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THE COMPETENCE VIEW OF INTUITIONS – A SHORT SKETCH

Nenad Miscevic

University of Maribor and CEU Budapest
e-mail: vismiscevic@ceu.hu

Abstract:

This paper proposes an outline of a view concerning intuitions, tying them to our basic cognitive competences, or virtues-capacities, a view that is here called The Moderate Voice-of-Competence view. This view claims that intuitions form a kind, albeit a relatively superficial one, united by their phenomenal appearance, but linked to capacities for understanding various domains. Further, intuitions are extroverted, turned towards the items they are explicitly about, and normatively answerable to them; they teach us about things "outside", not merely about our representation(s) of them. This view also takes seriously the actual dialectics of having intuitions: asking (or being asked) a question, imagining a scenario, giving a simple, preliminary answer to the question, formulating the immediate intuition which is often developed by considering other examples, and so on. This work involves more than mere inference following rules of logic. Further, this view is for the most part committed to realism about the objects of intuitions, and is very keen on their explainability. Finally, this view offers a complex answer about the normative epistemic status of intuitions, tilted towards a posteriority: although intuitions are prima face a priori, their reflective justification has a rich structure in which a posteriori elements play a crucial role.

Key words: cognitive competences, virtues-capacities, intuition.

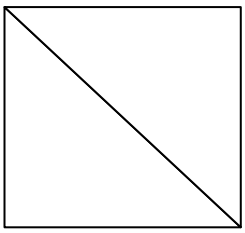
1. Intuitions and competencies: Formulating the view

What are intuitions in general and philosophical intuitions in particular? They are products of human competence(s), they speak with the voice of competence that produces them; indeed many of them are products of basic, fundamental competences humans have, say linguistic, logical, spatial. Linguistic intuitions are the voice of our innate linguistic competence; Chomsky has been famously arguing for this view for half a century. I would like to extend the proposal to other intuitions, in particular to philosophical ones. I will call my line "the Moderate Voice-of-Competence view", **MoVoC** for short, since it takes competence as basic, but allows that many opinions that people voice as their "intuitions" contain a lot of material not produced by, and therefore not revelatory of, the pure competence, linguistic, logical, spatial, or whatever. What about the normative status of intuition: are they a priori or a posteriori? Both. Their justification is a structured one, featuring elements from both categories. This is the view I would like to expound in this paper. I am not going to offer any explicit defense against competing views for want of space. My excuse for doing so is that I think that a sketch of one's view, even if ultra-programmatic, as the present one is, might be useful for offering to the reader the general outline, often obscured in detailed discussions of particular points (I shall be referring, with apologies, to my papers in which I do the more detailed work).

Let me start at the beginning. In philosophy and science one encounters a lot of imaginative thought experiments, (in what follows I will shorten "thought experiments" to "TEs"). For instance, in the Ship of Theseus thought experiment, we imagine a ship A with parts being replaced, the resulting ship B, still traveling, and the emergence of a ship C built on discarded original parts of A. Is A identical to B or C, we are asked. Next, we opt for one of them, say B, and in the good case we seem clearly to be aware of a state of affairs that seems obvious to us: B is identical to A. In the "intuition jargon", we have an intuition that this is the case. We might test it on similar items, say a (Hobbesian) knife, that survives through a series of changes of its handle and sheath. The general conclusion is that continuity makes for identity through time.

The prime use of the term "intuition" is for the clear seeming and/or conviction.[1]

TE's are also used in science, say in physics, to elicit intuitions that serve as guides for both experimentation and theory. Simon Stevin's TE, for example, enables one to 'see' the truth of a conclusion concerning weight resting on a plane. It involves a chain draped over a prism-like pair of inclined (frictionless) planes of unequal slope. Imagine you link the chain, adding links at the bottom. The closed loop "would rotate if the force on the left were not balanced by the force of the right. Thus we would have made a perpetual motion machine, which is presumably impossible" (Brown, 1991:4.). Stevin's TE is akin to problem solving in geometry by visual imaginative means, in the examples featuring simple geometrical configurations, like in the famous geometrical tasks in Plato's *Meno*. The simplest case might be claims like the one that by folding a square over one of its diagonals, the opposite sides will come to coincide, In such geometrical TE's the cognizer is invited to imagine some spatially salient situation and is lead to "see" the necessary regularities which govern it:



Finally, there is a standard procedure in linguistics that is often, and I think rightly, assimilated to TEs. The linguist asks the native speaker questions about a string of sounds or letters. (Often, the linguist is asking herself questions about strings of sounds in her own language.) First, is this a sentence of your language? If it is, further questions are in order. Suppose the linguist looks at issues like co-reference. The question might then concern who is doing what to whom according to the assertion; for instance, if the sentence is "John shaves himself", who is being shaved? The context, like in TEs, is primarily cognitive, not practical, and the point is to elicit a spontaneous judgment of the speaker, who finds a state of affairs obvious and compelling which then serves as the starting point of further theorizing. These are "linguistic intuitions".

So, the states we call "intuitions" vary in regard to their topic, but they share their phenomenal properties classically described by Descartes in terms of "clear and distinct cognition", of being "present and apparent to an attentive mind." [2] This should make intuition into a phenomenal kind, at least.

Next, we have to introduce a few distinctions concerning various uses of the word "intuition". We have taken it to refer primarily to cognitive states (those of 'seeing' that some proposition holds). It also denotes the contents of intuitive judgment (e.g. "John has this strange intuition that eating vegeta-

[1] The meaning of the word "intuition" is tied to obviousness and immediacy. Indeed, the original philosophical meaning of the word has been applied to the cases of a clear insight, "intuitio" meaning simply "seeing". (The word appears in the Middle Ages, in optics, in theories about immediate perception and in the religious context of "seeing God".) Descartes has made it famous, linking it to "clear and distinct cognition" in his "Regulae" and "Principles". He speaks of that

> which is present and apparent to an attentive mind, in the same way as we assert that we see objects clearly when, being present to the regarding eye, they operate upon it with sufficient strength (Principle XLV).

A slightly different way of understanding the term "intuition" comes from the Kantian tradition, and has also been prominent in the writings of German mathematicians, and others who have followed their usage. It focuses upon quasi-perceptual awareness, of the kind illustrated below with the folding of a square. You can "see" the result in your imagination, and this kind of exercise is often categorized under the rubric of "intuitive geometry". Kant suggested the Latin term "intuition" as a translation of his "Anschauung", encompassing both perception and quasi-perceptual imagination. Hilbert talks about "intuitive geometry" meaning exercises like the one above.

[2] L.J. Cohen proposes that "...an intuition that p is just an immediate and untutored inclination, without evidence or inference, to judge that p" (1981: 318). Similarly, the S. Blackburn's *Oxford dictionary of philosophy*, speaks of "immediate awareness, either of the truth of some proposition, or of some object of apprehension such as a concept" (1994, 197).
Michael Ayers –commenting on Locke, and apparently endorsing his general stance–describes the intuition of necessity in the following way:

> " …the perception of necessity is something like seeing, but is more like ordinary cases of the intelligent apprehension of the significance of what we see, such as the realization how this (actual or depicted) gear works" (1991: 299)

bles is morally wrong."). Moreover, philosophers have hypothesized that there is a capacity for having intuitions and have extended the use of the term to cover that capacity. So the term "intuition" has at least three meanings:

> 1) intuition-state, i.e. either inclination to judge that p (with the feeling of obviousness and irresistibility), or the judging itself,
> 2) intuition-content, i.e. the judged proposition that p,
> 3) intuition-capacity, i.e. the hypothetical capacity producing and underlying the intuition-state.

We should add to these standard meanings the process producing intuition that is occasionally described as "intuiting that p."

INTUITION STATE		**INTUITION-CONTENT**	
STATE SPECIFICATION	**STATE-FEATURES**	**MODAL SPECIFICATION**	**CORE CONTENT**
I believe I "see" I intuit	certainly clearly obviously/that indubitably- compellingly	necessarily	*continuity determines identity of material objects.* *2+5=7* *if* p and q *then* p.

Let me now reiterate my claims in relation to the main categories in the table. I would defend a pro-intuitionist view that there are intuitions-dispositions and judgments, which form a distinct group of phenomena, and there is an intuition-capacity, the capacity to use our imaginative and judgmental competencies in an off-line fashion. It is the voice of competence – linguistic, spatial-geometrical, metaphysical, moral, and so on. Intuitional data are thus the minimal "products" of tentative production by the thinker (or speaker-listener) and not their opinions about the data. The data involve no theory and very little proto-theory. Although there might be admixtures of guesswork in the conscious production of data, these are routinely weaned out by theoreticians (philosophers, mathematicians, linguists).

Why go for competencies, and why suppose they are partially innate? Well, even authors like Devitt (1996), who are not friendly to competentialism, have recognized the usefulness of procedures like the following when dealing with intuitions: first, grouping similar intuition-contents by their domain into larger (candidate) content-kinds, and grouping the intuition-states supporting them into larger state-kinds (for example, intuitions about numbers, or those about physics, or about the composition of things). Second, assuming that a given state-kind (e.g. linguistic intuitions) is produced by a single kind of capacity pending massive evidence to the contrary. And finally, searching for the set of basic features that the hypothetical kinds – both state-kind and the capacity-kind – should have (e.g. the basic features of states of having linguistic intuitions and of the underlying hypothetical linguistic capacity). The advice is indeed a piece of methodological commonsense.

The competentionalist line of answer is best introduced by considering big families of intuitions outside the narrow domain of theoretical philosophy, and we shall start from these clearer cases. The whole competentialist story began with language and linguistics: the complexity of syntax, its early acquisition, as well as neurological evidence, point to a specialized, relatively modular competence that is answerable both for ordinary linguistic activities and for having linguistic intuitions.[3] Similarly with arithmetic: cognitive research points to a relatively modular numerical competence, innate in its basic form, modular in its functioning, as well as in the case of malfunctioning; the issue is not any more if such a "number sense" exists, but only what its precise structure is. Geometrical intuitions point to a spatial competence, again relatively modular, of prime importance for our dealing with the environment (and probably philogenetically important for the survival of our species).[4] Inference, both deductive and inductive, demands relatively specialized apparatuses. Psychologists debate about their relation to the two "official" branches, and the relation is obviously quite complex. Be that as it may, these competences are relatively clearly delineated, and not very dubious. Further, there is a widespread agreement that the human ability to deal with complex physical environments involves "naïve physics", grounded in an implicit understanding of material objects, relatively fixed, and impressive both in its achievements and in its limitations and

[3] See for the defense Miscevic, 2006 b.
[4] See Miscevic, forthcoming.

straightforward mistakes. [5]It is natural to suppose that our naïve understanding of our physical surrounding involves some premises that would on the professional library arrangement end up on the shelf of "metaphysics": assumptions about the basic structure of material objects, perhaps some naïve essentialist assumption, and assumptions about identity through time.[6]

If one wants a general theory of intuitions and intuition-capacity the appeal to specialized competences will be unavoidable. Their unity and simplicity will strongly suggest not to separate theoretical philosophical intuitions from the rest. Moreover, the practical sphere also seems to depend on a relatively specialized sensitivity to moral issues, if not to moral properties. What is the particular form of this moral competence is an open and exciting issue, but its existence is way less open to doubt.

This leaves open the issue of epistemological intuitions; there is little evidence for a special competence for them. However, if every other area is best accounted for in competentialist terms, it seems reasonable to postulate an ability to gauge and understand cognitive achievements, of oneself and of others. The ubiquitous and perpetual need to rely on others for information gives important practical value to gauging their testimony, and it is plausible to suppose that humans have developed a common treasure of means for achieving this. Cultural variety might have led to diversity in detail, but it is better to assume a fundamental unity, unless the evidence to the contrary is really overwhelming.

Also, our innate endowment might explain at least the very origin of the intuition-capacity and the initial stages of the formation of our intuition-states with their contents. For instance, it might consist of innate structures, some corresponding to concepts and some to inner, spatio-temporal "frames", responsible for an innate spatial-geometrical know-how to. This explains some of the objective validity of our intuitions. But nativism should be restricted to the origin of the system and to the relatively initial stages of processing. An intelligent nativist-adaptationist should allow for a wide margin of influence from individual empirical learning, which may overthrow even some deeply ingrained pre-conceptions to the contrary. And most importantly, intuition is doubly fallible. It can misrepresent the contents of our cognitive apparatus, and is thus internally fallible. But, the contents themselves–including their core, innate assumptions–are also fallible, yielding the external fallibility of intuitions. Our innate geometry might be false, our possibly innate folk-physics certainly is. No deep or strong apriority is involved in their deliveries. In short, we can admit an important role of intuitions, and preserve some of their special status, intimated by their phenolmenology, without falling into dangerous traps of classical Cartesianism. Finally, to stay in the normative realm, the appeal to competences nicely fits virtue epistemology, which sees well-functioning competences as epistemic virtues-capacities (Sosa, 2007).

Let me briefly sketch the main features of MoVoC. First, intuitionism: there are intuitions-dispositions and judgments, which form a distinct group of phenomena, and there is the intuition-capacity, the capacity to use our imaginative and judgmental competencies in an off-line fashion. It is the voice of competence, most often a discrete one. Intuitional data are thus the minimal "products" of tentative production – linguistic, philosophical, moral or mathematical – by a naïve thinker (or speaker-listener) and not his opinions about the data. The data involve no theory and very little prototheory. Although there might be admixtures of guesswork in the conscious production of data, these are routinely weaned out by linguists.

Second, extroversion or referentialism: intuittions are concerned with their external objects, the domain of items and facts, rather than with concepts. Concepts often play a role in the process, but they are not the object of intuitions, and their role is subordinate to the role played by the external referential domain.

[5] And it probably involves manipulating mental models. Many problems, particularly those involving spatial relations, are much easier to solve in mental models then verbally. Manipulating mental models gives the thinker a kind of "view" of changes of situation. It is close to experience, not only in respect of its "feel", but, much more importantly, in respect of its concreteness, specificity and spatial character. The solution of the problem is "imaged" (or "seen"), and this is just due to the peculiarity of the medium.

[6] Here is a quotation from Herbert Simon, that nicely captures the essential point:

> "The mind represents information in various ways, in this case, in the form of a mental picture. We have available certain processes, or operators – some of them conscious some not – for operating on and drawing conclusions from this information. In the case at hand, the subconscious operator applied is one called seeing. It is available for extracting information from both external visible displays and pictures in "the mind's eye'" (Simon, H., 1992, 125).

Third, the primacy of the concrete. TEs and the intuitions they produce are rather scenario-based than inference-based. Imagining scenarios, typically particularized ones, plays the main cognitive and justificatory role, whereas inference typically plays a subordinate role. I shall leave this aspect out of the present debate. On the psychological side this points to "mental models" and similar items with quasi-concrete representational features, rather than to pure reasoning (see Miscevic, 1992).

Fourth, explanationism: intuitions require an explanation, of having them and of their reliability,and if possible a causal explanation. The heart of philosophy is the question "how possibly" (as famously noted by arch-apriorist Kant), and in typical descriptive matters the question is naturally read as demanding a general causal account of the phenomenon in question. My own favorite line is summarized in the following paraphrase of J. L. Austin (where his term "words" is replaced with "cognitive inclinations"): the stock of our deepest cognitive inclinations embodies all the distinctions men have found worth drawing, and the connections they have found worth making, in the lifetimes of many generations: these surely are likely to be more numerous, more sound, since they have stood up to the long test of the survival of the fittest, and more subtle, at least in all ordinary and reasonably practical matters, than any that you or I are likely to think up on the spot ("A Plea For Excuses", in *Philosophical Papers*, p. 182). This accumulated wisdom then allows the philosopher to anticipate the experience from the armchair. At the same time, the double fallibility of these intuitions accounts for the limits of philosophical autonomy: armchair research should be open to corrections from empirical science. [7]

Fifth, moderate and structured aposteriorism: concerning the justificatory status of intuitions, where the stress is on a posteriori rather than on a priori. Mere acceptance of the "voice of competence" does not land us in any objectionable Cartesianism: it is compatible with naturalism and with distrust of a priori philosophy. I will have more to say about this in the penultimate section of the paper.[8]

Each of the proposed views requires substantial arguing. As I said, I will point to my published papers for further reading; here I just want to summarize the view, in the most programmatic manner possible. Let me now place my proposal on the map of views. Let me contrast the firmly aprioristic views with non-aprioristic ones, and place MoVoC with the latter. The traditional aprioristic view is epistemic Platonism, nowadays defended by authors like J. R. Brown (1991), and Lawrence Bonjour (1998). According to such direct access epistemic Platonism we have a capacity, intuition or insight, which offers us direct access to the domain we think about, in this case abstract objects and properties. It is basically the capacity to "see" the domain with the eye of one's mind. The problems for such view, made famous in our time by Benacerraf's proposal of an unpleasant dilemma, have reduced its popularity.

The most fashionable recent family of aprioristic views is tied together by the idea that armchair truths are typically (or even exclusively) conceptual truths, i.e. truths which express constitutive relations between concepts. Let me call the claim "conceptualist" and the whole family "conceptualism" [9] (The most prominent authors are Christopher Peacocke (see e.g. his 2004), Frank Jackson (1988), and Paul Boghossian (2008). Conceptualism continues the line made famous by early modern empiricists who, in their reaction to problems facing rationalism and Platonism in general, accepted that there is some a priori knowledge, but account for it by switching to concept-like (or even image-like) entities, our ideas, and then turning this idea against its empiricist proponents. Recent conceptualists are still being faithful to the empiricist notion that the a priori is grounded in "relations of ideas" (although they prefer formulating their proposal in terms of "conceptual knowledge", and some of them prefer to quote Frege rather than Locke). Their reversal consists in combining two claims: our a priori knowledge is conceptual, and/but it is still factual-substantial. [10]

On the opposite, anti-aprioristic side, let me distinguish two broad options. One is MoVoC. The other is the family of views claiming that the presumed intuitional source of beliefs is "nothing special", that what philosophers describe as intuitions are just ordinary beliefs. The so-called philosophical intuitions are not exceptional in any way, they are very, very ordinary beliefs. Since a term is needed, I propose the term "ordinarism". The view has a long tradition. For instance, British Intuitionists, prominently A. C. Ewing, have

[7] For further elaboration, see Miscevic, 2007.
[8] And there is more in Miscevic, 2004

[9] See the classical papers in Boghossian and Peacocke, 2000.
[10] I critically discuss these views in Miscevic, 2005.

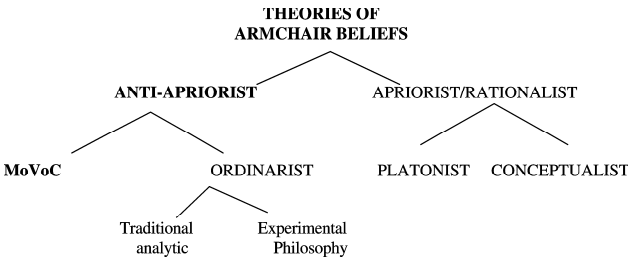
proposed that seemingly immediate armchair judgments and beliefs are in no way special; they are just ordinary judgments, often derived from reasoning.

> An intuition must be regarded as a rational judgement, though one not based on argument, even if capable of confirmation by it, and not as a mere feeling ... The best and most reliable intuition comes after reasoning and not before. (1953:137)

Similar views have been proposed more recently by Michael Devitt (2005, 2006) in connection with linguistic intuitions and intuitions in general, as well as by Soren Haquist (1996), and to some extent Roy Sorensen (1992). Norton has been a long time defender of a staunchly empiricist treatment of intuitions: they come from experience and reasoning, and TEs encapsulate the latter (2004). Let me add two very recent books, Tim Williamsonn's *Philosophy of Philosophy*(2007*)* and Herman Cappelen's *Philosophy without intuitions*(2012), which want philosophy to get rid of intuitions altogether. This is in fact even outside of ordinarism proper, but is similar in spirit to authors like Williamson, who insists on the ordinary character of the sources of philosophical beliefs.

> One main theme of this book is that the common assumption of philosophical exceptionalism is false. (2007: 3)

Ordinarism is usually combined with three attractive doctrines that MoVoC also accepts. First, referentialism or extroversion (in contrast to conceptualism) : armchair beliefs and similar states are concerned with their external objects, the domain of items and facts, rather than with concepts (as argued by Williamson in his *Philosophy of Philosophy*, chapter 2). Concepts may often play a role in the process, but they are not the object of beliefs, and their role is subordinate to the role played by the external referential domain. Next comes explanationism (in contrast to quietism): armchair beliefs and similar states require an explanation of their being had and their reliability (if possible, a causal one, I would add). Finally, we have anti-apriorism: armchair deliverances are not a priori. (I am using the less standard terms "apriorism" and "anti-apriorism" rather than "rationalism", because of the multiple ambiguity of the latter, and the fact that the term "anti-rationalism" is already pre-empted for a completely different stance in a different area). All of the authors listed are analytic philosophers in the mainstream tradition. A recent development in the area adds to the variety of ordinarism(s). This is "experimental philosophy", in itself a varied and already rich field, in which experimental psychological methods are deployed in order to study intuitions. Here, then, is the map:



Hopefully, MoVoC is sufficiently specific to merit an independent niche.

2. Eliciting an intuition: The stages of a TE

Our sketch has been quite general and abstract, keeping to the minimum of example and concrete analysis. Let me make up for this defect and illustrate the workings of the MoVoC attitude on a kind of example, and indeed one that has not been much discussed in the literature. Thought experimenting goes through stages, and traditionally a philosopher will pick up a particular stage and concentrate upon it, without making fuss about the structure of the whole. I would like to remedy a bit of this deficiency and look at the rich biography that certain kind of intuitions normally have.

Suppose the person, call her Jane, has been told a story (Twin Earth, Gettier, the Ship of Theseus) and is being asked for an opinion. Call this stage zero of a TE. In short, one can distinguish several steps in the thought process. Jane would normally begin with understanding what she is asked to imagine, namely, to conceive of a state of affairs involving some property P (being water, true justified belief, identity through time). Next she would make an effort of thought and imagination, implementing a particular scenario that involves P. This results in a clear seeing belief or judgment concerning P in the particularized setting (XWZ is not water, Smith doesn't have knowledge, etc.). The next task concerns the passage to generalization. (e.g., in the Twin Earth case noticing that the answer in question generalizes to other stuffs, and finally that it yields the verdict that the constitution of any kind of stuff

is essential to it). It thus ends with a general judgment concerning P. Further, reflective people think about their spontaneous reactions and judgments. They can compare them with other judgments, and balance them in their reflection. If the thinker reaches an equilibrium, it is called narrow reflective equilibrium. Also, they might compare the narrow result with what they know from other sources, for instance from science, or social experience, and balance all the components again. Finally, a philosopher may combine several scenarios into a continuous story, as Wittgenstein does with his questions about builders in the first roughly thirty paragraphs of *Philosophical Investigations*. Let us consider each stage in turn.

First, understanding the task.

The way in which the subject understands the question often determines the rest, and ill-understood or misunderstood questions might at the end of the day result in theoretical disasters. This stage one is now being made prominent in several lines of discussion. One line of discussion comes from experimental philosophy, where theorists often use procedures from the methodology of psychology in order to control variables that might influence subject's understanding of the question. The other is strictly philosophical, and has to do with the nature of questions asked in philosophy examples, like the Ship of Theseus or the Gettier problem.

Second, the stage of tentative simulation-production

We next pass to the subject's search for an answer. In discussions about philosophical intuitions one usually talks about subject's conceptual competence and/or her basic theory of the domain involved. There is little debate about whether the working of the competence is more conscious and situated at the personal level, or if it is rather non-conscious and sub-personal. However, in the case where a naïve subject is asked the question "Which of the two ships is identical to the original one?" it is plausible to suppose that she does not have conscious knowledge of the principles for identity through time. So, at least part of her search for an answer is better ascribed to a sub-personal capacity. In this case it is probably the logic of competence that tells her, at the end, that, for instance, things have a property or don't, and she therefore calculates that the right answer is Yes.

It is important here for the subject to be going through the actual scenario of the thought experiment, for instance imagining the history of the Ship of Theseus, simulating the situation of Smith in the Gettier example, imagining the falling objects in Gallileo's TE, or reproducing and parsing the sentence proposed in the testing of linguistic intuitions. I like the scenario and simulation approach, stressing the importance of actual simulation and imagining of the scenario as presenting the exercise as being irreplaceable; for these the unconscious inference is a mere auxiliary operation. Kant has probably been the fiercest advocate of this special nature of intuition, as against his rationalist predecessors, especially against Leibnizian inferentialism-logicism. I am very much with this line. (On the opposite side, there are those who stress the role of inference and logic, reducing thought experiments to reasoning, like Norton (2004).)

At this point one should note an interesting contrast concerning the generality of the approach: theoreticians that limit their research to philosophical intuitions tend to be divided equally between simulation-scenario and logic-inference approaches, whereas those who focus on linguistic or geometrical intuitions cannot but stress the specific role of simulation and imaginative scenarios. So, generality is on the side of the latter: if we want to offer a more uniform account, we cannot get rid of simulation and scenarios; but once we introduce them, there is no reason not to rely on their importance wherever needed.

Third, arriving at the verdict

After a brief period of time, a normal subject typically arrives at the verdict, the clear seeming and belief, e.g. that the still sailing ship is identical to the original one, that Smith does not have knowledge, and the like. Since MoVoC enjoins us to think about competencies, and since there is some evidence that various forces come together in a subject's arriving at the verdict, let me hypothesize three distinct sub-stages in this process. In many cases it is a specialized mechanism, say a "moral module", or a "geometrical module" that does the job. Whether or not we have a "metaphysical module" for the Ship of Theseus type of problem is an open question. We may assume that the module comes up with the verdict, either in the form of affirmation, or of a mere seeming. (Ernest Sosa, for instance, in his (2007) stresses the pull of the seeming, and in fact reduces the seeming to the attraction to believe.)

Next, the general cognitive capacity (or capacities) together with memory, general knowledge and motivational structure kick in. Let me give you an example (from Nichols, and Knobe (2007)). We

know, thanks to experimental philosophers, that people, when presented with a general deterministic description of a universe, judge that the agent in such a universe is not responsible for his deeds. However, if you make the deed very bad (killing one's family in a cruel way in order to elope with one's pretty secretary), they judge the doer to be responsible. One way to account for this discrepancy would be that the first judgment, the no-responsibility verdict, reflects our general moral competence of judging people's actions. With the murder of the family scenario added, a strong indignation comes in and overturns the initial intuition.

We can imagine a parallel, less dramatic story with the Ship of Theseus TE. Jane, after imagining the history of the Ship, and the three items figuring in the story, the initial vessels A, the continuing vessel B, and the rebuilt vessel C, has opted for one of them, say B. To her it seems obvious that the still sailing vessel B is in fact the same thing as the original Ship of Theseus. The thought, or more precisely the content of her thought, is attractive and compelling to her. This is stage four, with its intuitional seeming or "attraction". At this point in the TE various factors might intervene. For instance, Jane might remember helping in the restoration of an old church in her home town, and the art historian present complaining that "most of the parts are new and not original, and the church is 'not really the same any more'", and, driven by analogy, she might start doubting that a rebuilt ship can be the same as the original one. However, if nothing such intervenes, Jane will normally assent to the seeming, and thus form the (intuitional) belief that B is identical to A. This is the stage of the verdict. The two states, of seeming and of having belief are classically described as "having an intuition that…". This stage has been the favorite of recent meta-philosophers. But, we are far from being done.

Four, varying and generalizing (intuitive induction)

The intuition resulting from stage five is particularized: in the Ship story it says that the ship B is identical to the ship A. Most people do not need another analogous story, say of a knife, to conclude that the morals are generalizable. Similarly, in Twin Earth thought experiment one first judges that XWZ is not water, and then generalizes to the view that composition is essential for stuffs. Roderick Chisholm (1989) usefully distinguishes three stages in coming to see the truth of the general proposition: first, the accumulation of instances, second, the inductive inference from the instances to the general statement, and third, the 'sudden' intuitive insight that the general statement is necessary.

The "sudden" character of the insight is itself puzzling (J.R. Brown has been insisting upon this since his earliest book on intuitions (1991)), but we shall leave it to one side for now. So much about the single (particular or general) insight from a TE.

Five, reflective equilibrium, narrow and wide

We now pass to wider interaction. It might start at the level of varying and generalizing, or later. For instance, a person who thinks that the actually functioning ship is identical with the original one in spite of the different matter – planks – from which it is composed, might go through examples of tools, and generalize her insight. But then she might ask herself: Would I consider a gothic church, "preserved" in the same way, by replacement through two centuries of all the ancient bricks with industrially produced fake bricks, to be really "the old gothic church"? If the answer is No, it would clash with the Ship intuition. Both intuitions are strong. One way to balance them would be to claim that artworks have different, much stricter conditions of identity than ordinary material objects. This reflection would yield a fine equilibrium, an example of 'reflective equilibrium', as Rawls has called it.

Such an equilibrium within the "family", i.e. between various intuitions, is often called narrow reflective equilibrium. To give a further example, we might wonder whether our linguistic intuitions are mutually consistent, and weed out those that are inconsistent with the majority of others.

Narrow equilibrium is not sufficient. We want to have an encompassing philosophical view, informed with general knowledge of matters. So, the final stage is the wide reflective equilibrium, bringing in additional empirical information from history, psychology and social science or just ordinary experience. For instance, some of our discordant linguistic intuitions can be explained away by the assumption that they are being "infected" by extra-linguistic social considerations; for instance, we have rejected a completely grammatical English sentence out of snobbery or political correctness. Or, to revert to the Ship example, I might consult the work of anthropologists about the typical judgments from other cultures, in order to avoid being parochial. Once I have all the data, general claims (principles and the like) I go on balancing the intuitions with the rest. If I reach equilibrium in my reflection, it is called wide reflective equilibrium.

Six, from micro- to macro-TE

Until now we have discussed single TEs, or small groups of TEs, and this is what is usually done in the literature. However, there are famous examples of TEs organized in a sequence, so as to yield a consistent narrative, and accompanied by relevant theorizing. In the philosophy of mind, we have a book-length TE from Condillac. In his *Treatise on Sensations* (English translation, 1930) he asks the reader to indentify with a "statue" equipped with a human-like neural apparatus (a human-like robot, we would say nowadays), initially devoid of any contact with the outside world. Its senses are awakened, one by one, and the reader is asked to imagine the reactions of the statue along its way. Also, I have mentioned groups of related micro-TEs integrated into a larger whole in Wittgenstein. The first thirty or so paragraphs of *Philosophical investigations* famously introduce various small "language games" (or proto-language games), commented and organized into an impressive whole, a true macro-TE. But the most dramatic examples come from political philosophy. The first is Plato's *Republic*. Socrates famously suggests at [369a] to first look for justice in states, and only then also examine it in the individual. He then proposes the following: "If, then," said I, "we should in *our argument* / logos / *observe the origin of a state*, we should see also the origin of justice and injustice in it." So, he and his interlocutors proceed to build the just state in their logos, by imagining a series of arrangements. Socrates, for instance, asks about a community of children and whether it is just. His interlocutor, Adeimantos, imagines the arrangement and volunteers the positive answer. Such a small imaginative experience might be treated as a mini-TE. Its counterpart is Rawls's *Theory of Justice*, where the veil of ignorance creates the scenario(s) needed, and an impressive political theory is built from questioning about principles of justice to be agreed to under the veil. So, big, integrative macro-TEs appear in some fundamental classical books of philosophy and are worth studying in more detail [11].

3. Structured pluralism: In defense of impure reason

How should we proceed in justifying intuitions? Insisting on one kind of justification, foundationalist as opposed to coherentist and so on, would guarantee purity and elegance, but would bypass a lot of ways we usually talk about our intuitions. It is better to combine justifications, and in this I would follow the lines of authors like B. Russell (1940) and in our time Ernest Sosa (2007). Properly functioning intuition-producing competences are epistemic virtues-capacities. In line with Sosa-style virtue epistemology (but without following him specifically on intuitions) let me propose a picture that features two stages: the natural, un-reflective use of a thinker 's capacities, and the reflective, meta-cognitive level of reasons she has to trust them. The reflection starts with a thinker asking a question about her belief. She is personally reflectively justified (virtuous) in her belief if she has valid reasons to trust its source. If the source is also de facto reliable, she is meta-cognitively justified (virtuous) tout court. On the meta-cognitive level all the deliverances from the first level capacities might come into play: I thus test the memory by appeal to deliverances of perception and testimony by appeal to deliverances of both.

Let us start with the first level of spontaneous intuitions. Some of their justification is doubtlessly a priori. For instance, elementary logical moves and intuitions are accompanied by luminous understanding, involving insight into the (necessary) soundness of these moves. We accept this as a source of a priori justification, but insist on an account of the reliability of such an understanding. While admitting obviousness and compellingness as a priori prima facie justifiers of spontaneous intuitional beliefs, we can point to some candidate sources of a posteriori justification of the same beliefs, at the immediate, spontaneous level. In typical episodes of eliciting intuitions in TEs, one can separate the contribution of general empirical knowledge from domain-specific (mathematical, moral, and probably epistemological normative, etc.) contribution, which might have an at least prima facie a priori justification. We propose that the resulting intuitional judgments have a structured dual-nature justification. Since justification that is to a large extent affected by aposteriority traditionally counts as being a posteriori, their epistemic status is structured a posteriori.

Armchair beliefs have various origins that tie them to broadly empirical evidence. No wonder, since many intuition-contents seem to be true about physical reality: the mathematical ones apply to collections of things and to interactions in nature, conceptual ones seem to apply across the board. Even if I acknowledge the fallibility of intuition(s), the resulting score is still spectacularly high in favor

[11] For a longer story see Miscevic, in print.

of largely correct intuitions. Kant famously speaks about the "objective validity" of such cognitions, and wonders how the beliefs concerned with items in the world, and which seem not to derive from induction, can be so spectacularly valid in relation to the worldly items. Let me call this claim "validity claim" and distinguish three aspects of "validity": first, actual truth in application to worldly items (e.g. arithmetic applied to apples); second, actual approximate truth in application (e.g. Euclidean geometry combined with classical mechanics, conjectures about crucial properties of kinds); third, necessary truth (i.e. truth in "all possible worlds"). The first two are straightforwardly testable, and it is from this point that the philosophical puzzle arises.

The empirical origin of correct concepts might yield deep aposteriority, compatible with merely superficial apriority: one can decide not to ask about empirical origin, and thus have apriority by stipulation, but this would be a vanilla apriority, more verbal than real. Assume, with conceptualists, that concepts play an important role in steering our intuitions.Further, consider empirical concepts and concept analyzing, or the analytic propositions they generate, for example, "Whales are animals," or "Whales are material objects"; to indicate that they are analytic in WHALE I can write "a-Whales are animals". Such propositions have undoubtedly empirical equivalents which have a posteriori justification; these we can write as "e-Whales are animals". Now, the justification of "a-Whales are animals" and similar analytic propositions usually proceeds by appeal to the corresponding empirical propositions, in our case "e-Whales are animals" ("It has been scientifically confirmed beyond doubt", etc.), and never by merely pointing out that "aWhales are animals" analyzes the concept WHALE it is analytic in.

The practice of such justification implies that "a-Whales are animals" inherits its justification from the corresponding "e-Whales are animals". Therefore, the justification of "a-Whales are animals" and similar propositions is twofold: they can be superficially justified (virtuous) by the appeal to the concept they are analytic in, and they are normally more deeply justified (virtuous) by the justification of their empirical counterpart, which is a posteriori.

Let us summarize the argument pointing out that armchair beliefs have various origins that tie them to empirical evidence, in a general sense, and in particular:

> 1D. Many conceptual beliefs derived from (analysis of) empirical concepts ("e-analytic beliefs" for short) concern propositions (c-propositions) which have undoubtedly empirical equivalents (e-propositions) which have a posteriori justification.
>
> 2D. Justification of such c-propositions usually proceeds by appeal to the corresponding e-propositions, and not by merely pointing out that the c-proposition analyzes the concept it is analytic in.
>
> 3D. The practice of such justification implies that c-propositions inherit their justification from corresponding e-propositions. Therefore
>
> 4D. The justification of such c-propositions is twofold: they can be superficially justified by the appeal to the concept they are analytic in, and they are normally more deeply justified by the justification of their empirical counterpart, which is a posteriori.

On a more speculative side, I also argue that innate, bona fide a priori beliefs might have distant empirical origin. They might be derived from innate (re-)sources, most probably innate mechanisms-programs that have in turn developed from an evolutionary history of trial-and-error, so that their reliability derives from an empirical origin. Empirical origin, even such a distant one, entails a posteriori justification. This justification would be a deep one, compatible with superficial prima facie a priori justification. So, here is a more hypothetical proposal (where "H" stands for "hypothetical"):

> 1H. Simple arithmetical concepts and beliefs, as well as dispositions (and perhaps concepts and beliefs) concerning elementary logic and basic modal reasoning might be derived from innate (re-)sources, most probably innate mechanisms-programs. This view is reasonably supported by psychological and biological research.
>
> 2H. Such innate (re-)sources might have developed from an evolutionary history of trial-and-error.
>
> 3H. If 2H holds, then the reliability of the

(re-)sources might derive from an empirical origin.

4H. Empirical origin, even such a distant one, entails some a posteriori justification. This justification would be a deep one, compatible with superficial prima facie a priori justification. Therefore

5H. The justification of elementary arithmetical, logical and modal beliefs, as well as basic patterns of elementary logical and modal reasoning might be deeply a posteriori.

Let us pass to the second level, the one of metacognitive justification: it is the interplay of (the deliverances of) all capacities that indicates whether a particular capacity, in this case intuition, is reliable. Reflective justification is needed for several reasons: we don't want to rest satisfied with the blind trust in our faculties (and all too easy knowledge thus obtainable), reflection is a part of our normal intuitional thinking, and the need for reflection arises both on internalist and externalist accounts of first-level spontaneous justification. At the reflective level, the most popular and obvious source of apriority is the narrow reflective equilibrium. The sources of aposteriority have to do with (achieving) wide reflective equilibrium. We shall list three candidate sources, and, alas all-too briefly, sketch some reasons why they are indeed respectable.

The first concerns the requirement of total evidence and the opportunity to exploit empirical evidence for many of our intuitions. Reflective justification typically mobilizes and indeed should mobilize capacities distinct from the original capacity in order to enlarge the circle of justification and thus avoid viciousness. In the case of armchair beliefs, reflective justification should revert to empirical considerations testifying to the reliability of intuition and reasoning. Therefore, it will typically combine, in an articulated way, a posteriori elements contributing to thinker's reflective trust in her armchair capacities. On the second level of general coherence justification is partly a posteriori, involving negative and positive support from total empirical evidence.

The support yielding positive coherence is holistic, i.e. partly empirical, and of course, the negative coherence, i.e. absence of undermining, is also holistic. We have argued that reflective justification rightly mobilizes capacities distinct from the original capacity that has produced the belief-candidate for being justified, in order to assess the reliability of the original capacity. It has to go beyond justifiers that are of the same-kind ("homogenous") as first-level immediate ones, in order to enlarge the circle of justification (and thus avoid viciousness), and is, therefore, holistic and coherentist. Reflective justification of armchair beliefs, presumably produced by intuition and some reasoning, should revert to empirical considerations testifying to the reliability of intuition and reasoning. Therefore, it typically combines, in an articulated way, a posteriori elements contributing to a thinker's reflective trust in her armchair capacities. In brief:

1R Pieces of sophisticated belief of thoughtful researchers are typically reflectively justified, in addition to being immediately, first-level justified.

2R Reflective justification typically mobilizes capacities distinct from the original capacity that has produced the belief-candidate for being justified, in order to assess the reliability of the original capacity. It has to go beyond justifiers that are of the same-kind ("homogenous") as first-level immediate ones, in order to enlarge the circle of justification (and thus avoid viciousness), and is, therefore, holistic and coherentist.

3R Reflective justification of armchair beliefs, presumably produced by intuition and some reasoning, should revert to empirical considerations testifying to the reliability of intuition and reasoning. Therefore,

4R. Reflective justification of armchair beliefs typically combines, in an articulated way, a posteriori elements contributing to a thinker's reflective trust in her armchair capacities.

All this helps make the account proposed into a structured aposteriorist one, since on the reflective level it stresses the importance of a posteriori justification, and the insufficiency of a merely a priori one. The holism of reflective justification and its a posteriori component show their bite in two particular areas. First, there are explanation-based reasons against aprioristic purity of justification. Explanation is needed in order to dispel the air of mystery that has been surrounding intuitional knowledge since

Plato. Reflective assessment of armchair beliefs would be incomplete in total absence of explanation of their being held and their reliability. Explanation of their being held and their reliability is a causal explanation or is quite similar to it, e.g. explanation by determination. Therefore, it normally has essential empirical explanatory components, i.e. an important a posteriori component, with a clearly defined role. Of course, one should argue that causal explanation of our reason- and intuition-based beliefs is compatible with their full rational justifiedness.[12] To summarize:

> 1E. The reliability of armchair beliefs is prima facie puzzling.
>
> 2E. Reflective assessment of armchair beliefs is therefore incomplete in total absence of an explanation of their being held and their reliability (by analogy with perceptual beliefs).
>
> 3E. The explanation in 2 has to be to some extent causal or causal-like.
>
> 4E. Barring a priori theological grounding, any such explanation will involve appeal to an empirically believed assumption.
>
> 5E. A priori theological grounding is very dubious. Therefore,
>
> 6E. The explanation of being held and reliability will have essential empirical explanatory components. Therefore,
>
> 7E. Reflective justification of armchair belief will have essential empirical components. It will have an important a posteriori component, with a clearly defined role.

The final reason for aposteriority has to do with unavoidability and global indispensability of central armchair beliefs and inferential practices for all our cognitive efforts. It starts by agreeing with prominent apriorists about their attempt to justify such beliefs either from naturalistic computationalist considerations of unavoidability (inevitability) (Horwich) or from constitutiveness (Boghossian) or from a global indispensability argument (C. Wright), and then proceeds to argue that unavoidable and indispensable tools provide entitlement/justification for projects if those projects are themselves meaningful. However, we are justified to think that our most general cognitive projects are meaningful, and justified partly on the basis of their up to date success, and this basis is a posteriori. Therefore, the whole reflective justification from compellingness and unavoidability is a posteriori. In brief:

> 1I. Indispensability of logic and elementary mathematical understanding for any kind of cognitive project, call it global indispensability, is an important reflective justifier of logical and mathematical beliefs and inferential propensities, perhaps the most important one.
>
> 2I. Global indispensability can justify the target beliefs and propensities, only if our global cognitive project is a meaningful one, with some chances to succeed.
>
> 3I. The issue of the success of our global cognitive project is to a large extent an empirical matter; I am justified in being optimistic about it on the ground of already achieved empirical and empirically detectable success.
>
> 4I. The issue of reflective justification of logical and elementary mathematical beliefs and inferential propensities is to be decided to a large extent on the basis of global successfulness of our cognitive effort, which is largely an a posteriori matter. Therefore
>
> 5I. Logic and elementary mathematical understanding are reflectively justified a posteriori to a significant degree.

[12] We did it in (2004a) against the anti-naturalist, anti-explanationist line (from Kant to T. Nagel, J. Lear, J.Pust and others) which agrees that we have intuitional or reason-based knowledge and points out that rational certainty and justifiedness are essential for such knowledge. This paper then argues that causal explanation shows that these pieces of knowledge cannot have these features; therefore, causal explanation undermines our rational knowledge. Moreover, since causal explanation depends on a lot of rational knowledge, it undermines itself by undermining it. One can either explain intuitions or justify them, but not both. We argued against them that explanation of intuitions does not eliminate their essential features. We briefly sketched a justificational structure that should be acceptable to both parties in the dispute, and shows that giving a causal explanation of beliefs does not collide with justifying them.

In short the justification of our intuitional armchair beliefs is plural and structured, with a priori and a posteriori elements combined in a complex way. It seems thus that the a priori/a posteriori distinction is useful and to the point. What is needed is refinement and respect for structure, not rejection. Alvin Goldman is right to point to the complexity of matters: Warrant is just a complex and multi-dimensional affair, he writes (1999:28). But if it is complex and multi-dimensional, then the a priori/a posteriori distinction should be refined along all the dimensions available, not rejected.[13]

What then is the final verdict? Traditionally, the following principle was held sacrosanct: If justification contains a posteriori elements, then it is ultimately a posteriori. So, if it is mixed and contains one important a posteriori element, it is "infected" by it, and is ultimately a posteriori. For example, the traditional syllogism used to establish that Socrates is mortal contains important a priori elements, ingeniously and famously detected by Aristotle. But its two premises are a posteriori, so the conclusion is itself a posteriori as well. I propose to abide by this principle, and this explains the title of the paper: since reflective justification is shot through with a posteriori elements, it is ultimately a posteriori. Those who do not accept the traditional principle, and do not care for purity of a priori justification, might go a different way, and see the reflective justification proposed as being a simply structured justification, partly a priori and partly a posteriori. The difference between them and me will be mostly verbal-rhetorical, and I am not very much opposed to their choice. Finally, a caveat. Most of what we have tried to show has only a conditional value: if you accept the need for reflective justification, it might persuade you. The staunch opponent of reflective justification will, of course, remain unmoved. It would be a useful exercise to go through the alternatives that are left to them, and try to find out which of our considerations might still apply in the purely first-order setting. But this has to be left for another occasion.

[13] Let me put MoVoC proposal on a wider map:

		A PRIORI	A POSTERIORI	MIXED-STRUCTURED
INTERNALIST	FOUNDATIONALIST	Chisholm Brown	Mill Kitcher -?	
	COHERENTIST	(Kant?) Bonjour	Quine	
EXTERNALIST	RELIABILIST	Goldman		
	VIRTUE EPISTEMOL.	Greco	—	
COMBINED = 2 LEVEL		Russell Sosa Alston?		THE PRESENT MoVoC PROPOSAL

4. Conclusion

The sketched Moderate-Voice-of-Competence view tries to steer a middle course between conceptualist apriorism on the one hand, and its ordinarist contrary on the other. We sketch a version of modest intuitionism according to which intuitions are voices of competence(s). As against full-scale ordinarism, which sees armchair thinking as a holistic matter, we stress particular competencies: logical, linguistic, arithmetical, geometrical, moral. We agree with apriorists about the voice-of-competence line, but disagree about their exclusivity: for them the one and only relevant competence is the conceptual one. This is linked to our acceptance of scenario-based thought experiments versus purely inference-based pictures. We agree with ordinarists that intuitions are concerned with, and epistemically ultimately answerable to items in their domains: geometrical ones to triangles and squares, arithmetical ones to numbers or number-properties. This is referentialism as opposed to narrow conceptualism that takes the realm of sense, not reference, as the crucial instance to which intuitions are epistemically answerable. We defend traditional explanationism against fashionable quietism(s).

On the normative side, regarding the contrast of aposteriorism and apriorism I argue that there is very little or next to nothing in our knowledge that is purely a priori. Most of it, including such star items as mathematics and conceptual knowledge, admits of or even requires a mixed justification. Again, this MoVoC proposal takes a middle way between two prominent contemporary lines of thought concerning the normative status of intuitional beliefs. The first is rationalist-aprioristic, characterized by stressing the specific nature of armchair intuitions, the (presumably) non-holistic nature of their origin and justification, which seems to guarantee them a priori status, and, most importantly, their (alleged) grounding in human conceptual abilities. The opposite ordinarist line denies the specific nature of intuitions, (rightly) divorces intuitions from purely conceptual considerations but (wrongly) insists purely on holistic non-a priori justification (either a posteriori or of an un-

specified kind). We think that it is the task of the philosopher to analyze and find structure, and that intuitional justification is a highly structured one. Properly functioning intuition-producing competences are epistemic virtues-capacities with richly structured justification, crucially involving some a posteriori elements.

Let me conclude with apologies for brevity and dogmatism: if you, my reader, don't find the program plausible, please take it literally as a program: a list of views for which the proponent would have to argue. And we shall probably agree that arguing is not going to be easy.

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