

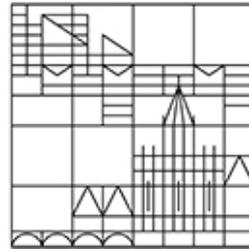
Intuitions and Circularity

Bachelorarbeit

**vorgelegt von
Herasymova, Larysa**

an der

**Universität
Konstanz**



**Geisteswissenschaftliche Sektion
Fachbereich Philosophie**

- 1. Gutachterin: Professorin Dr. Dina EMUNDTS**
- 2. Gutachter: Professor Dr. Wolfgang FREITAG**

Konstanz, 2012

Contents

Abstract	3
1. Introduction	3
2. Issues of Demarcation	8
Common Sense Terminology	8
Reasons for Demarcation	11
3. Issues of Generality	19
Intuitions and Thought Experiments	19
Jaakko Hintikka's Objection from Lacking Generality	23
Answers	24
So Far	26
4. Issues of Circularity	27
Fallibility & Conflict of Intuitions	27
Calibration	29
Foundationalist's Solution	31
Some Conclusions	32
References	34

Some philosophers think that something's having intuitive content is very inconclusive evidence in favour of it. I think it is very heavy evidence in favour of anything, myself. I really don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking.

Saul Kripke (Kripke 1972, p. 42)

Abstract

In what follows I will discuss 1) – the everyday conception of intuition and intuitive ‘knowledge’ as opposed to philosophically interesting conception. 2) – I will divide ‘philosophical’ intuitions into several separate groups with varying degree of strength. 3) – I will argue a fairly uncontroversial point that intuitions are and were constantly employed throughout the history of philosophical practice at the very least from Plato’s days onwards, and certainly long before the start of the contemporary intuition-debate. 4) – I will address one of intuitions’ usability objections namely the worry that if intuitions give us access only to knowledge about particulars then such intuitions are not worth intuiting.

5) – By considering how several objections of circularity of intuitions’ methodology can be reversed onto themselves I will attempt to show the inescapability of philosophical analysis from one or the other sort of intuitions. 6) – I will sketch one possible solution of the problem offered by foundationalism, but will hint that such a solution is not the most *intuitively* gratifying one.

1. Introduction

What is it that philosophers do? – They think and reason about things, ideas and concepts etc. They also reflect on *what* they are doing, and *how* they are doing it. To argue a philosophically interesting point, various methods can be employed either separately or in conjunction with each other; to ponder which of the methods are employed justifiably in reasoning is, of course, also a philosophically relevant point in its own right.

There are several different ways to argue for or against something in philosophy, to name just a few: thought experiment, partners-in-crime strategy, reflective equilibrium etc. An on-going heated debate in contemporary literature concerns one of such methods – intuition.

The whole debate is a relatively new development in a way, but not because philosophers suddenly started to make use of intuitions out of the blue, more because it is only recently that they became explicit about intuitions. It is only recently that the word ‘intuition’ has entered the philosophical jargon so firmly, became substantially used and discussed. Moreover, the reference to what seems obvious to us in discussing various (philosophical) issues has a tradition of a long standing. And although the word ‘intuition’ was rarely used before Chomsky and his interpreters coined it in the deep grammar discussion¹, our intuitions on various topics were extensively relied upon throughout the history of philosophical enterprise. The only difference being that before ‘intuition’ as a steadfast term² found its way into the philosophical discourse, it was much more common to talk about something being obvious and/or about something that seemed a natural and immediate response to a case under consideration.³

Consider how philosophical analysis takes place from Plato’s times. This is a short excerpt from *The Republic*:

Well said, Cephalus, I replied; but as concerning justice, what is it? – to speak the truth and to pay your debts – no more than this? And even to this are there not exceptions? Suppose that a friend when in his right mind has deposited arms with me and he asks for them when he is not in his right

¹ For a prolonged discussion of Chomsky’s (as well as Kripke’s) role in opening the debate see Hintikka 1999. In some discordance with Hintikka’s interpretation though, I still hold that employment of intuitions as it is done today is nothing new even if the word was rarely explicitly mentioned.

² I believe that the development of the debate in philosophy was conducive to the formation of the ‘further’ / second sense for the word ‘intuition’.

³ That is not to say that the word ‘intuition’ has never been used before. There is, for example, intuitionism in philosophy of mathematics, and also intuitions of Kant. Although I do not believe that Kant referred to intuitions just in the same way as it is done today, as far as I understand the both usages are not quite commensurable. Kant’s intuition is his ‘Anschauung’, which is a prerequisite for perception, in particular, and experience in general.

mind, ought I to give them back to him? *No one would say that I ought or that I should be right in doing so, any more than they would say that I ought always speak the truth to one who is in his condition.*

You are quite right, he replied.

But then, I said, speaking the truth and paying your debts is not the correct definition of justice.

Quite correct, Socrates. (Plato 1892, 595; cited in Pust 2000, p. 2; emphasis added)

This is a standard philosophical practice, which makes free use of intuitions while arguing the point and attempting to grasp the concepts of justice, knowledge, virtue etc. normally in terms of a set of necessary and sufficient requirements (Pust 2000, pp. 2-3).

Another standard practice is the use of hypothetical examples to argue either for or against a view. The Gettier cases are one of the most prominent examples of such use. Before Edmund L. Gettier's famous paper 'Is justified true belief knowledge?' it was traditionally accepted that the proposition of a form 'S believes p' can be counted as knowledge in case if:

- (i) P is true;
- (ii) S believes that P, and
- (iii) S is justified in believing that P.

Such 'traditional' analysis (justified true belief – JTB analysis) comes down from Plato's times and lives up to the modern times, when A. J. Ayer described knowledge as the 'right to be sure'.⁴ Gettier's examples are supposed to show that it does not necessarily have to be so, and that there are cases which, although they satisfy the (i) – (iii) requirements of the traditional analysis, cannot be seen as knowledge.

What Gettier claims is that conditions (i) – (iii) (and consequently all other versions of the knowledge analysis affiliated with the traditional one, in so far as they concern themselves with some sort of 'proper' justification for S's belief in P) are not sufficient for the truth of a given proposition. Gettier gives just two such cases when a person can be justified in believing what is in fact a false proposition, and by inferring from that false proposition comes to believe a true

⁴ A.J. Ayer, 'Knowing as having the right to be sure', Sven Bernecker and Fred Dretske (eds.): *Knowledge: Readings in Contemporary Epistemology*, Oxford: OUP, 2000, ch. 1.

statement, that is justified by the reliance on the false proposition for which one has good grounds. For obvious reasons we would not wish to ascribe knowledge status to any such statements – it just does not feel right, because our intuition ‘requires’ some sort of a connection between the justificatory grounds and inferred statement.

Goldman named Gettier’s discussion a ‘landmark discovery’ and a prominent example of how philosophers employ intuitions as evidence to base their theories on. Even though this may not be a ‘discovery’ as we normally conceive of it.

It wasn’t the mere publication of Gettier’s two examples, or what he said about them. It was the fact that almost everybody who read Gettier’s examples shared the *intuition* that these were not instances of knowing. Had their intuitions been different, there would have been no discovery. (Goldman 2007, p.2)

The turmoil that arose after the publication of Gettier’s paper and immediate responses that followed (attempting to either adjust the existing JTB analysis or offering a completely new analysis of knowledge) took place because of the fact that Gettier cases indeed triggered a widespread intuition, at least among philosophers, that neither of his cases or similarly construed ones could be seen as an instance of *S knowing that (p)*.

Timothy Williamson calls the fact that the whole philosophical community almost overnight agreed that the traditional analysis of knowledge with history over two thousand year was flawed, as Gettier cases indicated a ‘sociologically striking phenomenon’ (Williamson 2005, p. 4).

Clearly, intuitions exemplified by the previous two examples have a certain place in philosophy – they are taken by many to play the role of evidence (the other matter is whether the alleged capacity for intuiting a proposition is nothing over and above the ‘usual’ capacities for modal, counterfactual and logical thinking as Williamson argued⁵). Now, not all of what is called intuition according to the everyday notion is acceptable as philosophical evidence, therefore one has to find a way to distinguish between different intuitions, and explain why and where the distinction should be drawn. Moreover the

⁵ For further discussion see T. Williamson (2005 and 2007). Criticisms were expressed by D. Sosa (2006) and T. Grundman (2007).

difference lies not only between the common conception of intuitions and those relevant for philosophy's needs, but also in the fact that not all 'philosophical' intuitions are of the same ilk, as we will see in the next section.

The importance of philosophically interesting intuitions should emerge from the discussions in the section two and three. Section two discusses various types of intuitions, whereas section three turns its attention to a specific type of intuition, namely the kind evoked in hypothetical cases; in this section I will also attempt to refute the objection of such intuitions being useless because they 'merely' concern themselves with particular cases. In section four, I look at worries of circularity, but point to the fact that, if consistently followed, they may lead into general scepticism, and so would better be suppressed. One way to do so is to adopt a foundationalist's attitude, and put intuitions among other basic sources. The last section will be followed by some concluding remarks.

2. *Issues of Demarcation*

As any word that is commonly used on a day-to-day basis which seems to be crystal clear at first glance falls under closer scrutiny and quickly becomes less perspicuous, (this goes for, e.g., knowledge, consciousness, reference and similar) so our capacity for intuiting some propositions becomes much less straightforward once it has been considered in some detail.

Common Sense Terminology

We all have some prior understanding of what 'intuition' stands for in a daily discourse. And since interpersonal communication normally flows on without stopping to specifically check what was meant when intuition was mentioned, it would seem that, albeit vague and undefined, we have a fairly workable grasp of what is meant by reference to intuition.

Various dictionaries, in our case of English, help to give this everyday usage a whiff of precision. This is what various dictionaries of English describe as an instance of intuiting something.

According to the *Oxford Dictionaries* (Online Edition) intuition is: 1) the ability to understand something instinctively, without the need for conscious reasoning. 2) a thing that one knows or considers likely from instinctive feeling rather than conscious reasoning.

Longman Dictionary (Online Edition) offers the following definitions: 1) the ability to understand or know something because of a feeling rather than by considering the facts [SYN – instinct: feminine intuition]. 2) an idea about what is true in a particular situation based on a feeling rather than facts.

In *Collins English Dictionary* (Online Edition) intuitions are described among other things as: 1) knowledge or belief obtained neither by reason nor by perception. 2) instinctive knowledge or belief. 3) a hunch or unjustified belief.

These are the everyday common sense usages of the word 'intuition'; the ones for which having an intuition is not much different from having a hunch that p is true. Here, the state of having an intuition that p is equated with having a 'gut feeling' that p just seems to be the right pick from among other available options. Instinct, insight, feeling, gut feeling, impression, suspicion, hunch, premonition and similar are all supposed to be equivalent substitutes for 'intuition'. Such description of the scope of intuition is not only extremely loose; it brings a great many things under a single roof. If all these 'attitudes' to a proposition p are freely interchangeable then, they should be of approximately the same quality, source and validity, especially level of validity, which cannot be too high when it is a hunch or a premonition we are talking about.

The above seems to imply that intuitions are somehow grounded in our *everyday* experience. A psychologist Myers in his book *Intuition: Its Powers and Perils* speaks of 'intuitive common sense'. Examples of common sense intuitions according to him are:

Common sense once told us that the earth was flat and the sun revolved around us. Common sense, supported by medical experience, assured doctors that bleeding was an effective treatment for typhoid fever, until someone in the middle of the nineteenth century bothered to experiment – to divide patients into two groups – one bled, the other given mere bed rest. (Meyers 2002, p. 93)

When it comes to research done by empirical psychology he is not alone in taking one (or all) of the above loose definitions as a working definition; it would seem that often a similarly wide and loose sense of the word is being employed,

We will call any judgement an *intuitive judgement*, or more briefly an *intuition*, just in case that judgement is not made on the basis of some kind of explicit reasoning process that a person can consciously observe. Intuitions are judgements that grow, rather, out of an underground process, of whatever kind, that cannot be directly observed. (Gopnik and Schwitzgebel 1998, p. 77)

And many intuition-disinclined philosophers follow psychologists in adopting the above view saying sometimes just as much about intuitions as that 'epistemic intuitions are spontaneous judgements about *specific cases*' (Weinberg, Nichols and Stich 2001, p. 5, n.7) with stress being put mainly on the spontaneity of intuitions.

All that being said, the worry of 'traditional' philosophers has been that neither of the previous descriptions seems to capture what they have in mind when they turn to intuitions. Whenever an intuition is present it is usually there in order to tip the balance of the debate in favour of one of the sides, and it seems most unlikely that such a self-respecting discipline as philosophy, which prides itself in the rigour of its methods, would rely on mere gut feelings or hunches. Even if the last are being termed 'intuitions', in any case they are not the philosophically interesting ones.

Well, which are the intuitions that interest philosophers and how do they get to enjoy a different status from the common ones? Gopnik and Schwitzgebel add a couple of examples to illustrate their view above of how they understand the meaning of intuition:

- (1) the grammaticality of sentences;
- (2) the morality of actions;
- (3) the applicability of a certain term to a certain situation;
- (4) Bob's likely reaction to an insult;
- (5) the relative size of two distant objects.

In each of these cases, the judgements flow spontaneously from the situation that engender them, rather than from any process of explicit reasoning. (Gopnik and Schwitzgebel 1998, p. 77)

As already pointed out, the very loose descriptions springing from the everyday use and them being carried over with only slight, if any, modifications in the field of empirical psychology allow for the widest possible scope of candidates for the role of intuitions. Apparently all five given examples should be of approximately the same (epistemic) worth – that of a guess or a hunch at

least according to the authors. That is precisely where most 'traditional' philosophers disagree. The intuitions like those of the (2) and (3) kind are indeed objects of continuous philosophical interest, whereas those like (4) and (5) are of no concern, with (1) being open for debate. Traditional philosophers obviously tend to restrict the notion of the intuition so that various instances of gut feelings, premonitions, hunches and similar are excluded from the discourse; these form the first group of intuitions – the group of the excluded ones.

I. (1) As common sense intuitions (Meyers 2002) or *garden-variety* intuitions (Goldman 2007) or not *source-specific* ones (see Grundman 2007) were described some of the following:

- premonitions about the future;
- probabilistic estimates;
- quick evaluations of a person's character;
- a simple and straightforward (not requiring any special reflection on the matter, when simple observation suffices) physical⁶ intuition that the earth is flat or that sun revolves around the earth;
- and similar.

All instances of intuitions belonging to this group are deemed to be not up to the task of functioning as evidence in philosophical inquiry. What is it for an intuition to function as evidence and why does the group (I) fail? One strong, as I find it, argument in favour of such distinction are the differences in *phenomenology* between intuitions as conceived by traditional philosophy and those more akin to hunches than anything else.

Reasons for Demarcation

Consider Locke's argument in his *Essay* for primacy of consciousness over body. He writes,

⁶G.Bealer (1998, pp. 205-206) introduces a distinction between physical and rational intuitions, stressing that philosophers are only interested in the latter kind.

For should the soul of a prince, carrying with it the consciousness of the prince's past life, enter and inform the body of a cobbler, as soon as deserted by his own soul, *every one sees* he would be the same person with the prince, accountable only for the prince's actions: but who would say it was the same man?" (Locke, Essay, b. 2, ch. 27, sec. 15 with emphasis added).

Locke is confident that were anyone to consider this case of soul wandering he would immediately *see* how the prince is still *the* prince despite the fact that his soul has changed its dwelling; his soul has just happened to move to another body and now he is another man with the prince's soul. Part of what Locke means to say is that, on contemplation of the case, we have no choice but to *see* this *obvious* implication. Note how Locke makes at least three implicit claims that:

- (i) the conclusion is *obvious/self-evident* to the one considering this case.

In this respect I am not sure whether we ever perceive or could perceive a hunch or a guess as obvious or self-evident. The mere terminology suggests that there is a fair amount of uncertainty involved in choice of the correct option. To say that a hunch (or any other synonym for intuition under the first common sense definition) is obvious, strikes one as a very odd thing to say and does not seem to make much sense. If something is obvious, it should not have been called a hunch in the first place. Now, whatever the presented instance of intuition in the sense as it is used in philosophy is, it is not a hunch, and consequently they can neither be equated to each other nor used as synonyms.

- (ii) the easiness and readiness with which we reach the conclusion also functions as a sort of *leverage* (read evidence) in all its glaring obviousness to trip the balance in the argument Locke is reflecting on (this perceived obviousness is reached or called forth through glaringly immediate intuitive response we feel rising in our minds, some say guts, as we think about this case).

Introspectively neither hunches nor guesses nor premonitions nor gut feelings have the same influence on our beliefs, and hence neither can take on the role of a leverage for decisions much greater or more sophisticated than whether to take an umbrella this morning before leaving the house.

- (iii) (though not really implicit, but in any case taken for granted here) *everyone* should see how inevitably that conclusion follows – and so assuming *generality* of our intuitions for all of the mankind.

When philosophers refer to intuitions they normally speak of their own intuitions. Even so it is often implied that these intuitive responses are shared at least by professional philosophers, and it is expected that they will be endorsed by anyone else willing to take pains of considering the argument. Once again it feels odd to think of hunches in this manner – no one expects them to be so general as to be shared across greater groups; hunches feel more like particular occurrences, that is, on the scale of singular subjects, and certainly not whole groups or professions, though even if it were to happen they won't be considered as serious evidence for anything.

This is as good a place as any to point out that there are two different senses in which intuitions can be considered as being general. First, they maybe thought to be generally true for every and all sentient creatures with a make-up more or less like ours, and those capable of some sort of rational thinking – the sense of claim (iii). And second, intuitions may concern either generals or particulars. Some claim intuitions to be only about particulars, and if that is true then intuitions as a method are as good as useless for philosophy purposes. It is in the next section that I attend to turn to this issue and consider firstly whether all intuitions are indeed only about particulars, and secondly whether, if the previous should turn out true, intuitions about particular cases are worthless. The basis for answering the first question will be assembled yet in this section by means of introducing various types of intuitions. The second question will come in a form of rebuking (one of) Hintikka's objections to usage and reliance on intuitions in philosophy.

Incidentally each of (i)-(iii) Locke's assumptions can be and was contested.

(i) – Sometimes the implications of intuitions used (as is in this case) in thought experiments are neither obvious nor self-evident. This applies to those thought experiments that are more of a science fiction type than anything else. Settings that take our concepts to their outer borders by discussing teleportation, brain transplantation, swampmen and various absent, fading and dancing qualia might be a bit of a stretch for our ordinary concepts.⁷ But even so intuitions do us a service of revealing the vagueness of our concepts, if those are stretched far enough.

(ii) – With this claim comes the most disturbing worry for intuitions – how exactly are we justified in using intuitions as evidence? Literally every single attempt to find a justification for the method of intuitions ends in a circle or in a regress. A slight modification of this concern is the problem of calibration for the method of intuitions. (See R. Cummins 1998.) Funnily enough the last objection rests itself on the intuition that methods should be calibrated for us to justifiably make use of them. I will return to this objection in the last section and will discuss it in a greater detail.

(iii) – This last claim has been hotly contested by experimental philosophers and some psychologists. Various tests were conducted to show that people of different races, age, educational and social background as well as gender think differently and have different *intuitions* not only when it comes to everyday situations, but contrary to Locke and other traditionally inclined philosophers intuitions also differ when it comes to widely accepted instances of correct intuitions e.g. as in Gattier cases vs. JTB. A whole new branch of the discussion came into being about whose intuitions we are really interested in. One can speak of (i) intuition solipsism, (ii) intuition elitism, and (iii) intuition populism ((i)-(iii) terminology is taken from J.Alexander & J.M.Weinberg 2007, p. 57 ff.)⁸.

⁷ For further discussion see, for example, E. Brendel 2004, pp. 103-104.

⁸ These issues are related to the question of what we think of intuitions' nature, whether it is malleable and whether it can be improved by longer considerations of relevant theoretical issues. Since nowadays most even hard-core rationalists agree that intuitions are fallible and quite a few take one or the other form of empiricism as a working foundation, they will probably allow for intuitions to develop and improve,

We will find a multitude of similarly constructed arguments everywhere in philosophical literature. Just think about Plato's Cave and his reasoning for conception of knowledge as Justified True Belief (though never really in quite the same terms); Descartes's Evil Demon; Locke's Prince and the Cobbler described above; Quine's indeterminacy of translation argument; Chinese Room thought experiment devised by Searle; barn-facades of Goldman arguing against his own Causal Connection analysis of knowledge; Water or no-Water on Putnam's Twin Earth; Thomson's Sick Violinist Case; and many more examples surfacing everywhere one may choose to look in philosophy books, articles or talks. Even the most superficial inspection into various philosophical topics throughout the history – at the very least from Plato's times and onwards – gives a good idea of how pervasive and interwoven in our thinking intuitions have come to be⁹. As Steven D. Hales appositely said, intuitions are 'the common currency of our profession' (Hales 2000, p. 137). It would seem that philosophical enterprise is literally saturated with examples of use and reliance on our various intuitions that often go unacknowledged or rather that are often being taken for granted. Such is the force of intuitively compelling arguments that, once fully grasped, they seem to be natural and obvious – we might even wonder how we failed to 'see' them before. Moreover it is quite certain that hunches or guesses introspectively *never* feel that way; so there exists a *sense* (an extra-meaning) of having an intuition, which is quite different from the loose definitions presented at the start of this section – the definitions of the everyday and empirical psychology's use. Solely the Oxford English Dictionary¹⁰ respects the philosophers' debates in giving the additional sense to intuitions:

The Oxford English Dictionary gives examples of how the meaning of intuition has been shaped by in the writings of some modern time

and in this way favouring attitude of elitism. The good news is that psychology's research might support this attitude. But the debate goes on.

⁹ For an extended discussion of the role intuitions and especially thought experiments play in philosophy see Pust (2000) chapter 1.

¹⁰ That is probably because OED respects all historical uses of the word that have ever been uncovered.

philosophers – (1), contrasting such influences with more general sense of an intuition usage – see (2):

1) a. The immediate apprehension of an object by the mind without the intervention of any reasoning process; a particular act of such apprehension.

b. Immediate apprehension by the intellect alone; a particular act of such apprehension.

c. Immediate apprehension by sense; a particular act of such apprehension. [Esp. in reference to Kant, who held that the only intuition (*anschauung*, *intuitus*) possible to man was that under the forms of sensibility, space, and time.]

2) In a more general sense: Direct or immediate insight; an instance of this.¹¹

There is further reasoning for separating the two meanings of intuition: Intuitions in the second sense are taken to have different epistemic status – they are reliable informants in comparison to the intuitions of the first group. The reliability comes from certain features that appear to belong to intuitions in the second sense, namely:

- First of all, an intuition is some sort of a *propositional* attitude¹².
- In the second sense of the word the *intellectual* aspect (in contrast to the *feeling* aspect of the first sense) becomes prominent. George Bealer for example used wording '*intellectual seeming*' (Bealer 1998).
- Intuition in this sense has no inherent aspect of uncertainty as the first sense seems to possess.

¹¹ intuition, n.

Second edition, 1989; online version December 2011.

<<http://www.oed.com/view/Entry/98794>>; accessed 10 March 2012. Earlier version first published in *New English Dictionary*, 1900.

¹² But it is not a belief, since one can have an intuition without having a correspondent belief as in naive comprehension axiom of set theory, which is intuitively alluring, incorrect. But even after being presented with definite proof that the axiom is mistaken the intuitive appeal remains (see Pust 2000, p. 32-34).

- The implications of an intuition (as e.g. in Gettier cases) have an aspect of *necessity* – the intuition should not only present itself as true, but also as *necessarily* so. The aspect of necessity is present in various analyses of intuition by Plantinga, Bonjour, Bealer and Pust (Pust 2000, p. 35).
- Introspectively the ‘rational’ intuition presents itself with much higher degree of reliability than the common intuitions do¹³.

To this other group – **II** – of more firmly held intuitions belong:

- (2) basic mathematical intuitions e.g. that 2 plus 2 cannot but equal 4.
- (3) logical truths or tautologies e.g. $(p \vee \neg p)$ or $\neg(p \wedge \neg p)$.
- (4) Quine’s famous ontological necessity – ‘no entity without identity’.
- (5) logical necessities (see Hales 2000 and Grundman 2007).
- (6) moral intuitions.
- (7) intuitions evoked by thought experiments.

It would appear that (2)-(7) do not all enjoy the same firmness of conviction in their truthfulness; some of them we believe in stronger than the others. Such intuitions as ‘1+1’ is always and necessarily equals ‘2’ or if $(a \rightarrow b)$ and $(b \rightarrow c)$ then $(a \rightarrow c)$ seem to be a part of universe’s basic make-up and consequently our mode of thinking; we cannot help but see things this way, any other way seems to be simply inconceivable to us. If we were to think about the ‘web of belief’ then the latter intuitions are at the very heart of it, but contrary to Quine, no amount of sci-fi thinking seems to be enough to induce us to give up on such basic truths/propositions. This certainly is not the case for moral intuitions.

I will allow myself a brief digression from the main course of the discussion to point out a potential difficulty – varying degrees of reliability we ascribe to different types of *rational* intuitions lead one to wonder wherein does the difference lie, because we would better have some explanation at hand as to why we do ascribe greater credibility to mathematical intuitions rather than

¹³ Some of these features may vary in degree depending on the type of intuition (see below).

moral. I see at the moment three options: (i) the difference is in the object of the intuition¹⁴; (ii) there is not much difference (Mill's account of mathematical knowledge perhaps¹⁵); (iii) moral intuitions are not intuitions proper¹⁶.

The (iii) option seems interesting in the present context of drawing the line between intuitions as hunches and gut feelings on one side and intuitions as rational occurrences on the other. Sabine Roeser has recently championed the view that moral intuitions are in fact emotions. To use her wording 'paradigmatically moral intuitions are emotions' (Roeser 2011, p. xii). She defends the idea that (moral) intuitions can be *cognitively* laden despite the fact that empirical psychologists casually use intuitions synonymously with 'gut feelings'. By the by she is not particularly happy to equate emotions to something as rude and unrefined as 'gut feelings' are. In her attitude Roeser follows the research done in the last few decades by philosophers (Solomon, Nussbaum, Roberts, etc.) and some psychologists (Scherer, Frijda) on the nature of emotions, 'Emotions are a form of cognition and insight, especially when it comes to evaluative judgments [...]. Emotions allow us to be practically rational (Damasio 1994).' (Roeser, p. xvii)¹⁷

¹⁴ This one is probably the trickiest option despite its allure, because we will be obliged to explain the correlation between the object of an intuition and the degree of intuition's reliability.

¹⁵ John Stuart Mill expressed a very radical view that *all* knowledge is experiential including propositions of logic and mathematics. And although latter in his life Mill became hesitant about experiential origin of at least some of logical truths, he never changed his mind about the status of mathematical knowledge. (As an example of such change in Mill's views can serve his review essay 'Grote's Aristotle'.) This path will in the end lead to the endorsement of the metaphorical web of belief with propositions of mathematics and logic lying at the very centre of the web, but they are nevertheless remain revisable in this manner explaining why do we have gradations among our intuitions.

¹⁶ I owe this discussion to Attila Tanyi

¹⁷ There is a project under review presently at the Zukunftskolleg (University of Konstanz) to test Roeser's theory as applied to Overdemandingness Objection.

3. *Issues of Generality*

As I have pointed out above there are two senses in which the question of generality in respect to intuitions could be understood, and it is the second one – whether content of an intuition is about particulars or generalities – that will interest us in this section.¹⁸

Intuitions and Thought Experiments

If a philosopher wants to argue, for example, against a theory she often thinks out a hypothetical case that obviously fits in the framework or satisfies the analysis. In other words, the case satisfies all the necessary and sufficient requirements of that theory, and yet it fails to satisfy our intuition about one or several concepts involved, or some of the expectations we implicitly harbour remain unfulfilled. Hence, the theory in question yields the results that do not agree with our intuitive responses to hypothetical cases – the theory accepts the case as a legitimate one when, according to our intuitions, it should not. This often leads philosophers to revise their theories or abandonment. One may see the activity of considering hypothetical examples as consisting of three separate stages: (i) uncovering recalcitrant or supporting intuitions, (ii) revision of previous beliefs and theories with incorporation of elicited intuitions' implications or validation of existing analysis, and sometimes (iii) explaining why we have the intuitions that we seem to have.

All that being said, George Bealer (1998) has expressed dissatisfaction with rational intuitions about hypothetical cases being called thought experiments. He maintains that *traditionally* thought experiments work with our physical intuitions 'about what would happen in a hypothetical situation in which physical, or natural, laws (whatever they happen to be) are held constant but physical conditions are in various other respects nonactual and often highly

¹⁸ The first sense – whether intuitions are general for all of the mankind (and probably other sentient creatures capable of rational thinking) or whether they can vary according to the person's background – will not be considered here. It involves discussions between psychologists, experimental philosophers, naturalists and more traditionally inclined representatives of the profession. And although this paper will have little to do with their debate, the section dedicated to the differentiation of various intuitions has in part arisen from the worry that in these debates it is often disregarded, which sense of the intuition precisely is being implied, and so the objections sometimes seem to be simply beside the point.

idealized' (p. 207). In contrast, rational intuitions search to establish whether a certain case is metaphysically or logically possible.

In the following I will attempt to develop a list of ways in which thought experiments work, or in other words, for which purposes they are being devised and offer some examples:

- (i) an intuition can lend explicit support to an idea, if it was referred to in an argument; it can also tacitly support a claim not unlike background assumptions (e.g. Locke's thought experiment seen above).
- (ii) an intuition brought to light is able to show how a well-established theory cannot account for all cases it should (e.g. Gettier cases).
- (iii) intuition also helps to clarify or sharpen the concepts we regularly employ.
- (iv) cases that call forth conflicting responses/intuitions can demonstrate vagueness of our concepts (e.g. personal identity and brain transplantation).
- (v) sometimes cases are specifically designed to bring about *differentiating* intuitions that demonstrate how two (or more) distinct concepts were unwittingly merged into a single one (e.g. Thomson's Sick Violinist).¹⁹

Normally (i)-(v) happen while a thought experiment is presented for consideration, which is not surprising since thought experiments are a prominent and regularly used setting for elicitation of intuitions. The (7) group of intuitions are often called 'semantic', 'classification' or 'application' intuitions, 'because they are intuitions about how cases are to be classified, or whether various categories or concepts apply to selected cases' (A. I. Goldman 2007, p. 4).

¹⁹ I am aware of the fact that (iv) and (v) could be conceived as special forms of (iii), but in so far as both (iv) and (v) represent particular functions not explicit in the rather general formulation of (iii), I see it fit to bring the implicit (iv) and (v) functions out of the context of (iii).

In order to have examples for all or most of the list, let us consider two famous thought experiments regularly referred to in the literature: Thomson's Sick Violinist Case and the even more famous Gettier cases.

Thomson aims at the following anti-abortion argument: 1) an (innocent) person has a right to life, 2) a foetus is an innocent person (or, milder stated, is going to become such person), so 3) a foetus has a right to life, and therefore 4) it is morally wrong to have an abortion.

The Thought Experiment (1). Jane, remembers falling asleep in her bed, but the next morning she wakes up in a hospital. Not only does she open up her eyes to completely different surroundings than when she closed them, Jane also finds herself plugged into another person. When the doctor comes he explains to her that last night Jane was kidnapped by the Society of Music Lovers. The Society discovered that Jane is the only person in the world that can help a very famous violinist to whom she is now plugged to and who would otherwise die. The doctor tells her that the hospital would have never agreed to her being kidnaped and plugged to another person, but since it has already been done... and to unplug her from the violinist would mean to kill him... But no need to worry it is only for nine months and then they could be safely unplugged from each other, since the ailing violinist would recover by that time. (Thomson 1971, pp. 48-50)

In this example the question is whether Jane *has* to accede to this situation, whether there is a moral obligation for her to stay chained to bed for nine months (the case could be easily modified to say that Jane has to stay in bed for nine years or forever). Thomson thinks that there is no such obligation and that Jane is not blameworthy should she choose to immediately unplug herself from the ailing violinist. This TE is devised to show that the Argument against abortion melts together 'right to life' and 'right to the means necessary to sustain that life', Thomson with her thought experiment showed that 1) two things were run together, and that 2) when distinguished, the argument against abortion loses its strength and conviction (SEP – *Thought Experiment*).

The Thought Experiment (2). It is widely agreed among (analytical) philosophers that canonical example of correct (and justified) application of the thought experiment method and with it our capacity for intuitive knowledge can be found in Edmund L. Gettier's famous paper 'Is justified true belief knowledge?'

Let us briefly consider Gettier's two cases.

1. In the first case both Smith and Jones have applied for the same job. A president of the company he applied to told Smith that Jones is the one who is going to get the job, and Smith had also happened to know how many coins Jones has in his pocket (he might have counted coins). So Smith assumes that (a) Jones is the man who will get the job and he has ten coins in his pocket. And on the grounds of (a) Smith comes to believe (b) *The man who will get the position has ten coins in his pocket.*

As the case runs, unknown to Smith he is the one who will get the job, and he is also unaware of the fact that he has ten coins in his pocket. So (b) satisfies the requirements (i) – (iii) of the traditional analysis without us having the intuition that it is an instance of knowledge. The reason being that (b) is true in virtue of the fact that Smith has ten coins in his pocket, which is unknown to him. So Smith believing (b) is rather an accident than an instance of knowledge.

2. In Gettier's second case Smith believes that (q) Jones owns a Ford, and has strong evidence for believing this proposition. He infers from it (p) Either Jones owns a Ford or Brown is in Barcelona, where the second part of the disjunction has been chosen by Smith quite randomly and for its truth he has no evidence whatsoever, being completely ignorant at the time of whereabouts of his friend Brown. What may become a problem in such case is the chance that (q) may in fact turn out to be false, but if Brown happened to be in Barcelona at the time then (p) would still be true and satisfy the truth conditions of the traditional analysis without us willing to say that Smith really knows (p). (Gettier, 1963)

Most thought experiments involving our intuitive responses create unusual counterfactual situations to see whether explanations/predictions of the tested theory can be extended to a less familiar environment. Whenever we

contemplate various thought experiments, we make modal judgements about counterfactual situations²⁰, and the received results tend to have implications for the *generality* of the given theory.

Jaakko Hintikka's Objection from Lacking Generality

At present I would like to take a look at the following objection – Hintikka's doubt about the ability of intuition to provide us with suitably general philosophical theories due to the manner in which intuitions offer us their services.

Here we encounter one of the most debilitating weaknesses of contemporary philosophers' reliance on intuitions. For it is generally – though not universally – thought that intuition, like sense perception, always deals with particular cases, however representative. Some such restriction is implicit in all analogies between intuition and sense perception. But if so, intuitions alone cannot yield the general truths: for instance, general theories for which a scientist and a philosopher is presumably searching. Some kind of generalizing process will be needed, be it inductive inference, abduction, or a lucky guess. (Hintikka, 1999, p. 137)

The worry, apparently, is that philosophers seek for general theories, but since intuitions give us information exclusively about particular cases, Gettier cases for example, they are useless: 'we are not any wiser because of them'. Hintikka claims that for intuition to be useful, it 'must have some kind of generality'.

As I understand this small part of his discussion, Hintikka's critique comes down to the following (i) the aim is to achieve the highest possible grade of generality for a theory (enlarging its extension so that most or all cases fall under it), (ii) intuitions are almost exclusively about particular cases, this means (iii) intuitions are not capable of producing general truths, therefore (iv) intuitions are largely useless for the philosophical etc. purposes.

²⁰ I do believe that Williamson might be correct in claiming that intuitions involve some of our 'normal' mental capacities such as modal and counterfactual thinking. Having said that, at the present stage I will probably not go as far as to say that it is everything there is to be said about intuitions.

Answers

There are two ways of dealing with the above objection. We can either grant (i)-(iii) and see whether the conclusion follows or we reject one of the premises.

1st Answer. Even if we grant (i)-(iii) as true, the conclusion still does not follow. Intuitions especially like those considered in this section namely appearing in a thought experiment's setting are indeed mostly about particulars and not generalities. So there is no reason to expect general truths from them. But does this allow us to say that they are useless? As I see it, at least one of the roles that intuition (in this case revealed by a thought experiment) may play in theory construction process is a negative one – it reveals possible aberrant cases that do not fit into the framework of the theory, and so threatening to weaken the generality of that theory²¹. In other words, the intuition in this sense works rather like the method of falsification than production of general proposition. The role in this case is much less creative than it is critical. And in any case it is difficult to think of intuitions called forth by Thomson's or Gettier's or any other thought experiment for that matter as useless. One could restate (ii) so that this function becomes more obvious: (ii*) absence or presence of recalcitrant intuitions is a test for the *generality* of a theory. Think about the Gettier cases, our intuition about those two types of cases undermined the generality of JTB analysis, and so pressed us to reconsider whether JTB analysis is an adequate representation of what knowledge is about. So even if intuitions concern themselves exclusively with particular cases they are far from being useless.

2nd Answer. But as it goes we do not have to accept Hintikka's argument and for several reasons. The first reason is, as Hintikka says himself, it is *not* universally thought that intuitions always deal with particular cases. I believe one could find some general propositions in (2)-(7) list of types of intuitions

²¹ Which is not to endorse that particular intuitions that come from thought experiments have *only* this negative function of serving as counter-examples. This usage is probably the most obvious and the first that comes to mind, but as the (i)-(v) list should have shown not the only one.

proposed in the previous section; after all the intuition ‘no entity without identity’ sounds pretty general to me.

One further worry about this objection is the reasoning that if one uses analogy between intuition and perception then one imposes a restriction on one’s definition of intuition, namely that if intuition and perception share some qualities then they are also alike when it comes to dealing with exclusively particular cases. For my part I perceive the method of analogy as a tricky one, because for every analogy there is always a disanalogy. Moreover I cannot see that the method of analogy may have some strong implications or impose any severe restrictions. I do not think that anyone would like to claim that Paley’s analogy between a watch and the universe establishes that the universe *must* have a maker; there is just too much space for disanalogy²².

There are (to my knowledge) at least two distinct ways to compare perception and intuition present in the literature. One line of comparing intuition to perception is to show how both of them have features that accompany basic sources of evidence, and should intuitions be rejected then perception will have to go as well. The idea is that both perception and intuition find themselves in an epistemic circle, because the reliability of both can only be assessed by their own means. David Sosa (2006) provides partners-in-crime strategy for the pairs intuition-perception, intuition-memory and intuition-introspection, and argues that there is little to no justification for repressing scepticism in case of e.g. perception, and endorsing it in the case of intuition. This analogy does not seem to say anything about what kind of propositions intuitions are about.

Another analogy to perception can be found in describing intuitions as ‘intellectual *seemings*’. The emphasis here should be on the occurrence being ‘intellectual’, which introspectively feels much like seeming, but still allows enough room for disanalogy, since nothing prevents me from intellectually ‘perceiving’ that there may be no entity without identity.

Even if there are more straightforward analogies between intuition and perception to be found, we need not accept the step from them sharing *some*

²² As David Hume had forcefully argued.

qualities to them sharing *all* of their qualities – this is the most debilitating weakness of the method of analogy.

So Far

So far I have argued the need for demarcation between the ordinary sense of intuitions and the rational philosophical ones; this discussion lead me to delineate groups and types of intuitions with an attempt to justify the demarcation along those lines. Then I turned to one of the most frequently employed settings for elicitation of our intuitive responses, namely thought experiments. I have also offered a defence against one of the objections concerning the worth of intuitions. In the section to follow I intend to discuss objections of circularity, which in their turn aim at intuition's worth, but by the fact that those objections turn on themselves in presupposing at least some intuitions as premises, they only sustain the idea of intuition's importance.

4. *Issues of Circularity and Co.*

It is all very fine that intuitions can be and are constantly used as justification for our beliefs and theories, but how do we know that we are justified in using and relying on them in the first place? Can we justify our trust in intuitions? Or can we justify intuitions only by referring back to intuitions themselves? The answer to the last question would seem to be 'yes', and that leads to a reasonable doubt that we can answer the first one positively. 'This intuitive knowledge is hard to understand. Since intuition seems to be our only means to assess its own reliability, we appear to be caught in a kind of *epistemic circle*.' (D. Sosa, 2006, p. 633). I could not have expressed the worry better. On top of that, there seems a regress locked in that circle. Even if we attempt to save the situation by arguing that one type of intuition is justified by the other, which gets its justification from some further type of intuition, that still leaves us locked inside the justificatory circle with some additional turns to it²³.

Fallibility & Conflict of Intuitions

Whenever we place our trust in a mode of reasoning or method to provide us with reliable information, we expect it to deliver correct results; we hope, in other words, that it will not fail us and prove to be an unreliable source of information. How well does this expectation sit with intuition methodology? The case of intuitions conflicting according to the background of a person having them, allegedly shown to be the case by experimental philosophy research, does not speak in favour of our *complete* reliance on intuitions²⁴. One could of course argue, as many have done, that fallibility²⁵ does not imply unreliability much in the same way we continue relying on our senses despite the fact that we know for sure that they often fail us. However, we can run empirical tests to check whether our senses deceive us (except maybe in

²³ This reminds of Quine's attempts to non-circularly define analyticity. Interestingly, one may find in the literature descriptions of rational intuitions that come very close to those of analyticity. See, for example, T. Grundmann: 'By and large, we say that understanding certain propositions is sufficient to cause an evidential state or clear and distinct insight into the truth, independently of empirical reasons.' (Grundmann 2007, p. 70)

²⁴ That applies only if one finds those arguments compelling; I, for my part, do not.

²⁵ Even hard-core modern rationalist like Bealer, Bonjour and E.Sosa agree that rational intuitions are fallible.

extreme cases such as Brain in the Vat scenario), which is impossible in the case of intuitions.

One of the nuances of the problem was expressed by A. J. Ayer 'unless it is possible to provide some criterion by which one may decide between conflicting intuitions, a mere appeal to intuition is worthless as a test of proposition's validity' (Ayer, 1936, p.106; cited in Hales, 2000). That is indeed a legitimate worry for intuition methodology – how should we settle different people's conflicting intuitions? Who is right and who gets it all wrong? "Ayer's point is that if there is no way for the two opponents to settle their differences except by appeal to yet more intuitions that again conflict, then they have reached an epistemic impasse. Since they cannot both be right, the method of 'pure reason' has proven useless in finding the truth." (Hales, 2000)

However, should we choose to follow this line of reasoning, we soon come to the point where we will have to give up quite a few propositions to which we normally ascribe certainty. Propositions of the type 'necessarily, everything is equal with itself' or 'necessarily either *p* or *not-p*' are ordinarily seen as *certain* and *a priori*. The question is then by what means is this proposition known as certain and a priori, if justification by intuition is banned from the debate. This might be of lesser difficulty for someone like Quine for whom no proposition is genuinely certain, since they all find themselves in the 'web of belief'; some lying closer to the centre and therefore *more* certain, but never quite so. It is a general problem for anyone rejecting intuitions on the grounds of circularity of their justification, or for any other reason for that matter, that they automatically have to relinquish any claim to necessary truths, though naturalised philosophers may deal somewhat better with this difficulty than others in the profession.

Having said that, there is a problem for someone like Quine and his followers in claiming that there can be no *logically* necessary propositions. These, as Hales puts it, are tricky to avoid. Consider the proposition 'all propositions are logically contingent'. If this proposition is true, then it also is contingent. And so it would appear that there after all could be some necessary propositions. (Hales, 2000, p. 143).

An outright rejection of intuition may become a problem for the opponent of intuition use. When it is discovered that people have conflicting intuitions then it is immediately assumed something of the form '(O) If opposed intuitions cannot be reconciled, then at least one of them is unreliable.' (D. Sosa, 2006, p. 635). But here is the catch: how precisely does the opponent wish to account for (O) except by reliance on intuition? And if we find that we are entitled to rely on (O), then there is at least one reliable intuition, and therefore we are entitled to rely at least on some intuitions.

Calibration

Intuition is often said to be one of the methods in philosophy. Methods of natural, for example, sciences have to be calibrated before scientists can justifiably rely on their output. So maybe methods of philosophy should also be calibrated to eradicate the possibility of error²⁶.

Robert Cummins offered a slightly different take on the problem of circularity for intuitions – problem of calibrating the method of intuition. This approach runs together the problems of circularity and fallibility in considering intuitions more explicitly as method in a rather scientific manner. Cummins's criticism streams from an often spelled out comparison of content of intuitions with observations, so then maybe we are justified in comparing method of intuition to methods used for gathering observational data. Cummins's argument runs approximately as follows.

- (i) Any results gained by application of a method or procedure could properly be treated as evidence only after that method or procedure has been *calibrated*.
- (ii) Operation of calibration should be performed by an *independent* procedure in order for it to yield reliable results.

²⁶ George Bealer would object strongly to that. He develops and forcefully argues for autonomy and authority of philosophy from and over empirical sciences. The empirical sciences simply haven't got the capabilities. See Bealer 1996 and Bealer 1998.

- (iii) Reliance on intuition (as shown above) has the nature of a vicious circle, in other words to justify intuition we need to presuppose it.
- (iv) Then intuition as a method of 'scientific' inquiry cannot be properly justified.
- (v) Therefore we are not justified in making use of intuition's output (at least in any philosophically interesting sense, for further discussion see Cummins 1998).
- (vi) So the method of intuition cannot be claimed to be a reliable one till proved otherwise, more specifically – intuition could not be seen as a reliable source of information till it has been calibrated.²⁷

The proposed requirement to calibrate methods of intuitions might turn out to be a very stringent requirement. Goldman (2007, p. 5) has argued this point, urging caution since such strict requirement might ban or at least seriously restrict reliance not only on our intuition capacity, but could be spread to other sources of knowledge, e.g. perception²⁸. He insists that we should opt for accepting some sources of evidence as basic; presumably such mental faculties as perception, memory, introspection, deductive and inductive reasoning will fall into the category of 'basic' sources²⁹. So maybe we should also consider intuitions as an additional basic source of evidence. Goldman also offers a modification of Cummins's 'calibration, or independent corroboration

²⁷ One probably should tread carefully here, because Cummins does not claim that there is no way at all to calibrate intuition, on the contrary he thinks that there is a way, albeit not everyone is likely to stomach it: 'So philosophical intuition could be calibrated, but only on the assumption that there is some nonintuitive access to its targets. Personally, I am inclined to think there are, at least in some cases, nonintuitive routes to the targets of philosophical intuition. We can give up on intuitions about the nature of space and time and ask instead what sort of beasts space and time must be if current physical theory is to be true and explanatory. We can give up on intuitions about representational content and ask instead what representation must be if current cognitive theory is to be true and explanatory.' (Cummins, 1998, p. 117)

²⁸ David Sosa (2006) discusses this issue in greater detail. He examines whether the partner-in-crime strategy applied to perception, memory and introspection could bring them down.

²⁹ For an attempt to localise scepticism of intuitions so that it will not spread over tot he agreed basic sources of evidence see Weinberg et al. (draft of 7/2006)

constraint' – a much milder constraint that 'we *not* be justified in believing that the putative source is *unreliable*' or in other version that 'we *not* be justified in *strongly doubting* that the source is reliable' (Goldman 2007, p. 5).

However the presupposed intuition that methods should be calibrated before we can justifiably rely on them may prove to be stumbling block also for this form of the circularity objection.

Foundationalist's Solution

There is no doubt that it does not look good for intuition to be locked in such a circle. And despite the fact that objections are easily reversed to face the opponent, this does not change the fact that intuitionists methodology is somewhat lacking in justification. One other way to block out the objections is to accept foundationalism and baptise intuitions into being 'basic' evidence on a par with perception. The tendency is indeed present in the literature; Goldman, as seen above, seems to be inclined to take this option.

According to Hales there is *the problem of intuition* in much the same way as there is the problem of induction. The following formal representation of the problem helps to see with greater immediacy the circularity of the method of intuition.

The Problem of Intuition

(taken from Hales 2000, p. 139).

premise

1. If a proposition is epistemically justified, then it is justified either *a priori* or *a posteriori*.

premise

2. If a proposition is epistemically justified *a priori*, then its justification depends on the method of intuition justifying some propositions.

premise

3. If the proposition 'the method of intuition justifies some propositions' is epistemically justified, it is not justified *a posteriori*.

premise

4. 'The method of intuition justifies some propositions' is epistemically justified.

premise

5. Nothing is self-justifying.

From 1, 3

6. If 'the method of intuition justifies some propositions' is epistemically justified, it is justified *a priori*.

From 2, 6

7. If 'the method of intuition justifies some propositions' is epistemically justified, then its justification depends on the method of intuition justifying some propositions.

From 4, 7

8. The justification of 'the method of intuition justifies some propositions' depends on the method of intuition justifying some propositions.

From 5, 8

9. Thus 'the method of intuition justifies some propositions' is not epistemically justified.

From 4, 9

10. 'The method of intuition justifies some propositions' is and is not epistemically justified.

All we need to do is to reject premise 5³⁰ and say that intuition is either self-justificatory or, since it is basic evidence, need not bother with justification.

Some Conclusions

Both partners-in-crime strategy of David Sosa and Hales's foundationalism do allow us to keep intuitions in our vocabulary. But the price is high for both sides since we end in a stalemate situation – intuitions were neither discredited nor established as a respectable practice. This impasse leaves a bitter aftertaste and is not entirely satisfactory philosophically seen. Amusingly we probably feel that way because of a strong intuition that a 'good' justification should look differently and give a more solid impression. Even when we are displeased with intuitions we are so because some of our other intuitions were not satisfied. The problem of circularity for intuitions is indeed notoriously difficult and not easily solved.

But one thing should be made clear – philosophical practice as it is usually done seems unthinkable without what we came now to call intuitions. The

³⁰ Hales actually argues at some length why it should be premise 5 that gets rejected.

critics of intuitions may maintain that intuitions are fallible, and do it rightfully so; they may demand that intuitions be put apart into a form of an argument if it is possible in a given situation; caution may be urged while intuitions are at play. Intuitions may be viewed from rationalist or empiricist's perspective, but, as striven to show above, not even the most radical empiricist is free of their influence.

References

- Alexander, J. and Weinberg J. M. (2007). 'Analytic Epistemology and Experimental Philosophy', *Philosophy Compass*, 2(1), pp. 56-80
- Bealer, G. (1996). 'A Priori Knowledge and the Scope of Philosophy', *Philosophical Studies*, 81, pp. 121-142.
- Bealer, G. (1998). 'Intuition and the Autonomy of Philosophy', *Rethinking Intuition: The Psychology of Intuition and its Role in Philosophical Inquiry*, (eds.) M. DePaul and W. Ramsey, Lanham: Rowman & Littlefield, 1998, pp. 201-240.
- Brendel, E. (2004). 'Intuition Pumps and the Proper Use of Thought Experiments', *Dialectica*, 58 (1), pp. 89-108.
- Brown, J. R. and Fehige, Y. (2011). 'Thought Experiments', *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition), (ed.) Edward N. Zalta, URL = <<http://plato.stanford.edu/archives/fall2011/entries/thought-experiment/>>.
- Cummins, R. (1998). 'Reflection on Reflective Equilibrium', *Rethinking Intuition: The Psychology of Intuition and its Role in Philosophical Inquiry*, (eds.) M. DePaul and W. Ramsey, Lanham: Rowman & Littlefield, 1998, pp. 113-127.
- Gettier, E. L. (1963). 'Is Justified True Belief Knowledge?', *Knowledge: Readings in Contemporary Epistemology*, (eds.) S. Bernecker and F. Dretske, Oxford: OUP, 2000, pp. 13-15.
- Goldman, A. I. (2007). 'Philosophical Intuitions: Their Target, Their Source, and Their Epistemic Status', *Grazer Philosophische Studien*, 74, 1-26.
- Gopnik, A. and Schwitzgebel, E. (1998). 'Whose Concepts Are They Anyway? The Role of Philosophical Intuition in Empirical Psychology', *Rethinking Intuition: The Psychology of Intuition and its Role in Philosophical Inquiry*, (eds.) M. DePaul and W. Ramsey, Lanham: Rowman & Littlefield, 1998, pp. 75-91.
- Grundmann, T. (2007). 'The Nature of Rational Intuitions and a Fresh Look at the Explanationist Objection', *Grazer Philosophische Studien*, 74, pp. 69-87.

- Hales, S. D. (2000). 'The Problem of Intuition', *American Philosophical Quarterly*, 37(2), pp. 135-147.
- Hintikka, J. (1999). 'The Emperor's New Intuitions', *Journal of Philosophy*, 96(3), pp. 127-147
- Kripke, S. (1980). *Naming and Necessity*, Oxford: Blackwell.
- Myers, D. G. (2002). *Intuition: Its Powers and Perils*, New Haven & London: Yale University Press.
- Pust, J. (2000). *Intuitions as Evidence*, Garland Publishing: New York.
- Roeser, S. (2011). *Moral Emotions and Intuitions*, Palgrave Macmillan.
- Sosa, D. (2006). 'Scepticism About Intuition', *Philosophy*, 81, pp. 633-647.
- Thomson, J. J. (1971). 'A Defence of Abortion', *Philosophy & Public Affairs*, 1(1), pp. 47-66.
- Weinberg, J. M., Crowley, S. J., Gonnerman, C., Swain, S. and Vandewalker, I. (under review). 'Intuition & Calibration'. (Draft of 7/2006).
- Weinberg, J. M., Nichols, S. and Stich, S. (2001). 'Normativity and Epistemic Intuitions', *Philosophical Topics*, 29 (1-2), pp. 429-460.
- Williamson, T. (2005). 'Armchair Philosophy, Metaphysical Modality and Counterfactual Thinking', *Proceedings of the Aristotelian Society*, 105, pp. 1-23.