



## The concept of intuition in experimental philosophy\*

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### ABSTRACT

Although the concept of intuition has a central place in experimental philosophy, it is still far from being clear. Moreover, critics of that movement often argue that the concept of intuition in experimental philosophy does not correspond to the concept of intuition used in traditional, armchair philosophy. However, such a claim is problematic, because most attempts to define this concept are made with regard to the armchair philosophy's point of view and not that of experimental philosophy. In the article I analyse the concept of intuition in experimental philosophy by taking into account its theoretical assumptions, and the research practice of its representatives. By analysing the most influential experimental philosophers' views, I formulate its core characteristics. According to them, intuition is a mental state that is a reaction to the described case, which is revealed in the readiness to express a judgment about this case. Then, I investigate step by step the frequently postulated methodological, phenomenological, and etiological conditions that could narrow down the initial definition. I show that the only condition coherent with experimental philosophy's assumptions and its practice is an etiological one, as the mental state that could be classified as intuition has to be shaped by pragmatic, and not only semantic factors. In the last parts of the text, I draw out some of the consequences of the position that I have presented, regarding the methodology of experimental philosophy and philosophy in general.

### KEYWORDS

experimental philosophy; intuition; methodology; pragmatics

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## 1. INTRODUCTION

Despite a lively discussion about the concept of intuition in philosophy and experimental philosophy, there still seems to be no consensus as to what intuition is. This state of affairs is problematic, as experimental philosophy's critics often argue that experimentalists do not study examples of intuition that are relevant from a philosophical perspective (Kauppinen, 2007; Ludwig, 2007; Devitt, 2012; Egler & Rose, 2020). A commonly raised problem is that the concept of intuition is fuzzy, unclear, and non-informative (Williamson, 2007; Cappelen, 2012). Moreover, despite attempts to define this concept (Bealer, 1998; Chudnoff, 2013; Devitt, 2006), most proposals are focused on the perspective of traditional, armchair philosophy. My suggestion is that, in order to assess to what extent the experimental philosophy's concept of intuition applies to e.g. the methodology of traditional philosophy, it is first necessary to establish how this concept is understood from the perspective of the theoretical assumptions of experimental philosophers and their research practice. In this paper I aim to accomplish this.

The structure of the paper is as follows. In the section 2, I discuss the classic representatives of experimental philosophy's core views on intuitions, as this enables me to propose an initial "thin" definition of intuition. Then I analyse how this thin definition could be narrowed down in order to make it "thicker" and therefore more informative (section 3). To do so, I analyse step by step three, present in the literature, possible conditions that could be imposed on the concept of intuition. I argue that the narrowing of the concept of intuition by methodological (section 3.1) and phenomenological (section 3.2) conditions is incompatible with the assumptions and the methodology of experimental philosophers. However, I argue that the initial concept of intuition described in section 2 can be strengthened by narrowing it by the specific etiological condition, according to which intuitions are formed as a result of an analysis of the pragmatic context of the conversation (section 3.3). Finally, (section 4) I discuss the consequences this may have for the discussion on the applicability of experimental philosophy's results that could be drawn from my conclusions.

## 2. INITIAL "THIN" CHARACTERISTICS OF INTUITION

Before start, let me introduce one terminological note. Hereafter when I will use the term "xPhi intuition" or "xPhi concept of intuition", I am referring to the concept of intuition that is coherent with experimental philosophers' assumptions and practice. Although, when I refer to the concept of intuition coherent with traditional, "armchair" philosophers' assumptions I will use the

term “armchair intuitions” or “armchair concept of intuition”. Finally, if I use simply the term “intuition”, I am referring to intuition in general.

The starting point for my consideration is making a distinction between “thick” and “thin” concepts of intuition (Weinberg & Alexander, 2014; Andow, 2016). In short, “thick” concepts are those that characterize intuitions in detail. In contrast, “thin” ones are satisfied with quite general descriptions. The difference between “thin” and the “thick” concepts is manifested then in the various scopes of the concept of intuition. In the case of the “thick” concepts, it is narrower due to additional necessary conditions.

The initial motivation for experimental philosophy is the assumption that it is possible to empirically examine the truth of statements put forward by philosophers, such as “Everyone would agree that in a given situation X does/does not occur”, named in the literature as the uniformity conjecture (Sytsma & Livengood 2011). Nevertheless, the uniformity conjecture raises many questions. It is not clear, for example, which kind of sentences formulated by armchair philosophers can be considered as a manifestation of the uniformity conjecture. Weinberg (Weinberg, 2016: 296) argues that the verdicts may take the form of statements about the world (“that is not knowledge”), metalinguistic statements (“we would not describe this case with the term ‘knowledge’”) or conceptual ones (“this case does not fall under the concept of knowledge”). The effect of verdicts having such flexibility is that the intuitions related to their formulation would apply to conceptual, (meta) linguistic, or empirical issues. This is consistent with Jonathan Weinberg, Shaun Nichols and Stephen Stich according to which intuitions should be understood as *any* spontaneous judgment about a given individual situation (Weinberg, Nichols, & Stich, 2001: 432). Let us assume then, in the first approximation, that xPhi intuitions are related to judgments about the states of affairs that were being described<sup>1</sup>.

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<sup>1</sup> Let me stress that in my analyses I do not take into account the distinction between the so-called “negative” and “positive” programs of experimental philosophy. The negative program aims to criticize the methodology of armchair philosophy by showing the unreliability of intuition, which is considered to be a source of evidence for philosophical claims. The positive program focuses on establishing what kind of intuitions are elicited by certain thought experiments and what kind of processes are responsible for forming intuitive judgments. I believe that if one aims to establish the xPhi concept of intuition, assumptions and practices of philosophers engaged in both of these programs should be taken into consideration. Why? Firstly, because *prima facie* there is no reason to suspect that the concept of intuition is understood differently in studies conducted within a positive and negative program. Secondly, because many experimental philosophers are engaged in both of these programs (just mention a few most prominent: Stephen Stich, Edouard Machery, Jonathan Weinberg or Shaun Nichols), hence there are reasons to suspect that at least these philosophers refer to the same concept of intuition in studies in which they aim to show some differences in intuitions while criticizing armchair philosophy, and in studies in which they try to explain a source of these differences.

Such a position seems to be shared by Joshua Knobe and Shaun Nichols (Knobe & Nichols, 2008). They argue that experimental philosophy is primarily concerned with the psychological processes and conditions that underlie judgments about hypothetical scenarios. However, they point out that the subject of experimental philosophy are not the judgments about circumstances themselves, but the psychological processes and conditions that emerge in readiness to express a judgment about these states of affairs. Having discovered what intuitions people have, they additionally ask why people have such intuitions. Moreover, it is the latter question that is the most interesting and the most significant for experimental philosophy (Knobe & Nichols, 2008: 5–6). Thus, intuitions cannot be equated with mere judgments about situations being described, but it can be associated with them so that they can be a source of verdicts on the content.

According to the first approximation of the characteristics of intuition, they are related to judgments about the states of affairs being described. In light of Nichols and Knobe's views, we can characterize intuitions in the following way:

Intuitions are mental states that manifest themselves in readiness to express judgments about the states of affairs being described.

However, this proposal seems to be too broad, as intuitions would be some judgements about states of affairs being described, which are not in the scope of interest of experimental philosophers. For example, note that it is possible that a person who is presented with a detailed description of the state of affairs either does not register it or does not understand it, but by pure chance will be in a mental state that will affect her statement about this state of affairs. The following situation illustrates such possibility:

Imagine that John is a participant in a study of experimental philosophy. He is presented with a scenario about Donald Trump, the ex-president of the United States. The script describes how Trump dismissed the Head of the FBI before his term expired. The Head investigated the possible influence of the Russian authorities on the election of Trump as the President of the USA.

After presenting the script, the researchers ask John a question: "Is Trump honest?". He, however, did not listen to the presented scenario because he was thinking about an upcoming date. However, he is knowledgeable about Trump's various activities and firmly believes that Trump is not honest. He was distracted from his thoughts only by the researcher's question, to which he replied: "Trump is not honest".

John's judgment concerns the described state of affairs as it is about the same Trump, as mentioned in the script presented to John. However, it is important to note that it is not the case that John's judgment expresses his intuition that the authors of the study wanted to investigate. They were interested

in the intuition that would have resulted from John getting acquainted with the scenario.

To exclude such cases, an additional requirement should be introduced that the appearance of intuition is causally related to the state of affairs being described. Intuitions are to be “reactions” to state of affairs. The concept is also intended to rule out the possibility of bizarre causal sequences. Intuitions are supposed to be reactions to the described states of affairs, which means that they should refer to the content of the description, not the description medium itself. Therefore, this limitation requires a minimal understanding of the description of, for example, the Gettier scenario. Thus, intuition is not a reaction to being hit on the head with a Gettier article, or a reaction of surprise to a description of a Gettier case in an unknown language.

Taking these considerations into account, intuition can be characterized as follows:

Core Definition of xPhi Intuition (hereafter: Core Definition): Intuitions are mental states that are reactions to the described states of affairs, which are revealed in readiness to express judgments about these states of affairs.

### 3. CONDITIONS RESTRICTING THE SCOPE OF THE CONCEPT OF INTUITION

So far, the preliminary “thin” definition of the concept of intuition (Core Definition) has been established. Now, I will discuss the three possible conditions that could narrow down the scope of the concept of intuition. Weinberg and Alexander (Weinberg & Alexander, 2014) mention three candidates for such conditions:

1. **Methodological conditions** concern whether the formulation of intuitive judgments should be preceded by reflection, or whether they should be considered spontaneous.

2. **Phenomenological conditions** are usually described as the necessity to accompany intuitive states with the “sense of truth” of a given judgment or other similar phenomenology.

3. **Etiological conditions** determine how one acquires specific intuitions (e.g., whether they arise from semantic or also pragmatic considerations)<sup>2</sup>.

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<sup>2</sup> Note that these conditions do not have to be fully independent. For instance, one might argue that some methodological conditions entail some phenomenological conditions (since reflection might have some kind of specific phenomenology) or that if one accepts that intuitions always arise from semantic or pragmatic considerations, and additionally assumes that these considerations have to be reflective, then this condition entails a kind of methodological condition according to which intuitions have to be preceded by reflection. However below I will show that methodological and phenomenological conditions cannot be applied to the

In the following sections, I analyse the above conditions and argue that neither methodological (section 4.1.) nor phenomenological (section 4.2.) ones are compatible with the assumptions and practice of experimental philosophy. However, in section 4.3., I show that the etiological condition is the one that could and should be adopted in the concept of intuition.

### 3.1. METHODOLOGICAL CONDITION — SPONTANEITY OR REFLECTION

The methodological condition concerns whether intuitions should be spontaneous or preceded by thought or reflection. The spontaneity is one of the most frequently mentioned distinctive features of intuition (Cappelen, 2012: 10–11; Jenkins, 2014: 94–95). At the same time, however, the question of whether intuitions are in fact preceded by any reflection raises considerable controversy (Weinberg, 2016: 297).

Despite the fact that spontaneity is a popular characteristic of intuition, there is a lot of evidence that intuitions studied by experimental philosophy can be preceded by reflection. Actually, it turns out that a whole series of studies do not exclude the possible reflection preceding the respondents' intuitive verdicts and even impose such reflection.

As for an analysis of the practice of experimental philosophy, Weinberg et al. (Weinberg, Nichols, & Stich, 2001: 453) explicitly admit that they take the possibility of reflection preceding intuitive verdicts into account. However, it should be noted that at the beginning of the same article, they assume that intuitions are spontaneous reactions to thought experiments. On the other hand, the way they designed their research suggests that they at least assume that the possibility that intuitions are not spontaneous. In some cases, the respondents justified their verdicts. The questionnaire was created in such a way that even after giving justification, the verdict could be changed, so enabling the possibility of deeper reflection (Weinberg, Nichols, & Stich, 2001: 453–454).

In another study, Jennifer Wright (Wright, 2010) asked her respondents to determine the certainty of their verdicts by asking them how confident they were about their answers, and how strongly they believed their answers. Such a research structure may lead to the conclusion that also in this case intuitions require a kind of reflection. It should be noted that it is not obvious what was the subject of reflection. Wright's question can be interpreted as concerning

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proper definition of xPhi concept of intuition, so these results apply also to the readings of these conditions enriched by additional assumptions similar to these mentioned above. Moreover, when I will argue in favour of a kind of ethnological condition according to which xPhi intuitions arise from pragmatic considerations, it should be understood in a liberal way according to which these considerations might be as well reflective and spontaneous (e.g. these considerations might be placed on sub-personal as well as on personal level).

certainty of having a declared intuition. Therefore, the answer would be the result of reflection on the state of one's introspective abilities. However, the more natural interpretation seems to be that this question was about certainty as to the correctness of the intuition content. In other words, certainty as to whether the sentence the respondents indicated was true. The answer to this question is a verdict on the actual situation — one in which the examined person plays a role analogous to that of the agents in the hypothetical states of affairs described in thought experiments. It appears that the question of the certainty of the truth of one's intuitive belief is a question of epistemic intuition. It is not about the binary assigning knowledge to oneself, but assessing the level of this knowledge on a specific scale.

Thus the practice of constructing questions, to a scale to assess the application of a particular concept to the described situation, is widespread in experimental philosophy. In many experimental philosophy's studies (Knobe & Prinz, 2008; Schwitzgebel & Cushman, 2012; Nagel, Juan, & Mar, 2013), in addition to questions about whether a given concept applies to the described situation or whether a given act was good or bad (in the case of research on ethical issues), we often see the question prompt; to what extent a given situation was good or bad, or to what extent a given concept applies to the situation described. A Likert, or similar scale is often used.

Let us consider whether the request to assess, for example, the level of knowledge on a scale must be related to a reflection preceding this assessment. Note that it is possible that the respondents, driven by a firm belief in their knowledge or ignorance, will spontaneously choose extreme values. It is also possible that they will mark a particular value on the scale without hesitation.

However, these two situations are quite extreme. All the possible respondents' behaviours and also those of them which are consistent with the assumptions of researchers constructing a given study are of interest when analysing the  $x\Phi$  concept of intuition. This is because if a behaviour which is inconsistent with the researchers' assumptions is detected, for example, answering "at random", such responses are removed from the set of analysed data. Thus, if the researcher uses a 7-point Likert scale, she assumes that there is a similarly high probability of selecting each of the seven possibilities. It is not that the choice of only two extreme answers is possible. Otherwise, the researcher simply would not use such a scale.

On the other hand, when the respondents mark a place on the scale without hesitation, the question should be asked: what drives them to choose this particular place and not another? If it is a random place, then this behaviour is also not consistent with the assumptions of the researchers who designed the study.

If it is not a random place, it would seem that the decision to select a particular point on the scale should be preceded by at least a minimal reflection on the level of certainty. This reflection may concern, for example, whether



the certainty the person is assessing is the greatest possible or not. For if the participant in the study does not consider the difference between maximum and limited certainty, then this behaviour is also inconsistent with the assumptions of the researchers constructing the assessment. The lack of reflection on the level of certainty results in no differences between the answers marked in the middle of the scale and those at its end. Thus, the use of a scale would be superfluous in that case.

One could argue that there is no reason to assume that the fact that some questions ask for the selection of a particular point on the scale requires any reflection. There are views on metacognition that show reasons to think that intuitions do not only contain propositional content, but the information about the strength or confidence of that content that could be projected onto a Likert-scale (Kornblith, 2012; Thompson & Johnson, 2014). However, note that I am not claiming that simply the fact that participants were asked for placing their answers on a Likert scale entails that their answers were necessarily preceded by reflection. I am insisting however that the use of Likert scale as in e.g., Wright's or Eric Schwitzgebel and Fiery Cushman's study enables and raises the possibility that the respondents' answers were non-spontaneous.

Let us consider Schwitzgebel and Cushman's study, where participants were asked to place their answers on a 7-point Likert scale whether some action was "extremely morally bad", "extremely morally good" or somewhere between these two extremes. Note that this question does not measure the strength of participants' opinions. This question could be interpreted as a question for detailing the content of participants' intuitions, and thereby it could force participants to think more deeply about the scenarios that had been presented. In Wright's studies on the other hand, although the question on the confidence of participants' answers is clearly a question that concerns the strength of their opinions, please note that it was an additional question, and that simple fact could encourage a deeper reflection in participants.

To sum up, neither the view that intuitions must be preceded by reflection, nor that it must be spontaneous could be included into the xPhi definition of intuition. Moreover, there are good reasons that the xPhi concept of intuition, should at least allow for possible reflection preceding intuitive verdicts. However, note that these practices are not caused by any explicit arguments according to which participants answers have to be preceded by reflection, and these practices usually only allow instead of force participants to consider more deeply their answers. Therefore it cannot be concluded that the reflection preceding intuitive verdicts is a necessary condition for considering individual verdicts to be intuitions. Thus, methodological conditions cannot be added to the xPhi concept of intuition in order to narrow down the "thin", Core Definition of intuition proposed earlier.



### 3.2. PHENOMENOLOGICAL CONDITION

Some philosophers distinguish intuitions from other mental states, pointing to their specific phenomenology. According to such views, intuitions are accompanied with a peculiar feeling of seeing that a particular proposition is true (Bealer, 1998; Plantinga, 1993: 105–106). In the following section I will argue that a phenomenological condition is incoherent with experimental philosophy's methodology.

The most common argument against the view that phenomenological condition describes intuitions' distinctive property is that characteristics of specific phenomenology attributable to intuition are very vague (Williamson, 2007: 217–218; Cappelen, 2012: 80). Similar objections are raised from the perspective of experimental philosophy. Experimental Philosophers' motivations come however from practical, and not theoretical problems that are caused by discriminating intuitions from other mental states by their phenomenology. Due to the ambiguity of characteristics of the phenomenology accompanying intuitions, it is very difficult to operationalise variables in empirical research in order to precisely measure intuitions and not other kinds of beliefs (Weinberg & Alexander, 2014: 197–198).

Some critics of experimental philosophy who endorse the view that intuitions are phenomenologically specific argue that intuitions are immune to the influence of philosophically irrelevant factors, as opposed to the subject of research in experimental philosophy (Bengson, 2013; Chudnoff, 2013). According to them, there are reasons to suspect that in experimental research intuitions are conflated with other kinds of mental states, such as guesses, emotional reactions, or inferences. These philosophers argue that although phenomenologically distinguished intuitions are reliable and stable, there is empirical evidence that shows the susceptibility to irrelevant factors of the other kind of mental states, which are the subject of experimental philosophy's study.

It is crucial that experimental philosophers who address this argument (Egler & Rose, 2020) do not try to show that experimental philosophy examines only those beliefs which are accompanied by appropriate phenomenology, and therefore it could be said that these beliefs are intuitions. Instead, they should try to show that mental states that satisfy phenomenological characteristics are not immune to the influence of philosophically irrelevant factors as well. As a result, experimental opponents of phenomenological theories of intuitions treat both phenomenologically-specific-intuitions and phenomenologically-neutral-intuitions as equally suitable from their empirical perspective. In short, phenomenology just does not matter in such a case. It cannot be treated as a necessary condition that excludes intuitions from different kinds of mental states.

The fact that specific phenomenology is not a necessary condition for the concept of intuition is visible in the research practice of experimental philosophy in a quite obvious way. The phenomenological aspect is exceptionally rarely considered in the operationalization of variables corresponding to intuition. Even if it is included, it usually does not aim to distinguish intuitions from other mental states. An example of experimental practice that could be interpreted as taking phenomenology into account in operationalization is the practice in which the respondents are asked about how certain they are about the correctness of their answers (Swain, Alexander, & Weinberg, 2008). Intuition-specific phenomenology is described as a strong feeling that a particular proposition seems true. Hence the degree of respondents' certainty as to their answers may be treated as an indicator of this phenomenology. It is essential, however, that both answers that were assessed by the respondents as not very sure and those accompanied by high certainty were included in the results and interpreted as intuitions. In effect, although the phenomenological factor is taken into account in such operationalizations, both judgements that come with a phenomenology described by the proponents of phenomenological characteristics of intuition and judgements that come without such a phenomenology are considered as intuitions by experimental philosophers.

Thus, phenomenological conditions cannot be considered as a necessary condition for the concept of intuition, which is reflected in the assumptions and practice of experimental philosophy.

### 3.3. ETIOLOGICAL CONDITION — PRAGMATIC OR SEMANTIC INTUITIONS

According to the last option, the necessary condition that could be included in xPhi definition of intuition is that intuitions are pragmatic or purely semantic. Semantic intuitions concern the conditions of using concepts only due to their meaning, and are formed by the conceptual competencies possessed by the respondent. Pragmatic intuitions take into consideration such factors as, for example, conversational practice, the context of the statements containing the concept of interest, or the beliefs of the speaker. Therefore, they are shaped by the pragmatic competences possessed by the respondent of a study. In the following section I will argue that intuitions studied by experimental philosophy necessarily have a pragmatic nature.

Many critics of experimental philosophy have argued that the intuitions it studies are of a pragmatic nature (Ludwig, 2007; Kauppinen, 2007; Cullen, 2010; Devitt, 2012), although intuitions relevant to philosophical practice must be purely semantic. Kirk Ludwig (Ludwig, 2007) points out that the methodology of experimental philosophy does not make it possible to unequivocally state whether the verdicts of their respondents are formulated based on only

semantic considerations, or they take, e.g., pragmatic issues into account. Antti Kauppinen (Kauppinen, 2007) puts forward a more substantial thesis, as in his opinion, experimental philosophy is unable to study purely semantic intuitions possessed by non-philosophers. This is because the training that philosophers undergo in the course of their education and scientific work is necessary to be able to abstract from the pragmatic factors while analysing given scenarios.

Simon Cullen (Cullen, 2010) takes a similarly radical position as Kauppinen. He argues that the intuitions studied by experimental philosophy should be interpreted as resulting from reflection on pragmatic factors. Such a reflection might concern the beliefs of the experimenter, who formulated the questions in the research, or the purposes why she conducted it.

Cullen begins his considerations with an interesting remark. In his opinion, the respondents' answers to the questions should be interpreted similarly to the answers to questions in an ordinary conversation. In particular, it is necessary to consider how the questions and scenarios are formulated and whether the researcher who formulates them meets the Grice's conversational maxims and the principles of cooperation.

Note for example that in Weinberg et al. (Weinberg, Nichols, & Stich, 2001), the possible answers were: "y really knows that *p*" and "y only believes that *p*". Such a formulation suggests that there is a significant difference between belief and knowledge, thus reducing the value of belief and distorting the standards for those states that qualify as knowledge. For not only is it assumed that knowledge differs from belief, but it is additionally suggested that knowledge is something unique and challenging to achieve, although belief is something much weaker. This is in line with Weinberg et al. assumptions (Weinberg, Nichols, & Stich, 2001: 431), who in their article emphasize that they want to test knowledge as something unique and positive (they describe it as the "good stuff").

The reasoning that would lead to the adoption of the above suggestion regarding the lesser requirements for states that can be considered beliefs and the higher requirements for those that deserve the name of knowledge is worth following. Researchers, as the rational side of the conversation, must meet, for example, the maxim of quantity when formulating a question, according to which no unnecessary information from the perspective of the purpose of the conversation is given. For this reason, the participant's attention is drawn to the use of words describing knowledge and beliefs. In consequence, the participant assumes that there is a significant difference between knowledge and belief. This means that the verdicts of the respondents are formulated from analyses of the communicative context, and therefore they are of a pragmatic nature.

Cullen (Cullen, 2010) analyses research conducted by Stacey Swain, Joshua Alexander and Jonathan Weinberg (Swain, Alexander, & Weinberg, 2008). Swain et al. presented to the participants a scenario that concerns a man called

Truetemp who, due to the effects of an accident had neurological changes that gave him the ability to accurately assess the ambient temperature, although he was not aware of having such a skill. The respondents were to assess on a Likert scale Truetemp's knowledge about the temperature. Before exploring this scenario, they estimated the respondent's level of knowledge by giving them another scenario. In one group, the scenario described a chemistry professor acquiring, based on reading a research paper, a belief about the chemical reaction that would result from the mixing of two substances. The second group was presented with a situation in which an individual becomes convinced about the outcome of a coin toss based on her "gut" feeling. The respondents from the first group assessed the level of Truetemp's knowledge significantly lower than the respondents from the second group. Swain, et al. interpret these results as being evidence that the cognitive bias, namely priming effect (Bargh & Chartrand, 2000) might be distorting the respondent's intuition.

Nonetheless, Cullen argues that Swain et al.'s results should be interpreted in pragmatic terms, not in terms of cognitive bias. Pragmatic factors must be considered by the respondents when interpreting, for example, experimental questions because the research is a kind of conversation. The pragmatic categories, on the other hand, suffice to explain the effect noted by Swain et al. Therefore, there is no reason to find other cognitive errors in the interpretation of those results. Cullen refers at this point to whole-part questions taken non-literally if they satisfy conversational maxims. An example of such questions may be, e.g., a conversation in which person A asks person B about whether person B likes to eat jellybeans. When, after receiving a negative response, person A formulates a further question about whether person B likes to eat sweets, then person B, assuming that person A meets conversational maxims, will interpret this question as a question about whether person B likes to eat sweets other than jellybeans. If this question were to be interpreted literally, person A would be asking for redundant information. After all, jellybeans are sweets, and person A is already aware that person B does not like jellybeans.

In Swain et al.'s study, it can be presumed that the respondents interpreted the question about Truetemp's knowledge level as a question about the level of his knowledge compared to the level of knowledge of the chemistry professor or the person with a feeling about the result of a coin toss. In this case, differences in the assessment of Truetemp's knowledge level may result only from the fact that, in the light of the above interpretation, the respondents in different groups answered a different question. One question was about the difference in knowledge between Truetemp and the professor, and the other between Truetemp and a predicting toss of a coin.

At this point, the interpretation of the significant difference between knowledge and belief suggested in Weinberg et al.'s study (Weinberg, Nichols, & Stich, 2001) should be recalled — the questions concerned the epistemic

state of the scenario protagonist were formulated using the phrases “y really knows” and “y only believes”. The manner these questions were formulated could be interpreted in such a way that the respondents assumed high standards about knowledge and low standards concerning beliefs. It can be hypothesised then that it is the context of questions about the protagonist’s epistemic state that determines what conversational clues the respondents follow, when interpreting these questions. One of the contextual factors is, for example, the formulation of the possible responses discussed earlier. Another one may be the fact that the research is conducted by philosophers. Hence, the respondent may be convinced that when philosophers use the concept of knowledge, they place greater demands on it than it is done in everyday life.

Yet another factor may be the respondent’s belief that she is participating in an experiment. In such a case, the participant may interpret the additional information given in the form of evaluative phrases as possible experimental manipulation. She may interpret the formulation of possible answers as a desire to distort the answer. In such a case, the respondent may not accept such a significant difference between belief and knowledge, as suggested by the researchers. She may believe that suggesting this difference is an attempt at experimental manipulation.

The above factors shaping the possible interpretation of the experimental questions are pragmatic. These factors will possibly not affect the respondents’ responses in such a way that they will be different than when studying semantic intuitions. However, it is impossible for the respondents not to take into account the pragmatic factors when interpreting the questions. In any conversational situation, pragmatic factors must be taken into consideration, as it justifies the thesis about the pragmatic nature of epistemic intuitions studied by experimental philosophers.

Therefore, intuitions coherent with experimental philosophers’ assumptions and methodology must be shaped by pragmatic competences. This result has significant consequences, as it enables me to narrow down the initial xPhi Core Definition of intuition.

An etiological condition I propose is not similar to those usually cited by critics of experimental philosophy, according to which intuitions must be only semantic. As I argue, the opposite is true. A condition adequate for the assumptions and research practice of experimental philosophy will be the recognition that xPhi intuitions must be formed based on pragmatic competences. This does not mean that these intuitions do not also arise from having semantic competences. It is crucial, however, that pragmatic competences must play a part in shaping these intuitions. This means that if there are mental states similar to intuitions, which are formulated only based on semantic competences, these are not intuitions that correspond to the subject of research of experimental philosophy, as this is because the studies of experimental philosophy

cannot examine such states. The respondents' responses are always formulated with pragmatic factors taken into account.

In effect, I can add a necessary condition that narrows the scope of the Core Definition of intuition. The amended approach to intuition, modified by an etiological condition, is as follows:

*Definition of xPhi Intuition*

Intuitions are mental states that are reactions to the described states of affairs, which are revealed in readiness to express judgments about these states of affairs. Descriptions of these states of affairs are interpreted by the subject taking into consideration pragmatic factors such as, for example, the context in which these descriptions were formulated, beliefs as to the state of knowledge of the person formulating this description, or the purpose of formulating this description.

## 5. CONCLUSIONS AND SOME METHODOLOGICAL CONSEQUENCES

Main aim of this paper has been to develop a definition of intuition that is coherent with the assumptions and practices popular among experimental philosophers. Although this goal is rather positive and not very polemical, its results entail some consequences to the very lively debate about the influence of experimental philosophy's studies to the methodology of philosophy.

The first group of consequences concerns the results achieved in sections 3.1 and 3.2 devoted to spontaneity/non-spontaneity and the phenomenology of intuitions respectively. I demonstrated that xPhi intuitions cannot be characterized as necessarily spontaneous, reflective nor having a peculiar phenomenology. Therefore, if one adopts a view, according to which intuition plays an important methodological role in philosophical methodology, it necessarily has one of the previously mentioned properties, then experimental philosophy's results cannot be relevant in a dispute on the reliability of the method in which intuitions play an important role. For example, suppose that A adopts the view that (1) intuitions play an evidential role in the method of cases, and (2) intuitions necessarily have a unique phenomenology (as e.g., Bealer or Chudnoff does). B aims to argue that intuitions are unreliable because they are sensitive to irrelevant factors, and she justifies this claim by some empirical result. In such a situation, the burden of proof that the intuitions being studied are indeed the same intuitions as play an evidential role in philosophy is on B's side, because according to my results phenomenology cannot be considered as a characteristic of x-phi's intuitions. This is the same outcome for the conditions regarding the spontaneity/non-spontaneity of intuitions.



The second consequence results from my position that concerns my positive results: the etiological condition should be imposed on the xPhi concept of intuition. As I stated above, e.g. Kauppinen or Ludwig argue that the results of experimental philosophy's studies have no impact on armchair philosophy because the former focus on intuitions that have pragmatic nature, although in the latter purely semantic intuitions are relevant. As I have argued, the x-phi intuitions are mental states that arise as a result of the analysis of pragmatic, contextual conditions. In effect they are not only semantic but pragmatic as well, what supports Kauppinen's and Ludwig's argument.

However, my results support their argument only partially. Note that when Ludwig and Kauppinen argue that philosophically relevant intuitions are purely semantic ones (see: section 3.3) they are defending traditional armchair methodology. If one however wishes to defend traditional philosophical methodology by arguing in such a way, one has to justify the thesis, according to which intuitions actually used in philosophical practice are indeed purely semantic. Such a move would require an explanation of how philosophers are able to abstract from pragmatic factors and that are guided by purely semantic competence when making verdicts on thought experiments. Such explanations are especially needed because there are empirical results, according to which philosophers' intuitions are also sensitive to pragmatic issues, such as the sequence that the scenarios are presented, or whether these scenarios are written from the first or third-person perspective (Schulz, Cokely, & Feltz, 2011; Schwitzgebel & Cushman, 2012; Horvath & Wiegmann, 2016; see also Buckwalter, 2016). An immediate answer that comes into mind is that the above mentioned studies do not refute the arguments of experimental philosophy's critics, because their results concern philosophers' xPhi intuitions and not their armchair intuitions. It seems however that such an argument requires an explanation of how philosophers can have access to different (pragmatic) intuitions, while completing the surveys during experimental philosophy's studies, and to different (purely semantic) intuitions while analysing thought experiments in their armchairs.

The definition of xPhi intuition established in this paper has implications to methodological disputes in philosophy. However it should be noted that these implications are limited, and in order to defend armchair methodology it should be as well justified that (1) philosophically relevant intuitions are purely semantic and that (2) philosophers' intuitions actually used in philosophical practice are indeed purely semantic, which would justify drawing the conclusion that experimental philosophy's results cannot be applied into armchair intuition-driven methodology. However, letting these methodological considerations aside, the definition of intuition in experimental philosophy is independently valuable, for it enable us to better understand the assumptions and the practice of the experimental philosophy's movement.



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