the internal shapes — or features — of the concepts being insufficient to the task.

¹ In recent philosophy externalism with respect to linguistic and mental contents was most famously put forward in Hilary Putnam's "The Meaning of 'Meaning'" (in H. Putnam, *Philosophical Papers*, vol. 2: *Mind, Language, and Reality*, Cambridge: Cambridge University Press, 1975, 215-271) and Tyler Burge's "Individualism and the Mental" (in *Midwest Studies in Philosophy*, vol. 4, P. French *et al.* (eds.), Minneapolis: University of Minnesota Press, 1979, 73-121). For good overviews of the very rich discussion that followed, see in particular: Pessin, Andrew and Sanford Goldberg (eds.), *The Twin Earth Chronicles. Twenty Years of Reflection on Hilary Putnam's* "The Meaning of Meaning", Armonk (NY): M. E. Sharpe, 1996; Mark Rowlands, *Externalism. Putting Mind and World Back Together Again*, Montreal/Kingston: McGill-Queen's University Press, 2003; Richard Schantz (ed.), *The Externalist Challenge*, Berlin: Walter de Gruyter, 2004.

² See Peter King, "Two Conceptions of Experience", *Medieval Philosophy and Theology* 11 (2004), 1-24, and "Le role des concepts selon Ockham", *Philosophiques* 32/2 (2005), 435-447; Calvin Normore, "Burge, Descartes, and Us", in *Reflections and Replies. Essays on the Philosophy of Tyler Burge*, Cambridge (MA): The MIT Press, 2003, 1-14; Claude Panaccio, *Ockham on Concepts*, Aldershot: Ashgate, 2004 (esp. ch. 9, 165-179); and "Ockham's Externalism", in *Intentionality, Cognition and Mental Representation*, Gyula Klima (ed.), New York: Fordham University Press, 2011.

³ William of Ockham, *Reportatio* II, q. 12-13, *Opera Theologica* [= *OTh*] V, 287-288 (my translation).

I am well aware that this externalist interpretation has been — very cleverly — challenged in the case of Ockham by Susan Brower-Toland in a recent paper,⁴ but I will nevertheless assume it to be correct without further defence. I have discussed in some details Susan Brower's arguments in a recent conference in Parma and I concluded that clever and important as they are, they can be answered.⁵

My goal here, instead, will be to discuss a recent criticism, not of the externalist interpretation of late-medieval nominalism but of late-medieval nominalism itself, interpreted as externalist, that has been proposed by Gyula Klima towards the end of his remarkable 2009 book on John Buridan.⁶

Klima's point is that the medieval nominalist variety of content externalism, about natural kind concepts in particular, makes it vulnerable to Demon skepticism, which another variety of medieval content externalism — that of Aquinas, namely — is able to avoid. And Klima further argues that the nominalist variety of content externalism commits its proponents, even more damagingly, to accepting a certain notion which, he claims, can be shown to be contradictory. If successful, Klima's argumentation, then, purports to be a refutation of a central aspect of late-medieval nominalism, not only in Buridan — who is, of course, his main target in the book —, but in Ockham as well and, presumably, in all of their followers. My own point here will be that Klima's argumentation is *not* successful. The whole discussion, I hope, will help us reach a deeper understanding of some important aspects of Ockham's and Buridan's nominalist philosophy of mind.

1. Klima's criticism

I'll come back later on to Klima's detailed arguments. But let me first sketch his general criticism. It can be broken down into three theses, which I will call theses (A), (B), and (C).

(A) Nominalist externalism opens the door to Demon skepticism.

Demon skepticism, as Klima understands it, is the idea that for all we know, we might be entirely mistaken about everything. We might be what Klima calls a 'BIV' (a technical appellation he forms after Putnam's brains in vats). A BIV in Klima's parlance is "a thinking subject having no veridical concepts".⁷ And a veridical concept is defined by him as a concept "that represents what it appears to represent", while a Non-veridical concept "is one that represents something different from what it appears to represent".⁸ Demon skepticism, then, is the idea that BIVs are possible, and that they are possible in such a way, that, for all I know, I myself — or you yourself — might be a BIV.

⁴ Susan Brower-Toland, "Intuition, Externalism, and Direct Reference in Ockham", *History of Philosophy Quarterly* 24 (2007), 317-335.

⁵ Claude Panaccio, "Intuition and Causality: Ockham's Externalism Revisited", forthcoming in *Quaestio*, special issue on *Intentionality in Medieval Philosophy*, Fabrizio Amerini (ed.).

⁶ Gyula Klima, *John Buridan*, Oxford: Oxford University Press, 2009.

⁷ G. Klima, *op. cit.*, 254.

⁸ Ibid.

The deep reason why late-medieval nominalism, according to Klima, opens the door to Demon skepticism is that it conceives of the relation between natural kind concepts and their objects as being a contingent relation. This is what the late-medieval nominalists' specific brand of content externalism ultimately amounts to. If the relation between a concept and its objects is contingent, then it is possible — at some level of possibility — that the same concept should have different objects from those it does have in the natural order of things. In other words, two concepts could be essentially indistinguishable from one another, while one of them has certain objects while the other has other objects. And then we could be irremediably confused about the objects of our own concepts. In accepting the contingency of the relation between concepts and that I — or you for that matter — might be one of them. Late-medieval nominalism thus leads to Demon skepticism.

(B) Demon skepticism rests upon a contradictory notion.

Klima thinks he has an argument to show that BIVs in his sense are impossible. This argument is inspired by Putnam's well-known criticism of the brain in a vat hypothesis, but it is actually quite original, and a bit complex. The gist of it, however, is straightforward: it is that the acceptance of the mere possibility of BIVs leads to a contradiction, a certain proposition turning out to be both true and not true on that hypothesis. I'll discuss that argument later on. Let me just stress at this point that this is the main piece of Klima's attack on late-medieval nominalism. As we will see, both Ockham and Buridan do admit the possibility of radical divine deception — which is a version of Demon skepticism — and they are indeed committed up to a point to the theoretical possibility of what Klima calls a BIV. If successful, then, Klima's argument in support of thesis (B) yields a *reductio ad absurdum* of one central tenet of late-medieval nominalism.

(C) There is in medieval philosophy another variety of content externalism that does avoid Demon skepticism, that of Aquinas namely.

The central notion here is what Peter King has aptly dubbed 'conformality'.⁹ The conformality account of cognition is the idea that at the basic level of simple cognitive units —such as concepts —, the very *form* of the cognized objects is present within the cognizer, although with a different mode of being. On this account, as Klima writes, "a simple cognitive act is the form of the object received in the cognitive subject according to the nature and capacity of the subject, in a mode of being different from the mode of being of the object".¹⁰ According to this approach, the connection between a concept and its objects is one of identity, not real identity of course, but *formal* identity. And this is enough, Klima claims, to exorcise Demon skepticism, since formal identity, whatever it is, is not a contingent relation: "those that are formally the same", he says, "are essentially related, by essential similarity. *If* these things exist, *then* they *necessarily* are of the same kind, by *logical necessity*".¹¹ This conformality account of conceptual cognition

⁹ See Peter King, "Rethinking Representation in the Middle Ages: A Vade-Mecum to Mediaeval Theories of Mental Representation", in *Representations and Objects of Thought in Medieval Philosophy*, Henrik Lagerlund (ed.), Aldershot: Ashgate, 2007, 87-108 (esp. 88-92).

¹⁰ G. Klima, *John Buridan*, 247.

¹¹ *Ibid.* (with the author's italics).

was inspired by certain passages from Aristotle, and also by Avicenna. Klima, somewhat controversially, attributes it — with several other commentators, I must say — to Thomas Aquinas, and concludes that Aquinas's conformalist epistemology avoids the pitfall of late-medieval nominalism, since, in contrast with late-medieval nominalism, it is not committed to even the mere theoretical possibility of the existence of BIVs endowed with only Non-veridical concepts.

In Klima's view, though, the conformalist epistemology does not amount to the rejection of content externalism, since it is itself a variety of content externalism. It can even be labelled, according to Klima, as "a sort of strong externalism about mental acts", being "characterized by the idea that the *reality* of the objects of our simple cognitive acts along with their *genealogy* is part and parcel of their identity conditions".¹² We thus have, in this view, two varieties of content externalism in late-medieval philosophy, one of which — the nominalist one — is claimed to have slipped into inconsistent commitments because it regarded the relation between concepts and their objects as contingent, while the other one — the Thomistic one — avoids this pitfall by resorting to a conformalist account of cognition which takes the cognitive relation to be an essential and necessary relation.

2. Non-veridical concepts

Before I turn to a critical discussion of Klima's arguments, let me pause a bit in order to reflect on the intriguing idea of a Non-veridical concept, which is so crucial to Klima's line of reasoning. The main issue in the whole discussion, according to Klima, is whether BIVs *in his sense* are possible or not; and what he defines as a BIV, as we saw, is a thinking subject having *only* Non-veridical concepts, concepts, that is, that do not represent what they appear to represent. This idea, however, is not crystal-clear — at least not to me — and requires a few more explanations.

A first thing to note about it is that it is somewhat surprising that Klima should thus make Demon skepticism rest on the Non-veridicality of concepts, taken as simple cognitive units, rather than on the Non-veridicality of beliefs. Most versions of Demon skepticism that I am familiar with require only the possibility that most or many of our beliefs should be false. If this is a possibility indeed, and if we can't securely exclude that such a possibility is actualized in our own case, then we cannot be said to *know* any of these propositions that could be false, however strongly we believe them. This, I take it, is the gist of Demon skepticism as usually understood. But the possibility that all, or most, or many, of our beliefs should be false does not require in turn that all the concepts that occur in such possibly false beliefs should themselves be Nonveridical in Klima's sense.

It was a common place of Aristotelian and medieval semantics that truth and falsehood in the strict sense occur only where there is a composition of different concepts within a propositional structure, whether affirmative or negative.¹³ Mistakes, then, are possible only at the level of propositional contents, and not at the mere level of simple conceptual contents. And this holds

¹² *Ibid.*, 248 (with the author's italics).

¹³ See e.g. Aristotle, *Metaphysics* E, 4, 1027b18-22.

for late-medieval nominalism as well as for more traditional approaches such as Aquinas's or Scotus's. Ockham, in addition, clearly distinguishes between a judgement and the mere apprehension of a propositional content, a judgement in his terminology being the *assent* which a cognitive agent gives to a proposition.¹⁴ Yet the same proposition, as Ockham acknowledges, could be thought — or apprehended — by the same cognitive subject without assent or dissent. In such cases no mistake could occur. A mistake is possible only where there are judgements — or beliefs, if you prefer.

Now, it could be the case in this view that all or most of one's beliefs should be mistaken, even if the cognitive agent is perfectly capable of thinking — or apprehending — true propositions and, a fortiori, non misleading concepts. Actually, the very possibility of having a mistaken belief does require, within the compositional framework of medieval semantics, that the mistaken cognitive subject should at least be capable of thinking — or apprehending — certain true propositions, as many true propositions, indeed, as he has false beliefs, since, given the systematicity of mental language, the agent should, for any false proposition that he believes, be capable of thinking the negation of this proposition, even if he doesn't believe this negation to be true.

And nothing in the late-medieval nominalists's explicit acceptance of certain forms of Demon skepticism directly prevents the mistakenly believed propositions or their (thinkable) negations to be made up out of perfectly good concepts. Consider, for instance, the most famous passage where Ockham admits of the possibility of divine deception even in the simplest sort of perceptual judgement such as 'there is a man here' or 'there is something white in front of me'.¹⁵ What happens in such cases of divine deception, according to Ockham, is that God *directly* causes within the cognitive agent an 'act of believing', a judgemental act, which is an assent to the false proposition. But this in no way requires that the false proposition which is thus assented to be constituted of misleading concepts, since the constitutive concepts in such a case play no causal role whatsoever in the production of the assent. The assent being directly produced by God, nothing is required from the constitutive concepts. They could indeed be as good, as concepts go, as any other old concepts!

So it is a bit surprising that Klima should so strongly link Demon skepticism with the Nonveridicality of concepts, let alone with the possibility that *all* of our concepts should be Nonveridical. This is not how Demon skepticism usually goes, and it is not required in particular by the way medieval — especially nominalist — hypotheses about radical divine deception were formulated.

However relevant it is for clarifying the whole issue, this observation, nevertheless, must not be taken to jeopardize Klima's main point. Klima's point is that whether they're explicit about it or not, late-medieval nominalists were *committed* to the possibility of thinking subjects endowed only with Non-veridical concepts, while such thinking subjects are logically impossible. So keeping in mind the important distinctions just mentioned between concepts and mental

¹⁴ See e.g. William of Ockham, Ordinatio, Prologue, q. 1, art. 1, OTh I, 16.

¹⁵ See William of Ockham, *Quodlibeta Septem* V, 5, *OTh* IX, 498, 1. 72-76. On this particular passage, see Elizabeth Karger, "Ockham's Misunderstood Theory of Intuitive and Abstractive Cognition", in *The Cambridge Companion to Ockham*, Paul V. Spade (ed.), Cambridge: Cambridge University Press, 1999, 204-226.

propositions on the one hand, and between judgements — or beliefs — and the mere uncommitted entertaining of thoughts on the other hand, we still have to scrutinize a bit further the very idea of a Non-veridical concept.

In his book, Klima remains laconic about it. But one thing that is clearly implied by his definitions of a veridical concept as a concept which represents what it appears to represent, and of a Non-veridical concept as one that does not represent what it appears to represent, is that natural kind concepts at least, whether veridical or not, normally have two aspects to them: they represent, and they appear to represent. How this distinction is to be cashed out has been further explained by Klima in a paper he gave in May 2009 in Montreal.¹⁶ Klima then resorted to a distinction I had myself held Ockham to be committed to.¹⁷ My point was that Ockham, like most medieval philosophers, remained committed across all of his philosophical works to the idea that a categorematic concept — or even an intuitive act for that matter — is normally a similitude of a number of external things. But I also insisted that this similitude does not uniquely determine the extension of the concept for Ockham. In the case of a simple natural kind concept in particular, the extension of this concept in a given mind, from an Ockhamistic point of view, is determined by which singular thing — or things — originally caused its formation in this mind, and this extension includes this singular original cause or causes plus everything that is essentially equivalent to this cause, everything, in other words, that is cospecific - or cogeneric, according to the case at hand — with this original singular cause. So there is, on the one hand, what the concept is a similitude of, and on the other hand, what it has in its extension. And those two groups need not necessarily coincide. In "Ockham's Externalism", I further surmised that the similitude aspect of a natural kind concept should best be understood within an Ockhamistic framework — and although Ockham is far from explicit about it — as a recognition schema, the function of which being to help the cognitive agent to categorize things as falling or not under the said concept. Now this is the distinction Klima said in Montreal he wanted to use. Considered as a mental unit, a natural kind concept, on this account, has an extension on the one hand — which is what, in Klima's parlance, it 'represents' — and it incorporates on the other hand a recognition schema which inclines the cognitive agent to judgemental acts applying the concept to whatever it is that fits this schema — those things that fit the schema being, in Klima's vocabulary, what the concept 'appears to represent'.

A Non-veridical concept, then, is a concept with a recognition schema that does not suit the things that belong to its extension (if any).

As I understand the distinction between the extension of the concept and the recognition schema it incorporates, it would be normal, though, for any substance concept at least, that its recognition schema should not perfectly suit its extension. Insofar as the recognition schema has to do with perceivable, and mostly accidental features of the objects, while their belonging or not to the extension of the natural kind concept depends on their internal essential nature, there is bound to be in most normal cases a discrepancy to some degree between the extension of the

¹⁶ G. Klima, "Demon Skepticism and Concept Identity in a Nominalist vs a Realist Framework", paper presented at the 4th Montreal Workshop on Nominalism (on "Skepticism"), Montreal: UQAM, 2009.

¹⁷ See C. Panaccio, *Ockham on Concepts*, 2004, chap. 7: "Concepts as Similitudes", 119-143; and "Ockham's Externalism" (see n. 2 above).

concept and the set of things that fit its recognition schema. And it is to be presumed indeed, in such an account, that extensionally equivalent concepts are associated with different — and non equivalent — recognition schemata in different singular minds. From a late-medieval nominalist perspective, a concept always is a singular thing in a singular mind: a singular quality actually. And for both Ockham and Buridan, the meaning of a natural kind concept is nothing but its extension: the concept 'horse' signifies horses, and nothing else. Two cognitive subjects, then, are said to have the 'same' natural kind concept, not when they literally share a given single mental quality, but when the two of them have, each in his own mind, extensionally equivalent mental concepts. Nothing prevents, however, each of these concepts to incorporate a different recognition schema, with one of these schemata being more efficient than the other: a seasoned birdwatcher, after all, is more efficient than a beginner in correctly categorizing a given bird as a warbler, say, or as a nuthatch. Which is to say that the seasoned birdwatcher's recognition schema.

Yet even the seasoned birdwatcher might be misled in some cases — by very well imitated robots, for instance. The presumption is that the recognition schema associated with a concept within a particular mind very rarely suits exactly the extension of this concept, and most human mental concepts thus end up being Non-veridical up to a point. I take it that what Klima wants his BIVs to be equipped with are Non-veridical concepts of a worst kind than this, concepts, that is, with associated recognition schemata that would mislead the cognitive agent in *most* cases, or maybe in *all* cases. As we can see, there is room here for further precisions to be brought, but I'll settle for concluding at this point that a Non-veridical concept in Klima's sense is a mental unit endowed with a (possibly null) extension and incorporating — or associated with — a *systematically* misleading recognition schema, a recognition schema, that is, that systematically inclines the cognitive agent towards false categorization judgements. And a BIV in Klima's sense will be a thinking subject having *only* such misleading concepts in his mind.

3. Conformality and Demon skepticism

This being clarified, we can now come back to Klima's three theses. I'll take them in the reverse order, as this will prove more illuminating. Let us start, then, with thesis (C), according to which the conformality approach to cognitive content efficiently eschews Demon skepticism. There is a number of things to be said here.

First, I have very strong doubts about the attribution of the conformality account of cognition to Aquinas. It is true that Aquinas sometimes says things such as "cognition takes place insofar as what is cognized is within the cognizer".¹⁸ But when he gets serious about explaining what it means for the cognized thing to be within the cognizer, he is usually very explicit that this means nothing but that the cognized thing is represented within the cognizer by some similitude of it: "what is intellected", he says — and by this he means essential forms — "is not in the intellect by itself, but through its similitude".¹⁹ Or again: "something is cognized insofar as it is

¹⁸ Thomas Aquinas, *Summa theologiae* I, 6, 1.

¹⁹ *Ibid.* I, 76, 2, *ad* 4.

represented in the cognizer, and not insofar as it is existing in the cognizer".²⁰ Note that he does not merely say in this passage that the cognized thing is not cognized insofar as it *really* exists in the cognizer, but that it is not cognized insofar as it exists in the cognizer, period. No relevant distinctions among modes of existence are suggested here. What ultimately accounts for cognition in Aquinas is not some sort of identity, but representational similitude.

And he is very explicit, in addition, that representational similitude does not require in any way the sharing of a nature, as the conformality account wants it: "Between the cognizer and the cognized thing is not required a similitude by concordance in a nature, but by representation only: for it is clear that the form of the stone within the soul is of an entirely different nature than the form of the stone in the matter, but it is insofar as it represents it that it is the principle leading to its cognition".²¹

On the other hand, however, it seems to be the case that the conformalist account of cognition has been defended indeed by some other late-medieval authors, albeit less important ones. In his paper at the Parma conference of last June, the French scholar Aurélien Robert has quoted little known texts, especially by the Italian Averroist Angelo of Arezzo, that do seem to be quite clear about that.²² So whether Aquinas's or not, the conformalist account of cognition was voiced in medieval philosophy; and although most probably not genuinely Thomistic, it might be worth discussing it, especially if it has the virtues Klima claims it has.

A second thing I want to say about Klima's thesis (C) is that I also have strong reservations about classifying the conformality account of cognition as a variety of content externalism, let alone as a form of *strong* content externalism, as Klima does. Klima's point is that in the conformality account, the "*reality* of the objects of our simple cognitive acts along with their *genealogy* [their causal genealogy, that is] as part and parcel of their identity conditions".²³ This would be unproblematically externalist if it simply meant that for any mental unit to be an instance of the concept of *rabbit*, say, it needs to have been caused by real rabbits, just as for anybody to be the son of Noah, he needs to have been engendered by a really existing Noah. But Klima needs more than that. In order for the relation between what is in the cognizer and the cognized thing to be *logically* necessary, as he insists, or metaphysically necessary — as opposed to mere natural necessity or linguistic necessity —, it must be essential for whatever is in the mind to be the very thing that it is, that it should have this very object. But this is a form of strong *internalism* rather than externalism. For a doctrine of cognitive content to be a brand of

²⁰ Thomas Aquinas, *Quaestiones disputatae de veritate* II, 5.

²¹ Thomas Aquinas, *Scriptum super libros Sententiarum* IV, 49, 2, 1, *ad* 7. The whole question, admittedly, is a controversial issue in Aquinas's studies. I have given my own interpretation in "Aquinas on Intellectual Representation", in *Ancient and Medieval Theories of Intentionality*, Dominik Perler (ed.), Leiden: Brill, 2001, 185-201. See also for a more recent nonconformalist reading of Aquinas: Jeffrey Brower and Susan Brower-Toland, "Aquinas on Mental Representation: Concepts and Intentionality", *The Philosophical Review* (2008), 193-243.

²² See Aurélien Robert, "Intentionality and Categories in Medieval Latin Averroism", forthcoming in *Quaestio*, special issue on *Intentionality in Medieval Philosophy*, F. Amerini (ed.). Aurélien Robert has also edited some of the most relevant texts of Angelo of Arezzo in "Noétique et théorie de la connaissance chez Angelo d'Arezzo", *Mediaevalia philosophica polonorum* 37 (2008), 95-167.

²³ G. Klima, *John Buridan*, 248.

externalism, as I understand it, it must allow for the possibility that two different cognitive subjects be in maximally similar internal states while entertaining different cognitive contents. But if the connection between the internal states of the cognitive agent and their objects is logically or metaphysically necessary, as the conformalist account claims it to be, then it would seem to be impossible that two different cognitive subjects should be in the same internal states while entertaining different cognitive contents. The conformality account, therefore, is not a form of content externalism, as I think the label is usually employed. This, of course, might be a mere question of terminology, but in the context of a symposium on varieties of externalism, it seems to have some relevance.

A third point I would like to make about thesis (C) is that *even if* the conformality account should succeed in eschewing Demon skepticism in Klima's very strong sense, as he claims — and we'll come back to that in a moment —, it is doubtful that it can counter the most usual forms of Demon skepticism that we meet with in the literature, especially when the conformality account is coupled with a theology of God's omnipotency. Let us not forget that medieval authors — Aquinas included — would standardly distinguish between having or producing a concept as a simple cognitive unit, and judging or believing that something is or is not the case. So even if a given cognitive subject should have only veridical concepts inclining him to true judgements, the judgements of that cognitive subject could still end up being mostly false — or even being all of them false — if some intervening cause should occur that would prevent the subject to give his assent to the propositions that his concepts would incline him to accept, and that would cause him to give his assent instead to some other — false — propositions. Especially in a context where God's omnipotency is taken to be a dogma, I don't see how the possibility of being radically deceived could be neutralized, even for a subject having veridical concepts in Klima's sense, concepts, that is, that represent exactly what they appear to represent.

But now the main thing to be said about thesis (C) is that, as far as I can see, the conformality account will not succeed anyway in eschewing even Klima's very strong form of Demon skepticism. It cannot neutralize, that is, the possibility of a cognitive agent having only - or mostly - Non-veridical concepts. Here is why. A concept, as we saw, is Non-veridical when it is associated somehow with a misleading recognition schema that inclines the thinking subject to give his assent to false judgements, especially false categorization judgements. Now, however you think of it, not even a conformalist can reasonably claim that a natural kind concept should necessarily be associated in human beings with a non misleading recognition schema. Recognition schemata can vary from one person to the other, and some of them can be more misleading than others. This suggests that the connection between the extension of a given natural kind concept in a human mind and the recognition schema that this person uses for identifying things as falling or not under the said concept, is *contingent*. And the contingency of this link is decisively confirmed in the case of natural kind concepts for external material things by the fact that categorization judgements in such cases are normally based on perception, and human perception is normally sensitive to accidental features of the perceived objects, such as their colour, their size, their way of moving, and so on. Being perceptual, such recognition schemata do not directly reach the essential features of the objects. This is something that medieval philosophers standardly acknowledged. And even a conformalist has to admit that the link is contingent in human beings between what a concept represents — its extension — and what it appears to represent. The conformalist, of course, might say that the recognition schema is not normally part of the concept itself in human beings, but that it is externally associated with it. But he can't reasonably deny that the recognition schema, whether internal or external to the

concept itself, is but contingently connected with what the concept represents. And if *this* link is contingent, then the conformalist is no better off than the nominalist in eschewing the very possibility of systematic discrepancies in any human mind between what a given concept represents and the categorization judgements that its associated recognition schema inclines the thinking subject to. Especially with an omnipotent God around ...

4. Autopsy of an alleged contradiction

Let us now turn to Klima's thesis (B), according to which the very idea of a BIV is conceptually unacceptable since it leads to a contradiction. This, as we saw, is the main piece of Klima's attack on late-medieval nominalism. It rests on a complex argument in eight steps. Here is this argument, as given by Klima himself:²⁴

| (1) | A thought meant to express an actual state of affairs, whoever forms it, can be true only if it contains no Non-veridical concepts | (this is taken by Klima to be 'self-evident'; we'll come back to this claim in a minute). |
|-----|---|---|
| (2) | A thought meant to express an actual state of affairs, whoever forms it, is true if and only if it expresses an actual state of affairs | (also taken to be self-evident) |
| | | |
| (3) | A BIV has no veridical concepts | (by Klima's own definition of what a BIV is). |
| (4) | s is a BIV | (this is precisely the hypothesis the possibility of which is to be tested). |
| (5) | Then, the thought that s is a BIV, whoever forms it, is true | (by 2 and 4). |
| (6) | So, the thought that s is a BIV, formed by s, is true | (by universal instantiation from 5). |
| (7) | But the thought that s is a BIV, formed by s, contains no veridical concepts | (by 3 and 4) |
| (8) | So the thought that s is a BIV, formed by s, is not true | (by 1 and 7) |
| | | |

And now we have reached a contradiction, between (6) and (8) namely. Since (1) and (2) are taken to be self-evident, and (3) is true by definition, and (5) to (8) follow from the rest by noncontroversial logical inferences, the problem must be with (4), according to Klima, namely with the hypothesis that there exists a BIV.

What are we to think of this argument? Well first and foremost, I see no reason to accept premiss (1), which Klima takes to be self-evident. The truth of most elementary propositions in medieval semantics — and in any good semantics for that matter — depends on the relation between the extension of the subject and the extension of the predicate. This is what medieval logicians such as Ockham and Buridan worked out in terms of the so-called 'supposition-theory' (theory of *suppositio*). A proposition such as 'all As are Bs', for example, was said to be true if and only if all the supposite of the subject are among the supposite of the predicate, if and only

²⁴ *Ibid.*, 255-256.

if, in other words, the extension of the subject is included in the extension of the predicate. This is a matter of what the subject and the predicate represent. The truth of a proposition in no way depends on what the subject and predicate appear to represent. But Non-veridical concepts, in Klima's sense, are deficient only in that they do not represent what they appear to represent. Which is simply irrelevant for the truth or falsehood of the propositions in which they occur.

Of course, it might be relevant as to whether the thinking subject endowed with such Nonveridical concepts will *believe* a certain proposition or not. But premiss (1) is not about believing, it is about the very possibility of the truth of certain propositions. Premiss (1), then, not only is not self-evident, but it is straightforwardly false. Since it is crucial for the derivation of (8), the whole argument as it is collapses.

One problem with the argument as Klima formulates it, is that it has to do only with the possibility of forming certain propositions and with their truth or falsehood, and never with the matter of believing these propositions or not. But given the systematicity of human thought, whoever can form a false proposition can also form a true one, simply by negating the former proposition (whether he believes any of them or not). If a BIV was unable to form any true proposition, he would be unable to form any false ones as well, and he could barely be said to be a thinking subject at all.

Now, we might try to reformulate the argument in terms of judgement or belief rather than in terms of the mere capacity to form propositions. Yet I don't think it would work any better. We could try for example to replace premiss (1) with something like:

(1') A thought meant to express an actual state of affairs can be believed by a thinking subject who forms it, only if it contains no Non-veridical concept.

But that wouldn't work either. For one thing, we would have to introduce somewhere in the reasoning the assertion that s — the BIV — *believes* that he himself is a BIV. But that in no way follows from the mere hypothesis that s is a BIV. Certainly, most BIVs, if there are any, don't believe that they are BIVs (*we* certainly don't believe that we are BIVs, whether we are or not). And anyway, there is no reason whatsoever to accept the truth of premiss (1'). A thinking subject might be led to give his assent to any proposition, including propositions containing Non-veridical concepts. He might, for example, be caused to do so by God!

My conclusion, then, is that Klima has not shown — and has no good prospect for showing — that the possibility of a BIV as he understands it leads to contradiction. Late-medieval nominalism, insofar as it is committed to this possibility, is thus left unshaked.

5. Late-medieval nominalism and BIVs

But now, is late-medieval nominalism really committed to the possibility of BIVs in this strong sense, as claimed by thesis (A). Actually, I think it is, up to a point. But this commitment, as far as I can see, ends up being philosophically allright.

First, as I mentioned earlier, there is a variety of Demon skepticism that the late-medieval nominalists would typically concede, and that does not require that the deceived subjects should be BIVs in Klima's sense. Ockham saliently insisted, as we saw, that God could directly produce

in any created thinking subject an assent to any false proposition about what exists or does not exist in the immediate environment of the subject.²⁵ As such, this is entirely compatible with the constitutive concepts of those false propositions being veridical in Klima's sense. Since these concepts would then play no causal role at all with respect to what the agent assents to in the situation, whatever it is that they incline the subject to is irrelevant.

Yet, this is not the end of the matter. Both Adam Wodeham — a pupil of Ockham who became one of the leading nominalist figures of his time — and John Buridan — who was tremendously influent — concede the possibility that we be radically deceived by God's supernatural intervention. But the way they describe such deceitful situations is a bit more complex than what we have in Ockham. Wodeham, for one, concedes that any created intellect "can be deceived about any contingent truth concerning external things", because whatever belief is caused in the subject either by God *or by nature*, God can arrange or rearrange external things so that this belief turns out false.²⁶ It is true that this possibility is explicitly limited by Wodeham to contingent beliefs about external things; he insists immediately after that some of our judgements about our own soul are infallible, such as 'I am' or 'I live'. But the point I want to stress now is that the way the deceiving, when it occurs, is supposed to work in this Wodeham passage, is quite different from what we had in Ockham. God here does not simply cause a false belief in the victim. He rearranges some of the external things themselves so that one or more of the beliefs of the agent, *however they were caused*, become false. And this brings us much closer to what Klima's BIVs are supposed to endure.

Buridan illustrates the same point in his development on knowledge in his *Summulae de Dialectica*.²⁷ Suppose, he says, that I have been naturally caused to give my assent to the true judgement that 'the sun is bright', and that as a consequence of such a non-misleading natural process I still believe at nine o'clock that 'the sun is bright'. But now suppose that unbeknownst to me, God, in the meanwhile, has extinguished the sun. My belief, then, even if it was formed by a reliable natural process, now has become false, due to this supernatural intervention. God's intervention in this case, contrary to what we had in Ockham, does not consist in directly inducing in me the false belief, but in changing the external objects of the belief so that it becomes false.

Does *that* open the way to the possibility of BIVs as thesis (A) wants it ? Well, up to a point, yes. Let us suppose that I have acquired my concept of a rabbit in the usual natural way by meeting with real rabbits. I have thus been led to incorporate in — or associate with — this concept a reliable recognition schema. But now suppose God changes the world by removing all rabbits from it and replacing them by robots that strikingly look like rabbits. All my categorization judgements of the form 'this is a rabbit' would thus be false, and there would now be a systematic discrepancy between what my concept of rabbit represents, namely rabbits, and what it appears to represent in the modified world, namely robots. Which is to say that my concept of

²⁵ See n. 15 above.

²⁶ Adam Wodeham, *Lectura secunda in primum librum Sententiarum*, R. Wood, éd., Prologue, q. 6, parg. 16, St. Bonaventure (NY): The Franciscan Institute, 1990, Vol. I, 169.

²⁷ See John Buridan, *Summulae de Dialectica* 8, 4, 4, Engl. transl. by G. Klima, New Haven (CT): Yale University Press, 2001, 709.

rabbit, even if it was naturally acquired in normal circumstances, has become a Non-veridical concept. Suppose now that this situation is generalized to all my natural kind concepts: I will have become a BIV ! Late-medieval nominalists are indeed committed to such a possibility.

It has to be noted, though, that the extent of my being deceived would not, even in this unfortunate situation, be as radical as Klima thinks it should be in the case of what he takes to be a BIV. For one thing, as I hinted at earlier, both Wodeham and Buridan limit the mistaken beliefs I would be led to have by my possession of such Non-veridical concepts to contingent beliefs about external things. Wodeham excludes from such fallible beliefs my belief that I myself exist, or that I live.²⁸ As to Buridan, he explicitly excludes from the threat of such deception beliefs consisting of terms that supposit for God²⁹, presumably because God cannot remove himself from existence as he can do with rabbits. And he also excludes (somewhat more tentatively) beliefs consisting of terms taken in what he calls 'natural supposition', such as the belief that rabbits are animals, which remains true independently of the actual existence of rabbits. When its terms are taken in natural supposition, a proposition such as 'rabbits are animals' comes down to 'if something is a rabbit, then it's an animal' which remains true even if God annihilates all rabbits.³⁰

The sceptical hypotheses conceded to be theologically possible by Wodeham and Buridan are not as radical, then, as Klima's Demon skepticism, since the deceived subjects would still have in these hypotheses *some* true beliefs — and even some knowledge —, as well as some *not entirely* misleading concepts, such as the concept of being or the concept of a living thing. Of course, God being omnipotent, he could simply suppress those true beliefs and those not entirely misleading concepts from the mental apparatus of his victims, who would then be true BIVs in Klima's most radical sense: they would be thinking subjects endowed *only* with systematically misleading concepts and having only false beliefs. But they would also by the same tack be severely impoverished thinking subjects of a sort that we are not, and that we need not worry about.

Still, it is true that we cannot exclude, on the nominalists's hypotheses, the possibility that we should be supernaturally deceived by God to a very large extent about contingent extramental matters, especially in our categorization judgements such as 'this is a rabbit', 'this is a man', 'this is an animal', and so on. But how philosophically damaging is this concession to Demon skepticism, if Klima's thesis (B) — about the contradiction entailed by the admission of BIVs — is renounced, as I think it should be ?

After all, as Klima himself neatly explains in his Buridan book, Buridan has a clear answer to this sort of skepticism.³¹ It is that although we cannot entirely exclude the possibility of radical supernatural deception, we can disregard it in the course of doing natural sciences or metaphysics, as well as in the normal course of human affairs. Many propositions that we firmly

²⁸ Adam Wodeham, op. cit., 169.

²⁹ John Buridan, op. cit., 709.

³⁰ *Ibid.* For Buridan's theory of 'natural supposition', see *Summulae de Dialectica* 4, 3, 4: "De divisione suppositionis communis in naturalem et accidentalem."

³¹ See G. Klima, *John Buridan*, ch. 11: "The possibility of scientific knowledge", 234-251.

believe, such as that the sun is bright, are such that they "cannot be falsified by any natural power or by any manner of natural operation" [*Summulae de dialectica* 8.4.4., 709], at least not without our noticing it. And the sort of natural certainty that we can attain with respect to such propositions is all we need for having *knowledge* in natural sciences and in human affairs. In the relevant sense, therefore, scientific knowledge and moral knowledge are unproblematically within our reach despite the supernatural possibility of divine deception.³²

In the context, this seems to me to be a perfectly good answer, especially within an externalist framework. We can be attributed knowledge with respect to those of our firm beliefs that were acquired in ways which are in fact reliable in the current natural order, to the point that we can safely exclude all relevant natural alternatives.³³ The remaining alternatives, then — those of a supernatural sort or those wild possibilities in favour of which we have no indication whatsoever — can simply be disregarded as irrelevant with respect to the sort of knowledge we're after, even though they are not logically or theologically impossible. Klima is dissatisfied with this answer because he thinks that it leads to a contradiction on the one hand, and that, on the other hand, we have another doctrine available, even in medieval philosophy, that can do better in countering skepticism, namely Thomism. Those are the theses I have labelled (B) and (C). But since we have found reasons to reject both these theses, we can settle, I guess, for the Buridanian externalist reply to Demon skepticism. The world being as it is, and our concepts having the causal genealogy that they do have, we can rest reassured that most of them are not de facto systematically Non-veridical, even if they could be if God badly enough wanted it so. The recognition schema naturally associated with a given concept is usually quite reliable because it has been implemented by way of those very natural causal connections that determined the extension of the concept. Since the extension of my concept of rabbit was determined by my natural contacts with rabbits, and since rabbits usually look like rabbits, my concept of rabbit will most probably end up representing pretty well what it appears to represent. Philosophers cannot reasonably ask for much more.

³² See John Buridan, *Summulae de Dialectica* 8, 4, 4.

³³ This corresponds, basically, to Alvin Goldman's brand of epistemic externalism in *Epistemology and Cognition* (Cambridge [MA]: Harvard University Press, 1986) and to his way of facing skepticism. For good looks on the recent debate between internalism and externalism in the field of epistemology, see e.g.: *Epistemology. Internalism and Externalism*, Hilary Kornblith (ed.), Oxford: Blackwell, 2001; and *Internalism and Externalism in Semantics and Epistemology*, Sanford Goldberg (ed.), Oxford: Oxford University Press, 2007. For an externalist reading of Ockham's account of knowledge, see Claude Panaccio, « Le savoir selon Guillaume d'Ockham », in *Philosophies de la connaissance*, Robert Nadeau (ed.), Quebec / Paris: Presses de l'Université Laval / Vrin, 2009, 91-109; and Claude Panaccio and David Piché, "Ockham's Reliabilism and the Intuition of Non-Existents", in *Rethinking the History of Skepticism. The Missing Medieval Background*, Henrik Lagerlund (ed.), Leiden: Brill, 2010, 97-118.

Gyula Klima:

Demon Skepticism and Non-Veridical Concepts

Claude Panaccio perfectly reconstructed my position and my argument he is criticizing. In fact, I have nothing to complain about his interpretation of my idea of a BIV or of non-veridical concepts, *up to a certain point*. To see exactly where our interpretations of the relevant issues diverge, it will be useful to take a closer look at the idea of "Demon Skepticism" itself.

In *The Matrix*, the celebrated movie premised on a brains-in-a-vat scenario, there is an interesting conversation among "the rebels", i.e., persons living in the devastated physical world of the 22^{nd} century, who originally acquired their concepts in the virtual reality of "the Matrix", a computer program feeding artificially generated humans, nurtured in complete sensory isolation from physical reality, the virtual experiences of 21^{st} century America as *we* know it. The conversation concerns what the artificial peptide goo served for dinner tastes like. The suggestions range from runny egg to Tasty Wheat to snot. But it soon turns out that the main concern *is not* that one of the interlocutors makes an *error in judgment* in the sense that what he deems, say, Tasty Wheat taste is really oatmeal, or chicken, or tuna taste. Rather, the concern is that the interlocutors literally have *no idea* of Tasty Wheat taste or chicken taste or tuna taste, or of genuine chicken or real tuna, for that matter. Having acquired their concept of, say, chickens in the virtual reality of the Matrix, in complete cognitive isolation from a real world that at least used to be populated by real chickens, this concept can only represent the virtual objects of this virtual reality, whatever those are, but *not* the real objects of physical reality.

But if we come to think about it, Descartes had the same sort of concern when he worried *not* only about the possible *formal falsity*, as he called it, of our judgments, but also about the *material falsity* of our simple ideas, whether they are simple sensory or intellectual ideas, and whether these intellectual ideas are *adventitious*, empirical ideas, *acquired* somehow from sensory ideas, or *innate* intellectual ideas, co-created with our minds. For Descartes is not so much concerned about the sort of relatively easily corrigible error in judgment that stems from ordinary sensory illusion (after all, that's how we *know* about sensory illusion at all, namely, by our ability to detect it!), as about the systematic, *in principle incorrigible error* stemming from the *material falsity* of our simple ideas, whether they are *acquired* in a scenario of systematically deceptive quasi-experiences envisioned in the "dreaming argument" or *planted* in our minds by its maker or an omnipotent manipulator, as envisioned in the "demon argument".

Descartes' way out of the epistemic predicament of the Demon scenario is to show that it is not really possible: at least *one* of my simple ideas must be materially true, namely, the idea of myself; for otherwise I would have to accept the obviously self-defeating claims that I do not doubt, I do not think, I do not exist, whereas all these are refuted by the very act of doubting everything on account of thinking about the alleged possibility of the Demon scenario. Having proved the material truth of the idea of *ego*, Descartes moves on to prove the material truth of the idea of God, by proving God's existence, eliminating the possibility of there being an omnipotent deceiver, which in turn proves the reliability of clearly and distinctly perceived truths of reason.

From this, namely, the *formal truth* of principles of reason, Descartes infers the material truth of all innate ideas making up these principles, which is the guarantee of their applicability in *all possible* creations, but which still leaves open the doubt concerning the empirical reality of an *actual* creation on account of the dreaming scenario. Descartes' crucial move, then, is to use the material truth of innate ideas and the identity of the formal objects of these ideas in all possible creations and the formal objects of *some* of our sensory ideas in *this* creation to infer that the latter also have to be materially true, adequately representing objects of an empirical, actual physical reality.

This little, somewhat tendentious, recapitulation of the material to be covered in any first year history of philosophy seminar merely served to illustrate two important points with regard to the idea of Demon skepticism as I understand it. First, Demon skepticism concerns not only doubt concerning the formal truth of our judgments, but also doubt concerning the material truth of our simple ideas, or, in other words, the veridicality of our simple concepts. Second, since according to Descartes, the formal truth of judgments entails the material truth of the ideas making them up, by contraposition, he takes it to be self-evident that the material falsity of our ideas entails the formal falsity of the judgments they make up, provided this material falsity is understood as the complete *failure of these ideas to engage reality*, which is the way I would interpret my description of a non-veridical concept.

In fact, semantically speaking, we may clarify the idea of a non-veridical concept's failure to engage reality by saying that in a formal semantics, categorematic terms expressing nonveridical concepts and those expressing veridical ones would take their semantic values from two disjoint sets, even if, perhaps, phenomenally, from the perspective of the minds that form these concepts, they may be indistinguishable. Thus, for instance, if I have the concept of chickens formed in physical reality upon encountering genuine chickens, then the concept I express by the word 'chicken' represents genuine chickens. On the other hand, if I was raised in the Matrix, what I can express by the word 'chicken' is at best a concept that represents virtual chickens, whatever those are, but definitely not chickens as we understand them. Still, the claim of the Demon argument is that I can have phenomenally the exact same mental contents whether I acquire my concepts in genuine or in virtual reality. So, the concept acquired in the Matrix would appear to me to represent the same in the same way as the concept acquired in genuine physical reality, despite the fact that only the latter represents chickens, and the former does not. It is this idea of a non-veridical concept that I briefly described by saying that it appears to represent something that it does not represent. But with this understanding of the idea of a non-veridical concept (which is what really counts, since in discussing my argument what matters is what I mean by it), I think Panaccio's objections can easily be answered.

In the first place, although Panaccio is right in pointing out that one may be deceived in one's judgments even with veridical concepts, and even systematically, by an omnipotent deceiver, nevertheless, it should be clear that this is not the only, or even the primary, concern of those who deal with Demon skepticism, especially after Descartes. At any rate, since my argument is clearly not meant to engage any particular historical version of Demon-skepticism, but rather to use an abstract, extreme version of the very idea to bring out the implications of the nominalist conception of concept identity that allows the historical versions to crop up at all, these considerations are not really important. What *is* important is the question whether on my understanding of non-veridicality the idea of a subject having only non-veridical concepts is

really self-contradictory, and thus whether a BIV as I defined it is indeed impossible, and finally, whether the nominalist conception is nevertheless committed to its possibility.

Panaccio's main objection to my argument showing the impossibility of a BIV as I defined it is that the first premise of my argument that I claim to be self-evident is not self-evident at all, or indeed, it may well be false. However, what we can and what we cannot take to be a self-evident claim clearly depends on its precise understanding; and I think our difference over the selfevident status of this claim, namely, the claim that it is not possible to form true judgments with non-veridical concepts, hinges on our different understanding of what is involved in my notion of a non-veridical concept. But I hope that the foregoing made it quite clear that when I am talking about a non-veridical concept acquired or planted in our minds under the conditions of complete cognitive isolation from an external reality in a Demon-scenario, then these concepts cannot possibly apply to that reality, and so any judgment meant to apply to that reality, but formed with such concepts, simply cannot be true of that reality. To be sure, this idea may be extreme, but it is not really far-flung from Descartes' conception of material falsity. So, I think the idea of a BIV as described in my argument is not unjustifiably compared to Descartes' possibly completely deceived lonely consciousness. But, again, the issue whether my notion of a non-veridical concept is a faithful reconstruction of Descartes' notion of a materially false idea is beside the point. What matters is that on my understanding of a non-veridical concept, any judgment meant to be about an actual state of affairs of external reality, but formed with nonveridical concepts cannot be true, since its concepts just cannot reach that reality. Or, somewhat more precisely, the semantic values of the terms of the proposition expressing this judgment are simply not elements of the universe of discourse representing that reality. Thus, if I utter the sentence 'A donkey is brown', expressing a mental proposition or judgment or thought I form with concepts I acquired in the Matrix, then the supposita of the terms of this sentence as I use it cannot be real donkeys and real brown things, so my judgment simply cannot express the actual state of affairs that some real donkey is identical with some real brown thing. Therefore, this sentence *expressing my judgment* cannot be true, although, the sentence according to its proper meaning is meant to express that actual state of affairs. So, on this understanding of the semantics of non-veridical concepts, I hope it is clear that the incriminated first premise of my argument *must be* self-evident, and that it concerns truth and not belief, despite Panaccio's claim to the contrary. But then, on this understanding, the argument does prove the inconsistency of the notion of a BIV as defined. However, of course, this conclusion is damaging to the nominalist conception, only if it can be shown that the nominalist conception is indeed committed to the possibility of a BIV.

Panaccio does not deny that the nominalist conception is in fact committed to this possibility, at least as a remote, logical possibility, which is all I claimed in my argument. But it is also easy to see why this commitment follows from the nominalist conception, according to which, and this is the crucial point, the veridicality of our simple concepts is their *logically contingent feature*. For if any and all of our simple concepts is merely contingently veridical, then, since they are veridical or non-veridical logically independently of one another because of their simplicity, it is logically possible that *all* of them are non-veridical at the same time. But this is precisely the possibility featuring in the definition of a BIV, a cognitive subject whose concepts and generally all mental contents are phenomenally indistinguishable from ours, while *all* its simple concepts are non-veridical at the same time. So, any thought of such a subject would fail to engage external reality in the semantic sense described above, and so no thought formed by this subject would be true of that reality. Still, this subject is supposed to have *the same thoughts* as we do,

whose thoughts are meant to express actual state of affairs of that reality, such as the thought that this subject is a BIV. But then, this very same thought *would have to be* true, if this subject were indeed a BIV, and yet it *could not be* true because, as formed by this subject, it cannot engage this reality. This is what I claim to be the inherent contradiction of the idea of the mere logically contingent veridicality of our simple concepts, which claim, however, is the implication of the nominalist conception of the identity-conditions of concepts.

This much would basically clinch the defense of my argument against Panaccio's main objection, however, since the point of this discussion is not so much to establish *who* is right about the consistency of the nominalist position, as to find out *what* is right to claim about that position, I think it will be instructive to see exactly what it is in the nominalist position that commits it to the logical contingency of the veridicality of our simple concepts, which will then naturally lead to Panaccio's further interpretive points about the externalism of nominalists as opposed to that of the formal identity theory I attributed to Aquinas.

Another way of characterizing the relevant aspect of the nominalist position in contrast the view I attribute to Aquinas is that the nominalists would accept the possibility that a BIV might have the exact same concepts that we do (assuming now that we are not just brains-in-a-vat), namely, the same concepts, *identifiable as such* in terms of the *same internal properties* they have, whereas, while a BIV has these *same concepts*, it cannot have them *about the same things* as we do, because by hypothesis, a BIV is isolated precisely from the things we have our concepts about. So, in short, a BIV is supposed to have the same concepts that we do, but cannot have them about the same things we do. However, this means that a conception that allows the possibility of having the very same concepts, but without having them about the same things has to allow the possibility of a BIV. But the nominalist conception clearly allows this possibility, as Panaccio also admitted. Therefore, the nominalist conception is committed to allowing the possibility of a BIV.

But why does this *have to* be the case with the nominalist conception? And why wouldn't it be the same on the position I'm attributing to Aquinas? What makes the difference?

The simple possibility I just outlined, namely, possibly having the same concepts but not about the same objects, presupposes that concepts have their conditions of identity at least logically independently from their objects. In other words, the same concepts can be identified in terms of the same internal properties they have (whatever those are; whether a concept is a neural firing pattern of type X, or a spiritual modification of type Y), regardless of what their objects are. Thus, for instance, when I'm thinking of donkeys, I can have neural firing pattern of type X in my brain, while a BIV on this conception could also have firing pattern of type X, which would make it appear to it that it is also thinking of donkeys, but in fact, being a BIV, it cannot possibly think of donkeys, as it was exposed only to virtual donkeys in all its miserable life, in which it never saw a donkey, indeed, it never saw anything. So, what accounts for the emergence of the possibility of Demon skepticism on this account is that concept-identity is construed in terms of a concept's internal properties (whatever those are), regardless of what the objects of this concept are. In other words, if we identify the objects represented by the concept as its content, i.e., what the concept is about, then we may say that on this conception, the internal properties of the concept do not determine its content, which is precisely the idea that Panaccio hailed as the externalism involved in this conception. And I certainly do not dispute this claim, especially because it evidently supports my claim, namely, that this conception entails the possibility of Demon skepticism as described.

However, is there any other plausible way of construing the identity conditions of concepts? How would the position I'm attributing to Aquinas differ on this issue?

As we have seen, Demon-skepticism in the sense defined is possible, only if our simple cognitive acts are merely contingently veridical, leaving open the possibility that perhaps *all* our simple cognitive acts are non-veridical. However, if a certain conception of the identity conditions of these cognitive acts demands that at least some of our cognitive acts are essentially veridical, that is, their veridicality is part and parcel of their conditions of identity, then this conception directly excludes the possibility of Demon-skepticism. And, as I have argued earlier, this is precisely the conception one can glean from the Aristotelian idea of the cognizer receiving the form of the object without its matter, as it is developed by Aquinas, arguing for the claim that no cognitive power is deceived concerning its proper object.¹

So, how is this conception related to the issue of externalism? As we could see, the way this conception identifies concepts has practically nothing to do with their internal properties: we talk about the same concept as long as it is a carrier of the same information whatever realizes it, and what determines this information is precisely the type of external object the concept carries information about. Thus, from the perspective of this conception, whatever internal properties the concept has (say, whether it is a neural firing pattern of a certain type, etc.) is immaterial, since the same concept, carrying the same information, can be realized in just any other type of "medium". Therefore, the internal properties of the concept not only do not fully determine its content, they have basically nothing to do with it; on this conception the content of the concept is fully externally determined, and so this conception may even be dubbed "hyper-externalism". At any rate, this is what I meant when I said that Aquinas' conception involves an even stronger form of externalism than Ockham's or Buridan's.

In fact, there is an interesting and important difference between Ockham and Buridan in this regard, which I think sheds some light on their difference from Aquinas as well. When we are talking about the internal properties of a concept that would identify it for a nominalist, we may mean two things: its internal real properties, say, that it is mental act of type X, or its phenomenal representational properties, say, that it is a mental act that makes the cognizer having it aware of things of type Y. At any rate, in Ockham's case, what Panaccio calls a concept's "perceptual scheme" and what I would call its "phenomenal content" is clearly different from the concept's objective semantic content, namely, the objects it actually represents. In Buridan, by contrast, I have seen no evidence of this sort of divergence of phenomenal and semantic content. In fact, Buridan insists that what an absolute concept makes me aware of is just absolutely the object or objects of the type from which I originally acquired my concept. My concept of man makes me aware not of some indifferent, blurry image of human shape, sound and observable behavior (as Ockham's perceptual scheme or phenomenal content would have it), but rather simply of humans, past, present, future or merely possible (which of course would be the semantic content of this concept for Ockham as well). Still, Buridan finds it logically and hence by divine power perfectly possible to have the same concept without having the same semantic content: God could plant in my mind the same concept, namely, the same

¹ Here I omitted a part from the original presentation that repeated the CD-analogy discussed in my Montreal-talk reproduced here in the first article of this volume.

mental quality of type X, without however, this quality representing past, present, future or possible humans. To be sure, this is only a *supernatural* possibility, but nevertheless it *is* a possibility for Buridan.

By contrast, for Aquinas, at least on the view I am attributing to him, this is excluded even as a supernatural possibility. God might create a quality in my mind entirely similar in its internal properties to the one whereby I presently conceive of human nature without that quality actually representing human nature, but that quality, not being the encoding of human nature in my mind would not be a concept of humans, just as a pattern of tiny pits on a CD resembling a recording of a song would not be a recording of the song, if it were not the encoding of information about the song. But the same information may certainly be encoded or recorded in different media, yielding again *the same* representation, realized, however, in entities with radically different internal properties.

So, on this "hyper-externalist" conception, the formal unity of concept and object, interpreted as the sameness of information encoded in the concept and constituting the object, determines the identity of the concept quite independently from its internal properties. Thus, this "formal unity" does not have to amount to any qualitative similarity between concept and object (or even between my mental act and yours), so of course it is perfectly OK for Aquinas to insist in some passages on the *qualitative* dissimilarity of concept and object. As he often remarks, what I have in mind when I think of a stone is not the stone, but the species of the stone, and not in the way in which it is in the stone, informing mineral matter, but differently, informing my mind *about* the form informing that matter. So, the passage Panaccio quotes from Aquinas does not seem to speak against *this* interpretation of Aquinas as a "conformalist".

Having thus clarified what I take to be the fundamental differences among the three authors we considered from the point of view of their varieties of externalism, let me return in closing to Panaccio's criticism of my argument, to pinpoint exactly what I could not accept from his interpretation of it. As I noted at the beginning, the main difference between us is in our understanding of what a non-veridical concept is. For Panaccio, a non-veridical concept is simply one with a mismatch between its semantic content and what I would call its phenomenal content, which for Panaccio is just the perceptual "recognition schema" of the concept. Since on Ockham's view, as Panaccio interprets it, this sort of mismatch is something that may occur even in the ordinary course of nature, of course it is possible to make it systematic and inevitable for an omnipotent deceiver. As I have said, in Buridan I see no evidence for the possibility of this type of divergence, i.e., the natural divergence between phenomenal and semantic content. Indeed, for Buridan, just as for Aquinas, the phenomenal content of an intellectual concept is not anything like Panaccio's "recognition schema", because for them, an intellectual concept abstracts precisely from that perceptual scheme, although that scheme may be useful in not infallibly recognizing individuals of the kind represented by the concept. However, for Buridan, there is the possibility of supernatural divergence between phenomenal and semantic content, which would be the case in the Demon-scenario. If it were possible, then in this scenario, if I were a BIV, I would have the very same mental qualities that I now have. And those same mental qualities would appear to me to represent the very same things they do in fact represent now. But then, in that scenario, the same quality just could not latch on to the same objects it is latched on now, since by hypothesis, I am cognitively completely isolated from them. Thus, although I would have the same concepts, I could not have them about the same objects, which is the alleged possibility leading to a contradiction, as I concluded in my argument. But it is

precisely this alleged possibility that is correctly deemed to be impossible by Aquinas' position, at least, as understood in the way I interpret it.

APA December 27, 2009, New York, NY

Handout

Concept

- 1. *Qua entity*, has internal properties (neural firing pattern of type X, spiritual mental act of type Y)
- 2. Qua representation, has content
 - a. Phenomenal content: what it makes the subject aware of, what it appears to represent to the cognitive subject
 - b. Semantic content: what it carries information about, what it does in fact represent, whether the subject is aware of it or not

Ockham: 1 and 2a necessarily go together (but perhaps they are separable by divine power: X may appear once to represent donkeys, once to represent chickens?), whereas 1 and 2b are even naturally separable although they usually go together (concept X that appears to represent eggs and usually does so, may in fact represent marble eggs, say, if my "first oval experience" was an exposure to a marble egg); and they are certainly systematically separable by divine power.

Buridan: 1 and 2a and 2b go together by natural necessity, but 1 ("dragging" 2a with itself) is supernaturally separable by divine power, even systematically, allowing the possibility of a BIV scenario.

Aquinas: 2a and 2b are *the same*; therefore, they are inseparable by any power: my concept of donkey nature is just donkey nature informing not donkey matter, but my mind, informing my mind *about* the same nature that informs donkey matter. However, 2 is merely contingently related to 1: the same content may be realized in physically rather different mental acts, as the same information may be encoded in different media in different ways.

Henrik Lagerlund:

John Buridan's Empiricism and the Knowledge of Substances

The fourteenth century, foremost due to William Ockham, saw some radical changes in the way substance was conceptualized. Ockham challenged the Aristotelian or Thomistic way of thinking by systematically rethinking metaphysics. According to Aristotle and Thomas Aquinas a substance has no parts that are prior to it. A composite substance, an animal or a human being for example, comes to be out of another substance, but only the prime matter is the same and it has no existence on its own. Since matter is the principle of individuation, according to Aquinas, form has no existence before its union with matter. Hence nothing in an individual composite substance pre-exists its existence in nature.

The single substantial form of an animal dominates the matter to such a high degree that all the properties of the animal are due to the form. An animal body exhibits features that are attributed to it because it consists of 95% water, but, according to Aquinas, there is no water in the body. Instead there is flesh and bones that have, in the process of being made out of water, acquired some of the powers and features water has.

Ockham's ontology includes individual substantial forms, individual accidental forms and individual matters. A composite substance is composed of its essential parts, namely its matter and form. Besides its essential parts, a substance also has integral parts, like flesh bones, hands etc. Anything with integral parts is extended and material. All things with essential parts are composed of matter and hence also have integral parts and are extended. Everything extended is a quantity and every quantity is divisible into quanta, hence there are no indivisible matters and substances.

Ockham insists that a substance is nothing but the parts that make it up. This is contrary to Aquinas who held that although substances have integral parts these parts depend ontologically on the whole of which they are parts. Each part of a substance is actual and not dependent on anything to make them actual, Ockham argues contrary to Aquinas.

All the forms in all material substances are also extended. In a piece of wood, all the forms are extended just as the matter they inform. The only non-extended forms are the human intellectual soul, angels, and God on Ockham's view. Angels and God are, however, outside nature, and hence the only non-extended or immaterial form in nature is the human soul.

Two metaphysical theses are of crucial importance for understanding the changes in the concept of a substance that takes place with Ockham.

- (1) A whole is nothing but its parts.
- (2) All parts of an actual thing are themselves actual and their actuality is not derived from the whole.

If these two are combined with a third principle, a problem well known in Ancient and Early Modern philosophy appear, namely the problem of the identity of a substance over time. The principle is:

(3) All material substances change over time

Given Ockham's view of substance it is not clear what constitutes the unity or identity over time of a substance. On Aquinas view this is not an issue since a substance will be the same as long as it has the same substantial form and if the substantial form goes, so does the substance. This is what substantial change means on his view. This is the whole reason Aristotle introduced forms in the first place, but for Ockham there are no privileged parts like that. A substance is a substance due to its parts and all parts are individual parts of the substance. No substance on this view is after a process of growth, for example, numerically the same as before. Ockham does not explicitly address this problem, but Buridan does.

He argues that there are three ways in which something can be numerically the same over time, namely totally, partially and successively. Something that never gains or loses a part is totally the same over time. Hence only indivisible substances are totally the same over time. There are only three such things, namely God, Angels and the human soul.¹ Things that are partially the same over time are such things that have a principal part that is totally the same over time. In nature, it is only humans that are partially the same over time.² Buridan never explicitly tells us what is required for something to be successively the same over time. He gives an example of the river Seine which is said to be the same river over a millennium because the water parts succeed each other continuously.³ This is not sameness properly speaking, according to Buridan, since there is nothing that is the same over time, but rather there is a succession of entities, related enough so that the same name can be applied.

¹ "Tripliciter enim consuevimus dicere aliquid alicui esse idem in numero. Primo modo totaliter, scilicet quod hoc est illud et nihil est de integritate huius, quod non sit de integritate illius, et e converso; et hoc propriissime esse idem in numero. Et secundum illum modum dicendum est, quod ego non sum idem, quod ego eram heri, nam aliquid heri erat de integritate mea, quod iam resolutum est, et aliquid etiam heri non erat de integritate mea, quod post per nutritionem factum est de substantia mea." (Physics I, q. 10.)

² "Sed secundo modo aliquid dicitur alicui idem partialiter, scilicet quia hoc est pars illius, et maxime hoc dicitur, si sit maior pars vel principalior vel etiam, quia hoc et illud participant in aliquo, quod est pars maior vel principalior utriusque. Sic enim Aristoteles nono Ethicorum, quod homo maxime est intellectus, sicut civitas et omnis congregatio maxime a deniminationibus partium. Et ita manet homo idem per totam vitam, quia manet anima totaliter eadem, quae est pars principalior. Sic autem non manet equus idem immo nec corpus humanum."

³ "Sed adhuc tertio modo et minus proprie dicitur aliquid alicui idem numero secundum considerationem partium diversarum in succedendo alteram alteri, et sic Secana dicitur idem fluvius a mille annis citra, licet proprie loquendo nihil modo sit pars Secanae, quod a decem annis citra fuit pars Secanae. Sic enim mare dicitur perpetuum, et ille mundus inferior perpetuus, et equus idem per totam vitam, et similiter corpus humanum idem. Et iste modus identitatis sufficit ad hoc, quod nomen significativum dicatur discretum vel singulare secundum communem et consuetum modum loquendi, qui non est verum proprie. Non enim est verum proprie, quod Secana, quem ego video, est ille, quem ego vidi a decem annis citra. Sed propositio conceditur ad illum sensum, quod aqua, quam videmus, quae vocatur Secana, et aqua, quam tunc vidi, quae etiam vocabatur Secana, et aquae etiam, quae intermediis temporibus fuerunt, vocabantur quaelibet in tempore suo Secana et continuate fuerunt ad invicem in succedendo. Et ex identitate etiam dicta secundum huiusmodi continuationem dicimus hoc nomen 'Secana' esse nomen discretum et singulare, quamvis non ita proprie sit discretum sicut esset, si maneret idem totaliter ante et post."

Although no composite substance in nature, except humans, remain the same after growth or decay one can say on Buridan's view that a horse or a river is the same over time because of the continuity of its parts and this sort of sameness does not require that any given part remain through the change.

On this view then nothing except a human in nature has an identity or unity stronger than a heap. An animal, for example, is the same over time in the same way as the river Seine is same over time. From birth to death, the animal is the same because there is a succession of parts succeeding each other occupying the same spatiotemporal location. This is true of a heap as well and there is no other unity to an animal. This metaphysical problem implies an epistemological problem.

Explaining how and whether we have knowledge of substances is a well known problem in early modern philosophy. Locke for example argues that the idea of a particular substance is the complex idea of a set of coexisting qualities and powers, together with the supposition that there is some substrate upon which they all depend. Locke is not clear about the idea of this substrate (Essays II xxiii 2), but he nevertheless cannot eliminate the concept of substance altogether, since he must somehow account for the existence and coherence of just this group of features. On one reading of him we then simply infer the notion of a substance from a collection of simple ideas of sensible qualities.

Hume on the other hand argues that the inference of a substance is just an illusion or a simple mistake. He explains this mistake in the following way:

When we gradually follow an object in its successive changes, the smooth progress of the thought makes us ascribe an identity to the succession...When we compare its situation after a considerable change the progress of the thought is broken; and consequently we are presented with the idea of diversity: In order to reconcile which contradictions, the imagination is apt to feign something unknown and invisible, which it supposes to continue the same under all these variations; and this unintelligible something it calls a substance, or original and first matter.

What we infer to be a substance on Locke's view does not really exist and is just a bundle of perceptions, according to Hume.

In a recent paper, Gyula Klima has argued that Buridan thinks that there are simple substantial concepts and that he rejects the view about substance common to the British empiricists.⁴ Buridan argues that either we don't have a simple concept of substance, that is, we only have a complex concept, or we do have a simple concept. He writes in his commentary on Aristotle's Physics that:

The second conclusion is that we have simple concepts of substances, for the concept of man from which we take the substantial term 'man' is a concept of substance, if man is a substance. And that concept supposits only for a substance, for if it supposited for an accident or for something composed from substance and accident, then it would not be true that man is a substance, for neither an accident nor something composed from substance and accident is a substance; but precisely a substance is a substance, and that concept, while it supposits for a substance, does not even connote an accident that is other than that substance, for then it would not belong to the category of substance, but to that of an accident, as do the terms 'white' or 'big' or 'small', etc. For these terms supposit for substance and not for anything else, just as the term

⁴ See G. Klima, "John Buridan and the Acquisition of Simple Substantial Concepts",...

'man' does, but they leave the category of substance because of their connotation; therefore, a concept from which a term in the category of substance is taken is not a concept of any accident, or of something composed from substance and accident, but only of a substance or substances. And if anyone were to say that they are complex, then the complex ones are combined from simple ones, for in the analysis of concepts one cannot go to infinity; and then those simple ones and the ones composed from them are only of substances; therefore, there are simple concepts of substances.⁵

Buridan thinks that a substance concept cannot be made from accidental concepts, since substance concepts for him are absolute concepts, which only signify whatever they signify and nothing else. Accidental concepts on the other hand signify a thing, but they also connote another thing. Terms subordinate to absolute concepts are predicated of whatever they signify essentially while terms subordinate to connotative concepts are predicated of whatever they signify accidentally or denominatively. Their predication is a direct consequence of their mode of signification. On this view, then a substance concept cannot be a collection of connotative concepts, since they would then not be substance terms. He writes:

Again, if the substantial concept of man were complex, then let us posit that it consists of three simple ones, namely, a, b, and c. Then, if no concept of substance is simple, a can only be a concept of accident, and the same goes for b and c; therefore, the whole combined from them would also be only a concept of accident, and not one of substance, for a whole is nothing over and above its parts. But this is absurd, namely, that the substantial concept of man should be nothing but a concept of accidents; therefore, etc.⁶

Now, as Klima has pointed out, the British empiricists happily or perhaps not happily embraced the conclusion that ideas of substances are only a bundle of perceptions or inferred from sensory ideas. This cannot be right, argues Buridan; but how can he say this? Is he himself entitled to say what he says in these passages in the Physics commentary? I don't think so.

An absolute term is supposed to pick out its object as a rigid designator, which is to say that it picks out that object on all possible worlds. This is often, at least in contemporary philosophy, thought to imply some kind of essentialism. When I express identity statements like 'Water =

⁵ "Secunda conclusio est ista quod de substantia habemus conceptum simplicem, quia conceptus hominis a quo sumitur iste terminus substantialis 'homo' est conceptus substantiae, si homo est substantia; et ille conceptus non supponit, nisi pro substantia, quia si supponeret pro accidente vel pro composito ex substantia et accidente, tunc non esset verum quod homo est substantia, quia nec accidens est substantia, nec compositum ex substantia et accidens est substantia, sed praecise substantia est substantia. Et ille conceptus etiam supponendo pro substantia non connotat aliquod accidens aliud ab ipsa substantia, qui tunc non esset de praedicamento substantiae, sed accidentis, sicut ille terminus 'albus', vel 'magnus', vel 'parvus', etc. Illi enim termini ita supponunt pro substantia et non pro alio sicut iste terminus 'homo', sed exeunt a praedicamento substantiae nec est conceptus aliquorum accidentium, nec compositorum ex substantiis et accidentibus, sed solum substantiae vel substantiarum. Et si quis dicat quod sint complexi, tunc complexi sunt compositi ex simplicibus, cum in resolutione conceptuum non sit processus in infinitum; et tunc illi simplices et compositi ex eis non erunt, nisi substantiarum; igitur substantiarum sunt conceptus simplices." (Physics, I, q. 4.)

⁶ "Item si conceptus substantialis hominis sit complexus, ponamus quod hoc sit ex tribus conceptibus simplicibus, scilicet a, b, et c. Tunc si nullus conceptus substantiae est simplex, a non esset, nisi conceptus accidentis, et similiter nec b, nec c. Igitur totum complexum ex eis non esset conceptus, nisi accidentium et non substantiae, cum totum nihil sit praeter partes. Sed hoc est absurdum, scilicet quod conceptus substantialis hominis non sit nisi conceptus accidentium; igitur, etc."

 H_2O' I am, on this view, claiming that both 'water' and ' H_2O' are rigid designators and if that is the case and 'water = H_2O' is true then it is necessarily true. On Buridan's view 'water' and ' H_2O' are names subordinate to one absolute concept and through this concept they pick out the same substance. For all this to be the case, there needs to be something about the substance that is essential to it and which does not change about it. If that were not the case, then a term like 'water' cannot be a rigid designator.

Another way of putting this is to think about the distinction between substantial and accidental change. In a substantial change the substance itself is destroyed, that is, the death or Socrates is a substantial change, but in an accidental change, an accident of the substance has been replaced by another accident, as for example in the case when the color of Socrates' skin changes due to him spending time in the sun. This is an accidental change because there are certain properties of Socrates that do not change and if those were to change then Socrates would not be Socrates any more. This is captured on Aquinas' view by saying that the substantial form remains the same. For the rigid designator 'water' to keep picking out water there needs to be something about water that does not change, that is, only accidental changes can occur, such as the heating or cooling of it, but if there is nothing about water that remains unchanged then all change is accidental change. If that is the case, then 'water' cannot be a rigid designator, since there is nothing about water that makes it water. Ockham's and Buridan's view of non-human substances seem to entail just this problems, since there is nothing over time that remains the same about such things. There is nothing about a substance that makes it into that substance, since all properties are exchangeable, and hence an absolute term cannot pick out the same thing over time. It cannot be a rigid designator.

This is quite a startling conclusion with thoroughgoing implications for science and epistemology. It seems to imply a kind of conventionalism in that there are no natural kinds. It implies skepticism about our knowledge of substances. It is furthermore unclear that, if there are no absolute terms, how can there be connotative terms? It also implies a serious inconsistency in Buridan's own thinking. Was he aware of this? Is there a way of making his thinking consistent?

Buridan seems to indicate an awareness of this problem or this implication of his metaphysical views on his epistemology and theory of mind in his commentary on Aristotle's De anima. In Book II, q. 7, he asks "Whether the whole soul is in some part of the animal body". One of the problems addressed is whether some quantitative part of a plant is a plant or whether some part of an animal is an animal or whether the foot of a horse is a horse. In discussing these problems he brings up some of the same issues we have seen above. He for example says that "if the terms 'animal' and 'horse' are truly substantial non-connotative terms", then one must accept the conclusion that a part of an animal is an animal, that a part of a horse is a horse.⁷ On the other hand he notes that:

As the second conclusion I posit that if these names 'animal', 'horse', 'ass', etc. are not truly substantial terms, but connotative, namely connotative of totality, then it is not the case that some

⁷ "Ergo quantum ad istam dubitationem tertiam probata est prima conclusio quod quelibet pars quantitative animalis sit composita ex corpore et anima, et pars animalis est animal, et quelibet pars equi equus, et ita pes equi est equus, si isti termini 'animal' et 'equus' sunt veri termini substantiales non connotativi, et quod omnes partes anime equi sunt at invicem eiusdem rationis et eiusdem speciem animalis." (De anima II, q. 7.)

quantitative part of an animal or a horse is an animal or a horse, and it is not the case that the foot of a horse is a horse.⁸

It is not entirely clear to me what this means, but it is clear that the thought that terms like 'animal', 'horse' and 'ass' are connotative is not alien to him. He also in the same question addresses the notion of identity that he develops in his commentary on Aristotle's Physics as seen above.⁹ He seems to think that the third sense of identity developed is sufficient for solving the problem of identity of a non-human substance over time. He writes:

And further to this it should be said that we use another mode of identity less proper by which is understood only continuation in the succession of diverse parts just as we may say that the Seine has been numerically the same river for a 1000 years, and in this way we are able to say even more that Brunellus is numerically the same horse from his birth to his death.¹⁰

Buridan seems to think that this notion of identity is sufficient for his epistemology. Let me further note that Albert of Saxony also worries about whether there are any substance terms. In his question commentary on Aristotle's Physics he, for the same reasons as has been brought up above, says that the term 'Socrates' is not an absolute concept, but it is not strictly speaking a connotative term either.¹¹ Exactly what he thinks it is is not clear to me, but for now I am only interested in pointing out that they are aware of this problem and to some extent address is. The worrying conclusion seems to be that there seem to be very few if any absolute terms.

Instead of trying to defuse this issue, which I think is a real problem for Ockham and Buridan, I would like to throw more fuel on the fire by adding my take on Buridan's theory of cognition, which, it seems to me, has the resources to solve or at least dissolve some of the problem here being outlined. When Buridan explains how mental terms or concepts are acquired he begins by saying that the first concepts acquired are vague singulars. He thinks that in our in counter with the world the mind has the ability to unite or form a representation of the world through sense

⁸ "Secundam conclusionem ego pono quod si hec nomina 'animal', 'equus', 'asinus', et cetera non sint nomina vere substantialia, sed connotativa, scilicet connotative totalitatem, tunc non quelibet pars quantitativa animalis vel equi est animal vel equus, nec pes equi est equus."

⁹ "De quinta autem dubitatione tractavi satis in primo Physicorum, ubi dixi Sortes non esse totaliter eumdem quod Sor erat heri. Sed dixi 'eumdem' secundum denominationem a parte valde principaliori, quoniam locutiones tales utuntur communiter. Propter usum communem concedimus 'simpliciter' et 'absolute sine addictione' esse eumdem, licet iste non sit proprie usus secundum proprietatem sermonis, et licet huiusmodi idemptitas non sufficat ad medium syllogismi affirmativum. Licet enim omne symum sit nasus et, secundum denominationem a parte, concedimus hominem esse symum, non tamen concedit hominem esse nasum. Et so hodie amputarentur Sorti pedes, non valet talis syllogismus: 'Sor heri erat pedes, manus, cor, et caput. Et Sor est idem hodie quod ipse erat heri secundum denominationem a parte principaliori, ergo So rest hodie, manus, caput, et cetera'."

¹⁰ "Et adhuc ibidem dictum fuit quod utimur alio modo idemtitate minus proprie que attenditur ex sola continuatione in succedendo diversas partes ad invicem, sicud diceremus Secannam esse eumdem fluvium in numero a mille annis citra, et sic magis possemus Brunellum dicere eumdem equum in numero a principio sue nativitatis usque ad mortem, et ad presens non dico plus de hiis."

¹¹ "Sed diceret aliquis: si aliquid posset incipere esse Socrates isto modo, sequitur quod hoc nomen Socrates esset nomen connotativum, sicut li album. Respondetur quod bene verum est quod hoc nomen Socrates non est nomen mere absolutum sicut est nomen rei manentis idem secundum permanentiam omnium suarum partium, nec etiam est nomen mere connotativum, sicut est hoc nomen album, propter hoc quod hoc nomen Socrates praedicatur in quid, sed est unum nomen medio modo se habens." (Albert of Saxony, *Questions on the Physics*, I, q. 8.)

information provided to it by the five external senses. This is a rich representation which the intellect has to sort out and make intelligible. It does this by attending to or focusing on (putting in the prospect) the thing in this manifold. This activity of the intellect gives rise to first intellections or concepts. He calls these concepts vague concepts. They are vague because they are not uniquely of one singular thing although it is a singular concept. He describes them as containing a general part and a demonstrative, that is, they are best described as being about 'that animal' or 'that thing'. These vague singulars are the basis for further conceptualizations and from them we go to universal concepts or proper singular concepts. A concept is made to be universal by taking away the demonstrative element of the vague singular and it is made more singular or a proper singular by adding further singularizing circumstances to the vague singular, hence making it less vague and more determinate. This idea of a singular has been termed by Calvin Normore as its maximal specificity. A singular is singular if it maximally specifies the thing it is about. A singular term like 'Socrates' picks out Socrates because of the richness or maximal specificity of the singular concepts. It is by adding circumstances or descriptions to the singular concept that I narrow down its reference and make it specific. Hence a singular concept like 'Socrates' supports all kinds of inferences about him, that is, that he is snub nosed, that he is white, that he was Plato's teacher etc. A complete singular concept it seems to me would on this picture be like Leibniz's individual concepts. They are infinite in their content and hence nothing we human could have. Only God could have such a concept of 'Socrates'.

It seems clear that given this view no human could have a proper singular concept hence 'Socrates' on this view would not be an absolute term or rigid designator, since the term might not be able to pick him out in all possible worlds. This explains why we mistake him for his twin brother. Given this view, there is a sense in which Buridan can say that perhaps we can never get absolute terms, but we can get more or less close and this will be enough for us to use terms and classifications in science. This goes hand in hand with his criticism of skepticism and his revision of the notion of knowledge from an infallibilist conception to a fallibilist and the notion that we must relativize our concept of evidence. Scientific knowledge is only probable on his view.

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Gyula Klima:

Buridan on Substantial Unity and Substantial Concepts

Comments on Henrik Lagerlund: "John Buridan's Empiricism and the Knowledge of Substances"

Henrik Lagerlund's intriguing paper raises two major problems for Buridan: an epistemological one and an ontological one, the former of which is claimed by Henrik to be based on the latter. The *ontological problem* is whether on Buridan's conception there can be *any* genuine identity over time of material substances (other than humans, who form a special case on account of their immaterial intellective soul). The *epistemological problem* is whether the "toned down" identity assigned by Buridan to such material substances can serve as an ontological ground for the formation of absolute concepts about them, which on Buridan's conception are required for us to be able to form essential predications, that is to say, universal, necessary propositions, providing us with scientific knowledge of these substances.

In these comments, I will first clarify these problems and offer some tentative solutions on Buridan's behalf. But then I will also point out some other, perhaps, even tougher problems in Buridan's account that Henrik only touched on.

Concerning the ontological problem of identity of material substances over time, we should keep in mind in the first place that contrary to our contemporary, Frege-Russell-informed intuitions, for medieval authors in general, and also for Buridan in particular, the concept of identity is derivative with regard to the more fundamental, transcendental concept of unity, which is convertible with the notion of being, connoting indivision, that is, the lack of division.¹ On this approach, therefore, identity is but the unity of the things referred to by the terms flanking an identity claim. Since on Buridan's "identity theory of predication" *all* our categorical claims are identity-claims, we should really appreciate the importance of being clear on the notion of unity, which on this conception grounds the truth of *all* our predications.

¹ Hoc nomen "unum" ab indivisione sumitur, ut patet quinto Metaphysicae, propter quod ibidem dicitur, quod quaecumque non habent divisionem in quantum non habent divisionem, ut sic "unum" dicuntur. Ideo hoc nomen "unum" est nomen privativum privative oppositum huic nomini "multa", ut apparet decimo Metaphysicae. Modo nomen 'privativum' claudit in sua ratione nomen habitus sibi oppositum, cum negatione; ideo: aliquo modo significat vel connotat illud quod nomen habitus significat, et illud est extraneum ei de quo verificatur nomen privativum.' [...] Sed de isto termino "idem" ego dico, quod adhuc est magis connotativus quam iste terminus "unum"; et ideo "idem" dicitur passio "unius" et "unum" dicitur tamquam subiectum et fundamentum ipsius. Nam significatio huius termini "idem" praesupponit significationem "unius" et connotat ultra illam respectum, scilicet quod aliquid sit ad quod sit idem, et hoc est illudmet quod est idem ... QiPI, q. 11, pp. 171-172.

For Buridan, the notion of unity is primarily explicated by the Aristotelian formula: *unum est ens indivisum* – what is *one* thing is an undivided being. But then, since division comes in degrees, and so its lack comes in degrees, too, it is no wonder that unity and the derivative notion of identity come in degrees as well. In the passages quoted by Henrik, Buridan distinguishes three main types of identity, namely, *total, partial*, and *successive* identity.

When we are wondering about identity over time, as when we are wondering whether the thing that was Brunellus yesterday is the same as the thing that is Brunellus today, the question is whether the referents of the terms of such an identity claim are one and the same thing. In terms of Buridan's distinction, those referents of the terms of such claims can be said to be *totally* identical that have no parts not in common (i.e., that have all parts in common, if they have parts at all), those are *partially* identical that have only some parts (especially the greater and/or principal parts) in common, and those are *successively* identical that have no parts in common, but are related to each other by a continuous succession of parts.

But then, the question inevitably emerges: how can the last type of identity even be called identity at all, if the extremes of the corresponding identity claim refer to two totally distinct things, such as two totally distinct bodies of water, one of which is the body of water that was the Seine ten years ago, and the other is the body of water that is the Seine now?

I believe Buridan's answer may lie in the continuity of succession. For even if those two bodies of water are completely distinct, so that (calling the first A and the second B) no part of A is a part of B and *vice versa*, there is *a continuous succession of partially identical bodies of water* connecting A and B. So, even if A and B, considered synchronically, are discontinuous, the same bodies of water are *diachronically continuous* in the sense that between the time of A and the time of B there are times (quantifying over time intervals and not time-points, true to the spirit of Buridan's temporal logic) at which there is a body of water A' that is partially identical with A and a body of water B' that is partially identical with B, such that A' is partially identical with B'. However, in this or a similar way, the notion of successive identity may be reduced to the notion of a continuous succession of partial identities, and so, whoever is prepared to accept true predications of successive identity. To be sure, there is still an important difference between successive and partial identity as distinguished by Buridan: for successive identity is diachronic continuity *without the permanence of any single part*, whereas partial identity, as Buridan described it, is diachronic continuity *with the permanence of the greater or some principal part*.

But all this just goes to show that the three main types of identity distinguished by Buridan may admit even finer distinctions, as is testified by his use of comparatives all over the relevant passages, as for instance in his claim that *in the successive identity sense* we are able to say *even more* that Brunellus is numerically the same horse from his birth to his death than that the Seine has been the same river for a 1000 years. Consequently, I believe that it should make perfectly good sense for Buridan to claim that corresponding to, or rather grounding, these identity claims of different strengths, there are different degrees of unity exhibited by things of different natures: there is the absolutely absolute unity of God incompatible with any real division whatsoever, followed by the unity of angels, in which there is the division of substance and accident, as testified by their mutable will (see the fall of the Devil), followed by the unity of humans, having an immortal, permanent part, followed by synchronically continuous bodies, which, however, can have diachronically distinct stages, connected only through diachronically continuous parts, followed by processes (*res successivae*) which have *only* diachronically continuous parts,

followed, finally, by synchronically discontinuous and also diachronically disconnected bodies, which are properly speaking not numerically one, but many, but can still be considered as forming a unit on account of their order, contiguity, or position (say, as an army, or a heap), or just on account of the mere consideration of the intellect, lumping these things together under some nominal conjunction or on a mere list, as we can do in set theory.

Now, given this conception of "the gradation of unity" (to give it a catchy name), it will make perfectly good sense to claim that even if Brunellus is not as strongly numerically one as a human being is, Brunellus is still more numerically one than is a river, and both are more numerically one than is a heap.

Well, then, so much for Henrik's *ontological problem*; on the basis of these considerations, I do not think he managed to establish that on Buridan's conception Brunellus can have no greater numerical unity than a heap.

The *epistemological problem* (whether we can have scientific knowledge of material objects), *immediately* based as it is on the *cognitive psychological problem* of whether we can form absolute concepts of material objects, may actually be quite independent from the *ontological problem*, despite Henrik's claim to the contrary. For although it is true that according to Buridan essential predications require absolute concepts and that his absolute concepts are supposed to be "rigid designators", nevertheless, is it also true that we cannot form such rigid designators of things that only have successive identity over time?

A rigid designator is one that designates the same individual in any possible situation in which the individual exists. But then, if we can truly say that numerically the same river has existed for a thousand years, even if it is not the same body of water, we can certainly give a name to that same entity that picks it out in any possible situation in which it exists, with no matter how weak unity and identity. For although the conditions of unity of a certain thing are *a matter of ontology*, nevertheless, if that one thing is identified on the basis of its ontologically appropriate conditions of unity, its rigid designation is merely *a matter of semantics*, namely, the matter of designating it without the connotation of any extrinsic, variable entity on account of the variation of which a connotative term would cease to designate it, even if that same entity (no matter *how weakly* the same entity) does not cease to exist. Therefore, as long as there is an entity with continued existence and unity, no matter how weak (which is a matter of ontology), we just need to designate it without some extrinsic connotation and then we have its rigid designation.

To be sure, this still leaves us with the cognitive psychological problem of how, if at all, we can get rid of these extrinsic connotations in forming our mental representations of material objects, given that all our mental contents derive from sensory experience, presenting to us substances only through their sensible accidents. In my paper Henrik referred to, I analyzed in detail Buridan's account of how the intellect is capable of forming absolute concepts in a process of abstraction, sorting out the confused, content rich information "streaming in" through the senses. Without going into further details, a crucial element of that account relevant here was Buridan's insistence that the senses do carry information about the substance itself bearing the sensible accidents that directly affect the senses. This is most telling in the following passage:

... The senses first perceive both substance and accident in a confused manner, and afterwards the intellect, which is a superior power, differentiates between substance and accident. Therefore, if I see someone now to be white and later I see him to be black, and *at the same time I perceive that he remains the same*, I arrive at the cognition by which I notice that this is other than whiteness and likewise other than blackness. And thus, although at first substance and accident

are apprehended by means of the senses in a confused manner, the intellect, which is a superior power, can arrive at the cognition of substance itself.²

I believe the emphasized phrase is the key to Buridan's idea. As in my recent Buridan monograph I analyzed in more detail, *the sameness of the things undergoing change* in our perceptual field is part of the information we receive through the external senses and cognized already on the level of *common sense*.³ It is this information, abstracted from its confusion with information about the extrinsic sensible accidents of the thing, that is retained by the intellect forming its absolute concept of the thing that is perceived as permanent throughout its accidental change. As in a parallel passage Buridan remarks:

... I see not only whiteness, but something that is white, and then if I perceive *the same thing* to move and change from white to black, then I judge [by a sensory "judgment" of the common sense – GK] that this is something distinct from whiteness, and then the intellect naturally has the power to analyze that confusion, and to understand substance in abstraction from accident, and accident in abstraction from substance, and it can form a simple concept of each ...⁴

To be sure, the sameness or identity that is perceived by the common sense in this accidental change may be only *partial* or even merely *successive* identity, as when looking at the same river I perceive its changing patterns of ripples and colors as it reflects the changing color of the sky; but throughout all these changes I perceive it as *the same river* undergoing all these accidental changes. So, again, given this permanence of *the same substance*, no matter how weak its permanence is, I may be able to form a mental representation of it that abstracts from all its external features, and which therefore represents it absolutely and thus rigidly, without the connotation of these variable extrinsic features.

Well, at least, perhaps, this is what Buridan might say in response to the two main problems raised by Henrik. But he may still have a tough time responding to some other problems Henrik only touched on (and the problem of the aspectuality of abstracted concepts I raised in my book).

In closing, here I only want to reflect briefly on one problem Henrik only touched on, but of which I think Buridan would have a tough time ridding himself. The problem is that although we are able to form an absolute concept of, say, a horse, we apparently have another, connotative concept of it as well, namely, the one that connotes the integrity of the whole horse, which is what we utilize when are unwilling to say that the leg of a horse is a horse.

In the difficult argumentation of question seven of the second book of Buridan's *Questions on the Soul*, however, he argues that using the proper, absolute concept of horse, we *have to* swallow the counterintuitive conclusion that the ear or the leg of a horse is a horse. But then, he raises the question: how come we are so reluctant to accept this conclusion? His answer is that, as a rule, we tend to use the term 'horse' as subordinated not to the proper absolute concept of a horse, but rather to a connotative concept, connoting the integrity of the whole horse. In fact,

² QDA, lb. 1, q. 5 (prima lectura); cf. QiP, lb. 1, q. 4; QiP, lb. 1, q. 7, ff. 7vb-10ra; QDA, lb. 3, q. 8; QiPI, pp. 111– 195, esp. pp. 172–173; and QM, lb. 7, qq. 15–20, ff. 50rb–54va. I must note here that by now it is quite clear that the so-called *Prima Lectura* is not Buridan's work. But the passage quoted here succinctly expresses *Buridan's doctrine* more diffusely presented in the parallel passages of his authentic works referred to above.

³ Klima, John Buridan, Oxford, 2009, pp. 99-103.

⁴ QiP, lb. 1, q. 4

perhaps, we might properly express that concept by using this hyphenated term: 'whole-horse'. Thus, when we say that the leg of a horse is not a horse, what we *really* mean is that the leg of a horse is not a whole-horse. Fine, this answers the question, but raises a whole lot of further questions, such as the following: if the absolute concept equally applies to horses and horse parts, could we acquire it from experiencing, say, horse legs only? Again, if we normally use the term 'horse' as subordinated to the concept of 'whole-horse', then how can we regard the term 'horse' as a species, representing a natural kind? On the other hand, if it is subordinated to an absolute concept, and so it does represent a natural kind, then what are the individuals of this natural kind, horses and horse-parts as well? At this point, I do not have Buridan's answers to these questions.

© *Proceedings of the Society for Medieval Logic and Metaphysics*, Volume **9**, 2009 Gyula Klima: "Late Medieval Nominalism and Non-veridical Concepts", pp. 45-52.

Calvin G. Normore:

Externalism, Singular Thought and Nominalist Ontology¹

The 14th century nominalistae each held a number of theses, among them

- (1) that there is a language of thought the grammar of which is shared by all humans.
- (2) that the terms of spoken language are signs of whatever the terms of mental language with which they are correlated are signs.
- (3) that the primitive terms of mental language are concepts.
- (4) that the most basic concepts are of particular material substances and that all other concepts are acquired either by abstraction from these or by combining concepts previously acquired.
- (5) that generality is a feature only of signs terms of some language and not of anything nonlinguistic.
- (6) that a whole just is its parts.
- (7) that only spirits human souls, angels and God lack parts.
- (8) that material objects persist through time.

Some of these theses are striking and one might wonder whether even those that concern ontology are mutually consistent. If a whole just is its parts then a difference of parts should make for a different whole and if each material object is such a whole then for numerically the same material object to persist through time it must not gain or lose parts over time. Since this happens at most rarely it would seem there are few if any persisting material objects. Hence it seems that the thesis that a whole just is its parts is in some tension with the thesis that it persists through time. Moreover if our primitive concepts are concepts of ordinary objects and such objects do persist through time despite changing parts there must be identity conditions for such objects built into such concepts. These conditions will have to be expressed in concepts previously acquired and so our concepts of ordinary objects cannot be basic after all. Hence it seems that the thesis that our basic concepts are of ordinary objects conflicts with the thesis that ordinary objects persist through time.

I would like to explore these issues against the background of a more general one – to what extent and in what sense can the 14^{th} century nominalistae be considered externalists in the philosophy of mind. This paper treats a question, a puzzle and a problem. I do not have responses of which I am confident to any of them. The question is whether it is appropriate to think of the epistemology that seems common coin among 14^{th} century *nominalistae* as externalist. The puzzle is why Ockham seems to have vacillated on whether there are simple abstractive concepts proper to individuals. The problem is how there can be simple concepts of most individuals at all

¹This paper is a slightly revised version of a talk given at a session on Externalism in Medieval Thought at a meeting of the SMRP meeting together with the Eastern Division of the American Philosophical Association Dec. 2009.

given both views about the formation of such concepts and views about the nature of identity which Ockham holds and which also seem common coin among the nominalistae

First, then, about this terminology of externalism and internalism. When we think we typically think *about* objects. As understood here, externalism is the view that what such thoughts are about is determined by relations those thoughts bear. It is contrasted with internalism here understood as the view that what such thoughts are about is determined by intrinsic (i.e. non-relational) features of those thoughts. The terminology is recent and its application to medieval theories of cognition is not always straightforward. Before turning to the central issues of the paper let me try to indicate some of the complexities involved in applying the terminology to medieval accounts.

That there was a sea change in medieval theories of cognition sometime between Aquinas and Ockham is today taken more or less for granted. Exactly how to characterize the change is more controversial. Aquinas seems to have been focused on the claim that what was metaphorically 'in' the mind was in some sense the same as what was 'in' the world. His picture of how this was so relied heavily on a theory of specific forms – items which were in some sense present, though individuated, in distinct particular material things and were in another sense present (and perhaps in another sense individuated) 'in' distinct particular minds. As found in minds these forms were said to be 'universal' and to be no more forms of one individual of a material object kind than of another.

Is Aquinas' picture externalist? One might think not on the ground that it is by means of the forms as found in the mind that one thinks of material composites in the world. As the forms in the mind vary so does what one is thinking about. It is intrinsic features of what is found in the mind that determine what one is thinking about.

On the other hand, for Aquinas what is in the mind is in some sense what is in the world and it is far from clear that on his picture one can have in mind what is not in the world even if one can easily have it in mind other than as it is in the world. God can indeed infuse in an angelic or human mind a form without that mind having causal contact with an instance of that form and perhaps God could infuse us with a form which had no instances outside the mind but it would still be a genuine kind of which we were thinking. Only by combining forms can one think what is not real.

At the other end of the High Middle Ages one might ask whether Descartes' picture is externalist. I have argued elsewhere that in a sense it is and for reasons not unconnected with the remarks just made about Aquinas.² Descartes has it that to think of x is to have x present objectively in the intellect. There is no reason to suppose that Descartes thinks thought properly speaking is only of kinds as Aquinas does and there is no reason to think that Descartes thinks we can only think of what actually exists formally (as he puts it). Still we can only think of what *could* exist formally and when we do think of something it is because that something (or something else having as much or more reality formally) has produced the thing objectively in our intellect. We can conjoin ideas and so produce complex ideas that are not, as a whole, of

² Calvin G. Normore (2003). *Burge, Descartes, and Us.* In Martin Hahn & B. Ramberg (eds.), Reflections and Replies: Essays on the Philosophy of Tyler Burge. Mit Press.

anything but even such ideas will have parts that are of genuine (even if non-existent) things and such parts will be the products of those things themselves or of something with as much or more reality as they have.

Both in Aquinas' case and in Descartes' there is a close link between ontology and the theory of cognition. Aquinas countenances specific forms and has it that to think is to have them in mind, Descartes countenances individual substances and modes and has it that to think (properly speaking) is to have them in mind. Both Aquinas and Descartes distinguish formal aspects of a thought from the content of the thought. For Aquinas what one formally has in mind is an intelligible species and a *verbum* and whatever exactly these are they are as much in the world as intellects themselves. Descartes distinguishes the formal and the objective reality of an idea. Considered formally an idea is a mode of mind

Both Aquinas and Descartes have it that to think is to have what is thought about in mind in some sense. Between Aquinas and Descartes there was a significant movement that rejected this view. The mature William Ockham, Jean Buridan and others in the tradition of the *nominalistae* insisted that to think was for the mind to take on real accidents which, unlike Thomist forms or Cartesian ideas, did not have two modes of being but only one. Nominalist concepts are simply objects in the world like any other – immaterial objects 'tis true but just objects for all that. This difference creates a different problematic. While for the Thomist and the Cartesian concepts *are* in some sense what they are about and so the question whether we have an externalism or an internalism is hard to motivate, for the Nominalist a concept is one thing and, typically, what it is about is quite another – and so the question in virtue of what the one is about the other gets purchase.

I've spoken of the *nominalistae* and the Nominalist as though there was a school with a common doctrine but this is something of an exaggeration. By some time in the 15th century there does indeed seem to have been such a self-identified school and one which claims the people with whom I am concerned, principally William Ockham and Jean Buridan, as founding members, but it is not at all clear that these thought of themselves this way. Still they do share the theses with which I began, and while there are significant differences among their views there is enough common ground that, except when those differences loom large, I will continue to treat them together.

The relations among these 'nominalistae' are unclear. Ockham seems early in the tradition and there is good reason to think Buridan and those influenced by Buridan knew Ockham's work and were influenced by it. Whether there was any influence in the other direction is less clear. We do not have any work of Buridan's that we can date before 1331 and by then Ockham seems to have been focused entirely in political issues. It is tempting to look for common sources but so far they have proved elusive.

Ockham began his career with a picture rather like that later embraced by Descartes, one which involved things being in the mind with something like objective reality but he quickly abandoned it in favor of the one I mentioned above – that to have a thought was simply for there to be one or more real accidents in mind.

Since these accidents (usually characterized as qualities or acts) are of a piece with other accidents one might wonder how it is that a mind's being characterized by them counts as thinking. Ockham's conclusion was that this was a primitive – having those particular accidents in mind just is thinking.³ This distinguishes him from an earlier tradition – including Aquinas – which seems to have sought to explain intentionality itself in terms of some combination of immateriality and the special mode of being variously termed *sees intentional, sees spiritual* and *sees objective*. This question – in virtue of what is having a particular accident in mind to count as thinking - should be distinguished from another – what about having a particular accident in mind accounts for its being a thinking of this rather than of that? Here Ockham proffers two ideas and the relation between them has been the source of much debate in the recent secondary literature. One of Ockham's ideas is that an act of thought – a concept, he sometimes calls it – is of what it is because it is *similar* in a very special sense to what it is a concept of. The other of Ockham's ideas is that a concept is of what it is of because it is caused by what it is concept of. At first glance the first of these ideas might seem to be 'internality' and the second 'externalist' and so much of the discussion about them has supposed.

There is no doubt that Ockham employed both ideas, the question is how and in which contexts did he employ each. This question interacts with a number of others., for example, what is the peculiar similarity which connects a concept with what it is of, and what is the notion of abstraction Ockham employs to distinguish what he calls intuitive from what he calls abstractive cognition.

Here is a thumbnail sketch of what I take to be uncontroversial about Ockham's picture. It begins with an encounter between a mind and things, an encounter that in the human case is typically, but not necessarily, mediated by a sensory encounter. This encounter produces in the mind an *intuitive cognition* of a particular object. This cognition normally puts the thinker in a position to judge correctly whether the object exists and the cognition itself exists only as long as the thinker is so enabled. This cognition is one Ockham is prepared to call simple and it is proper to the thing which caused it.

A thinker who has such a cognition and normal human mental equipment is able to produce an abstractive cognition. One question which arises immediately is whether Ockham thinks that such a thinker can produce a simple abstractive cognition proper to the individual of which the thinker had an intuitive cognition. Whether Ockham had a consistent position on this question is not easy to determine. Claude Panaccio has shown that that at least at one period in his life Ockham granted that while we can form an abstractive cognition proper to a single individual such a cognition will always be complex and its simple parts will all be concepts which are not so proper. As Professor Panaccio has argued the reason for this is that, for Ockham, unlike an intuitive cognition, which can be naturally caused only by a single individual, an abstractive cognition is a similitude of any member of a most specific kind and could be abstracted from an intuitive cognition of any member of the kind.⁴

³ "Nec potest aliqua ratio generalis dari quare quiquid est cognitivum, sed ex natura rei habet quod sit cognitivum vel quod non sit cognitivum (I Sent d. 35 q. 1 OT IV,427)

⁴ cf Panaccio, C. Ockham on Concepts, p. 121 and the references therein.

Still, matters are not so simple. In the Prologue of the Ordination he prepared of Book I of his Sentences Commentary Ockham writes:

"We must realize, however, that the term 'abstractive cognition' can be taken in two senses. In one sense it means cognition that relates to something abstracted from many singulars; and in this sense abstractive cognition is nothing else but cognition of a universal which can be abstracted from many things. We shall speak about this later. If such a universal is a true quality existing in the mind as its subject-which is a probable opinion-then it must be conceded that such a universal can be intuitively known and that the same knowledge is intuitive and also abstractive, according to this first meaning of 'abstractive'. And in this sense 'intuitive' and 'abstractive' are not contrasted. Abstractive cognition in the second sense abstracts from existence and non-existence and from all the other conditions which contingently belong to or are predicated of a thing. This does not mean that something may be known by intuitive cognition which is not known by abstractive cognition; rather, the same thing is known fully, and under the same aspect, by either cognition. But they are distinguished in the following manner. Intuitive cognition of a thing is cognition that enables us to know whether the thing exists or does not exist, in such a way that, if the thing exists, then the intellect immediately judges that it exists and evidently knows that it exists, unless the judgment happens to be impeded

through the imperfection of this cognition. And in the same way, if the divine power were to conserve a perfect intuitive cognition of a thing no longer existent, in virtue of this non-complex knowledge the intellect would know evidently that this thing does not exist."

Ockham does not here say that there is a simple abstractive cognition proper to a single individual but he does say that abstractive cognition in the second sense "abstracts from existence and non-existence and from all the other conditions which contingently belong to or are predicated of a thing." This makes no sense if he is thinking here of the sort of abstractive cognition at stake in Quodlibet V q. 7 because there it is precisely by contingent features that we 'triangulate ' on one individual. On the other hand it makes little sense to suppose that in the Quod. V . q. 7 Ockham is talking about abstractive cognition in the first sense because that is explicitly 'of many singulars' while the discussion at hand is explicitly of one.

Whether or not he thinks there are simple abstractive cognitions of singulars it seems clear enough that for Ockham, as for Aquinas, we cannot simply make up either intuitive or simple abstractive concepts. Naturally they are the product of our encounters with things and they signify either those things or, in the case of the first sort of abstractive cognition, things of the kind of the intuitive cognitions from which they are abstracted; supernaturally God could infuse them but even so they would be *apt* to be caused only in the natural way.

Could God infuse a concept that was apt to be caused by nothing at all? Certainly God could place in our minds a real accident that was maximally similar to nothing at all and apt to be caused by nothing at all, but would it be a concept? Pierre d'Ailly thought not.⁵ What of Ockham? When he turns to explain how it is that concepts are similar to what is conceived by them Prof. Panaccio employs the image of a hand grasping.⁶ Certain configurations of the hand are suited to grasp a baseball, others to grasp a hammer, yet others to grasp a book and so on. The configuration of a hand which is suited to grasping a book is not like a book in any ordinary

⁵ Cf. Peter of Ailly *Concepts and Insolubles*, tr. P.V. Spade (Springer 1980) p.26

⁶ Panaccio op. cit. pp. 123-124

sense and yet it is a book-grasping configuration and not a ball grasping configuration. Suppose then that minds really were like hands and there were configurations of minds which really were configurations but which were not suited to grasp anything actual or possible. Would they be concepts – just not concepts of anything or would they not be concepts at all. If they would be concepts then it seems appropriate to say that it is internal features of the concept itself in virtue of which it is a concept – and so Ockham would be an internality. If, however, it is precisely because that way of being configured turns out to be a way of grasping certain things that the configuration is a concept of those things – and *so* a concept at all – then we might sensibly call Ockham an externalist.

I suggested earlier in this paper that for both Aquinas and Descartes there is a close connection between their ontologies and their theories of concepts. For Aquinas we can think universally because the forms found in different things of the same kind are in some sense the same and to think that kind is to have what is in some sense that same form in mind. For Descartes what there can be is what has objective reality and to think something is to have it in mind with that objective reality. What, then, of Ockham, Buridan and the nominalistae. How do their ontologies relate to their theories of concepts?

First some background. Ockham and Buridan both distinguish categorematic terms which signify objects from syncategorematic terms which do not but perform other semantic functions. Among categorematic terms they distinguish what Ockham regularly and Buridan occasionally call *absolute* terms from what Ockham regularly calls connotative terms. Absolute terms signify whatever they signify in the same way and they can be correctly predicated of what they signify. Connotative terms signify things in different ways and can be correctly predicated only of what they signify primarily. Connotative terms have nominal definitions which are synonymous with the term in question, absolute terms do not because if such a definition was not to be just a repetition of the absolute term it would involve *other terms* which would have their own significations which would differ from the signification of the absolute term and so, since synonymous with the term to be defined.

Both Ockham and Buridan think that thought itself has the structure of a language with concepts as terms. Hence they are committed to there being absolute concepts. Even if there are simple connotative concepts species concepts are not ordinarily among them. It is these ordinary species concepts which for Ockham in the Quodlibeta at least are the first simple abstractive cognitions.

The Nominalistae maintain that a whole just is its parts and they maintain that every material object is a whole made up of parts.⁷ Only God, angels and human intellectual souls are simple. Moreover they hold that matter is infinitely divisible so that each bit of matter is itself made up of parts and so on. What exactly then is conceived by an intuitive cognition of (say) a donkey like Brunellus?

Absolute terms and so absolute concepts do not express identity conditions. Suppose, for example, that human beings really were rational featherless bipeds so that nothing could be human if it were not (or were not apt to be) rational and featherless and bipedal. If these

⁷ cf. Calvin G. Normore (2006). "Ockham's Metaphysics of Parts", *Journal of Philosophy* 103 (12):737-754.

conditions were 'built in' to the concept of human then that concept would signify the rationals and the featherless and the bipedal and so at least angels, and likely kangaroos. Of course it would not signify them primarily but it would signify them and so would not be an absolute term, Hence if there is to be an absolute concept of Brunellus it must be one which does not encode identity conditions for him.

Now if there is an absolute concept of Brunellus it is an intuitive cognition of him or, if the doctrine of the Ockham's Quodlibeta V.7 is not the last word, a simple abstractive cognition differing from the intuitive cognitions in not grounding any contingent judgments about him. Any complex proper concept will have parts which signify things other than Brunellus and so not be an absolute concept of him.

But could even an intuitive cognition of Brunellus be absolute? To the best of my knowledge the nominalistae conceive of creatures like Brunellus as *res permanentes* having all of their parts at once. Thus Brunellus is wholly present when I intuitively cognize him and, were I to so cognize him a little later he would be wholly present again. But Buridan and Albert of Saxony explicitly admit – and Ockham is committed to and comes close to admitting – that Brunellus at t is not strictly identical with Brunellus at t+ - they are their parts and they are not the same parts. So what exactly do I conceive when I intuitively cognize Brunellus at t?

However things go with intuitive cognitions it is simple abstractive concepts which are the paradigmatic absolute concepts for the *nominalistae* and here the problems are acute. Ockham himself admits, for example, that the concrete term 'homo' does not correspond to an absolute concept. It does not because inter alia it picks out Christ and Christ is a homo only when a human nature has been assumed by the Second Person of the Trinity. Hence, strictly speaking 'homo' has a nominal definition – something is a homo if it is a *humanitas* which has not been assumed by anything else or if it is something which has assumed a *humanitas*. Ockham does not say so but one assumes the problem can be generalized to any concrete terms for a being whose nature can be assumed by something.

Ockham apparently does think that abstract terms like *humanity* and *donkeyhood* are absolute (though why such natures could not be assumed by a Person of the Trinity is far form clear) but in the light of the fact that no donkey is literally the same thing over time one wonders how this could be. Suppose 'asinitas' signified all the donkeys there are and these donkeys stay in existence by constant replacement of their parts. Suppose that they are their parts taken together. Then they are different collections of parts over time. The concept of *asinitas* must track these changes so that as I watch *that donkey* eat a meal I do not conceive that it has been replaced by a different donkey. But how can the concept track these changes unless it embodies conditions for identity over time and so is not absolute?

For Buridan (though perhaps not for Ockham) there seems to be an analogous problem with synchronous identity. Buridan thinks that animal souls are homogenous and that all the differentiation within an animal is due to different dispositions of the matter. Different types of animal soul require different material structures to exist. Some, like donkey soul, require rather complexly organized matter (which is why the leg of a donkey does not remain alive when cut off) while others like plant souls and certain worm souls require only very simply structured matter – which is why you can take cuttings from a plant and can cut certain worms in two without killing them.

Consider such a worm. Before it is cut in two there is just one worm – after there are two. Why? Buridan's thought is that separating the parts of worm matter and worm soul is exactly what makes for two – a worm is a continuous quantity of worm soul informing a continuous quantity of suitably disposed matter. Separate parts of those quantities (by air say) and you now have two worms. Thus there appears to be a condition built into the concept of an animal – an animal is animal body and soul unseparated. But if there is such a condition then the concept of animal is not absolute.

In the discussion just recounted I have focused on absolute concepts of count nouns – like donkey and worm – but there is some reason to think that Buridan at least does not think that count nouns are basic - and this may give him absolute terms after all – though in a somewhat different frame for that we usually attribute to him!

Here something hangs on the fact that Latin, unlike most of its descendents, lacks an indefinite article. In the Third redaction of his *Question Commentary on De Anima* Bk. II, q. 7 Buridan asks whether "Pes equi esset equus?" His answer is that."Pes equi est equus" but "Pes equi non est totus animal." If we translate the question as "whether a foot of a horse is a horse" Buridan's response seems to be that we have two concepts of horse – one absolute and the other connotative i.e. one just of horse and the other of a whole horse. If on the other hand we translate the question as asking whether every foot of horse is horse (on analogy with whether every part of water is water) we get a very different picture – one in which the basic concept is a *mass term* and the count noun, *a horse*, is a connotative term picking out a maximal unseparated quantity of horse matter and horse soul. If we read Buridan this way, then the problems about forming absolute concepts of horse stuff whenever they may be. On this picture, however, individual material objects cease to be the basic furniture of the universe. Can that really be where Ockham's epistemology and metaphysics lead?

Gyula Klima:

Two Brief Remarks on Calvin Normore's Paper

Since at the meeting we ran out of time and I did not have a chance to offer my comments on Calvin Normore's extremely stimulating paper, let me offer them here.

(1) "If a whole just is its parts then a difference of parts should make for a different whole and if each material object is such a whole then for numerically the same material object to persist through time it must not gain or lose parts over time." (p. 45 above)

Well, one might say that this is a *non-sequitur*, unless we make having (all) the same parts at any time throughout its existence a criterion of identity for the whole. For otherwise it is quite possible that the whole is the same as all of its parts at any given time, and yet, the same whole (re-identified on some grounds other than the sameness-of-all-its-parts, say, on the grounds of having the same greater part or the same "principal part", e.g., the same form or the same principle of individuation, etc.) is the same as all of its parts at one time, and it is the same as all of its parts at another time, at which time, however, not all its parts are the same as the parts it had at the former time, but some of its parts are replaced by others. In fact, this is precisely the strategy Buridan follows. So, the point is that the formula "whole = all parts" (at any time throughout the existence of the whole) in and of itself should not entail the quantitative immutability of the whole (during the course of its existence, i.e., as long as it is identifiably one and the same being), if the identity in the formula is read as contingent identity, in which the collective noun 'all parts' non-rigidly designates, at any given time, the totality of the parts of a given whole which, in turn, is rigidly designated by the term 'whole'. Thus, the same whole (having the same principal part at every time throughout its existence, identifying it as the same whole) may be the same as different totalities of its different non-principal parts plus its same principal part at different times.

With this comment, I would actually like to caution people who want avoid nominalism, simply because (on the strength of the fallacious *aporia* quoted above) they tend to think that the equation of wholes with their parts is some dangerous "reductionism", which one can get rid of only if we deny this (otherwise perfectly plausible) claim. Consequently, they think, we have to introduce some mysterious "organizing/unifying" principle into the whole, the soul or some other substantial form, that is over and above all of its parts, as if the soul were not just another part, only in a different sort of division, of a whole living body. But of course if we take all quantitative parts of a living body unseparated, then we get the whole living body, say, the whole animal, in which every part is animated by the same soul, i.e., it is there in every part; therefore, it is not something superadded to these parts. However, since it is the same whole soul that animates both the whole and its every part, therefore, we easily get the medieval formula according to which the soul is the same entire soul in the quantitative whole of the living body and in its

every quantitative part: anima est tota in toto and tota in omni parte. But this need not be the peculiarity of souls, i.e., the substantial forms of living things: the same may hold for the substantial form of every natural substance that has any persistence through change at all, which is, after all, one of the characteristic properties of substances as opposed to any other category of entities according to Aristotle in the Categories (toward the end of the chapter on substance, where he talks about it being a property of substance that while remaining the same it may receive contraries, undergoing change). Thus, this property of substance, persistence through change, properly understood, may unmask an entirely un-mysterious property of the soul that it shares with the substantial form of any other natural, persisting material substance, and which, therefore, has nothing to do with its alleged immateriality. In fact, this conception of the soul would make it into a material substantial form on a par with any other material substantial form, unless some specific kind of soul (such as the rational, human soul, on account of its peculiar rationality) can have a mode of existence that allows it to exist not only as the form of some matter, of necessity, but also in the way in which a subsistent form exists. But of course that is a further issue, of which Buridan explicitly claims that we cannot determine it relying on philosophical arguments alone.

(2) As for the final question of the paper, I would say that pushing the issue to its ultimate consequences as Buridan is doing it in this question (and in this one alone, as far as I can tell) would lead to a conception of natural science as the science of natural substances pretty much like the contemporary chemistry of elements, where the periodic table provides the quidditative definitions of various kinds of substances, and the laws of quantum physics and chemistry dictate what pertains to each by natural necessity. This, of course, yields a separation of the technical language of science from "ordinary language", in which we learn, for example that the stuff mom's ring is made of is not gold strictly speaking, but an alloy dominated by gold, and that the gemstone in it is just an allotrope of the "lead" in our pencil, which is of course not lead, but graphite, another allotrope of carbon, etc. However, Buridan's conception would push this practice too far away from ordinary language, where even individual horses would have to be regarded as merely spatio-temporally separated chunks of horse-stuff (to be defined, perhaps, in terms of "a periodic system" of animals, say, based on gene-sequencing – well, just following through to further consequences Buridan could not have had any idea about). Perhaps, and of course I'm guessing here, Buridan, being the "ordinary language philosopher" and the cautious, prudent person he was, simply abandoned the issue, and used in his logic "ordinary" substanceterms as if they were both ordinary count nouns and genuine substance terms, as everybody does, perhaps, adding his usual mental reservation every time that nomina sunt ad placitum (names are conventional), and that exemplorum non quaeritur verificatio (examples are not to be verified). If this is right, then this is just a further aspect of Buridan's striking "modernity" his modern readers discover time and time again.