The Mechanics of Epistemic Contextualism

Graduate Essay by Govert Schuller

§1.0. General introduction

A few years ago I happened to participate in a class on DeRose's recent monograph *The Case for Contextualism: Knowledge, Skepticism, and Context* (vol. 1). We picked the text apart and read also papers by Moore, Unger, Lewis, Kaplan, Perry, Schiffer and a few more. In his monograph DeRose was mainly concerned to prove *that* knowledge claims, especially knowledge attributions, are context sensitive. The reason *why* that is the case he left open to be explored in volume 2 of his study. When in this current class I started playing with the insights which I obtained in studying epistemic contextualism (EC) and applied them to the Gettier cases I thought I could give it a try myself to explore the deeper reasons why EC, as my professor formulated it--"offers the promise of explaining the force of the skeptical arguments, while at the same time preserving the utility of the notion of knowledge".

Then it struck me as very fruitful to also bring into play some of the insights obtained from a philosophy of science class in which we read Carl Craver's monograph *Explaining the Brain: Mechanisms and the Mosaic Unity of Neuroscience.* In this study the case is made that most of the successful advances in the biological sciences are due, explicitly or implicitly, to the use of explanations which include 1) a two-tier structure; 2) the notion of mechanism; 3) the idea that the elements of the mechanism in their interaction add up to an explanation; and 4) the concept of composition is central. The explanatory model is named 'Inter-Level Mechanistic Explanation' (ILME) and I think I can transpose this model to EC.

§1.1. Introduction

This paper is an attempt to contribute to the analysis of the standard definition of knowledge as 'justified true belief' (JTB) in its relationship to the standard 'skeptical argument' (SA) that humans do not know much for sure, if anything at all—including the existence of the world--because knowledge is hardly ever sufficiently justified as both our senses and reason are both fallible and deceivable to the point that we do not even know for certain if the world of our experience really exists independent of us.

The specific route taken in this paper is to combine two complex sets of ideas developed independently from each other but possibly, in their combination, generating a model with which certain skeptical cases can be analyzed in the specific manner such cases are generated and therefore can be, if not solved, at least be contained to the extent that scientific and quotidian notions of knowledge are preserved.

The two ideas are 1) from epistemology the idea of 'epistemic contextualism' (EC), especially the work by Keith DeRose; and 2) from the philosophy of science 'Inter-Level Mechanistic Explanation' (ILME) as developed by Carl Craver and Carl Gillett, but then transposed to the 'mechanics' of meaning generation.

The linchpin of the operation will be to show that there is enough congruence between 1) the structure of meaning generation, especially as developed in EC, and 2) the structure of natural processes and their successful explanation which the ILME model claims to have developed, such that 3) the insights of ILME can be transposed to EC and tested.

The helpfulness of the model will then be tested on some of the more prominent examples of skeptical arguments like the 'Brain in a Vat' argument which posits the possibility that all of our experience is generated by a very accomplished scientist who knows how to manipulate our brain to have worldly experiences while actually our brain is in a vat, and the first of the Gettier cases (or maybe both), in which someone by accident has a justified true believe but paradoxically has to be denied to have real knowledge.

This operation, because of its experimental character, is of course fallible, but my hunch is that it could succeed if it is executed in a flexible manner with a sensitivity to the nature of meaning which is quite different than the nature of natural processes and their explanation from which the ILME model was developed.

This paper will first explain EC with the intention to bring out certain of its features which will be relevant to show the above mentioned structural congruency with ILME. Once these structural features are highlighted I will explain the work of ILME and highlight the features which will be relevant to make it 'fit' EC and be of service to the operation. That a certain amount of violence will be done to both ILME and EC is hereby acknowledged. Every operation involves necessary cutting and slicing, but the success depends on the mending and curing of the wounds and the recuperation of the patient, in this case scientific and quotidian knowledge and its cure from academic skepticism.

§2.1. Epistemic Contextualism

One of the recent developments in philosophy is the notion of 'epistemic contextualism', which claims to get some grip on skepticism by making the point that when someone engages in the Skeptical Argument he or she is actually setting the epistemic standard so high that no proposition whatsoever about the world can be said to be true for certain. The usual context in which these claims are made is mostly academia, especially in philosophy classes, but not in other contexts like regular college classes, court rooms, journalistic reporting and quotidian situations. Those contexts, as is EC's contention, will have their own appropriate epistemic standards.

The important strategy applied by EC is to make context and its accompanying epistemic standard an essential part of evaluating the strength of one's knowledge claims. DeRose, who is today the most prolific defender of EC, constructed an illustrative example in which one person could justifiably attribute to a third person that he or she knows the truth of a certain proposition, while another person could paradoxically, but still justifiably, attribute to the same third person and at the same time the opposite, i.e. that he or she does *not* know the truth of the proposition in question. DeRose's solution to the paradox is to highlight the difference in context and its different accompanying epistemic standard.

§2.2. The Office Case

One of the stronger examples with which DeRose makes his case for EC is the Office Case and and is composed as follows. Thelma, Louise, Lena and John all work at the same office. John is often absent from the office. The three women are friends and on their day off, just before going to dinner together, they pick up their pay-check at the office where they have some indication that John is present. They see his hat hanging on the coat rack and someone else makes an audible reference to him as if he were present. After dinner the women go their own way with Thelma going to a local tavern, Lena going home and Louise stopped by the police. Thelma at the tavern settles a bet with another friend about John's showing up at work that day. Thelma, having bet John would be at work, tells her friend to pay up because John was at work. Her friend also had the same bet with Lena and asks Thelma if Lena also knows that John was at work. Thelma answers that “Lena knows that John was at the office”. Meanwhile Louise is stopped by the police who are conducting an investigation of John's whereabouts in connection with a crime. Asked whether she knows if John was in the office she had to answer in the negative—she only saw his hat and heard a remark about him-- and when asked if Lena knows she felt obliged to answer that “Lena does *not* know that John was at the office”.

The paradox is obviously in the fact that Thelma and Louise make opposite knowledge attributions to Lena at approximately the same time, but somehow both seem justified to do so in their own situation. DeRose's contextualist solution to the conundrum is to highlight the difference in circumstances in which Thelma and Louise found themselves and the different epistemic standards comprising the truth-conditions for making statements in the different contexts. Conversations at the tavern are governed by a low epistemic standard by which Thelma's claim can be considered true, while Louise's situation calls for a quite high standard by which her opposite statement can also be considered true. In other words, though both Thelma and Louise have epistemic positions of equal strength in regards to their knowledge about John's presence at the office, Thelma's position is strong enough to pass the low standard at the tavern while Louise's position is not strong enough to pass the high standard operative in the police station.

§2.3. Attributor *vs* Subject Contextualism

Before continuing I like to discuss the difference between attributor epistemic contextualism, in which one person attributes or denies knowledge to a second person (like the Office Case), and on the other side subject epistemic contextualism, which just focuses on one person and his or her epistemic position.

Patrick Rysiew, in his encyclopedia entry on epistemic contextualism, observes that the more technical literature on the subject comes in two variations, whose adherents are not necessarily in discussion with each other. The first is a more semantic oriented, attributor concept of context and the second is a more substantive oriented, subject concept of context (Rysiew: 6-7). In the Office Case one could say that 'substantive subject contextualism' would focus on Lena and her specific circumstances and that 'semantic attributor contextualism' would focus, as is the case in DeRose, on Thelma and Louise. Rysiew also observes that it is not clear where to position theorists along these two dimensions.

I think that 'attributor contextualism' is derivative from 'subject contextualism' and therefore the latter is the more important one, though the first one might enable to construct simpler examples to make the case for contextualism of either kind. In the Office Case it is not primarily Thelma and Louise and their respective justifications to attribute knowledge to Lena which is central. It is essentially about whether *Lena* knows or not if she would find herself in either the tavern or the police station. As long as she is not placed in either context it could be argued that Lena *neither knows nor does not know* that John was in the office. She does have some circumstantial pieces of evidence at her disposal, but these will only prove to be sufficient (or not) to back up the claim that she knows (or not) when asked in a specific context.[1] Another manner to make the same point is to see that it is possible to make the Office Case work as an example of epistemic contextualism without Thelma and Louise, but it would be impossible do to so without Lena. For example one could have Lena first visit the tavern, where she would justifiably assert that John was in the office, and then have her show up at the police station, where she could negate the same with equally strong justification.[2] Therefore I will focus on Lena and leave Thelma and Louise behind.

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[1] There is a parallel here with quantum physics which might be helpful to make the case that, as long as Lena is not asked, she neither knows nor not knows. Because sub-atomic entities either behave as a particle or a wave depending on the instruments of observation we do not know what it is independent of measurement. Likewise, only when put in a context of 'measurement' (tavern or police station) can it be established if Lena's evidence is sufficient to count her as knowing.

[2] This latter variation of the Office Case would be an exercise in Husserlian imaginative free variation in the natural attitude to differentiate between dependent, founding moments and independent, founded parts (Sokolowski: 8-17).

§2.4. The Sufficiently Articulated Contextual Formula

In my effort to understand DeRose's conceptualization of EC I constructed the following formula to incorporate some of the more relevant contextual elements which he discussed, which I baptized as the *Sufficiently Articulated Contextual Formula* (SACF):

> (1a) In the role of X, individual S knows *p* relative to epistemic standard N, which is prevalent in social context C.

If one plugs into the formula Lena's two different epistemic contexts one would get the following propositions, which might look contradictory, but, because of the idea of context-sensitive epistemic standards, are not really contradictory anymore.

> (1b) As a betting person in a tavern, Lena knows--relative to standard LOW reigning at a low-stakes, friendly bet--that John was in the office that afternoon.
>
> (1c) As a police interviewee in a police station, Lena doesn't know--relative to standard HIGH reigning at a criminal investigation--that John was in the office that afternoon.

Because of its relevance later in this paper, the origin of some of the elements comprising the formula will receive a more elaborate discussion. The majority of the formula's elements came from a diverse set of thinkers discussed by DeRose and Rysiew who grappled throughout the years with context-sensitive terms like demonstratives, indexicals, gradable adjectives and the issue of context-sensitive epistemic standards.

§2.5. Kaplan's Machinery

The most important idea—of which the other ideas seem to be refinements—is Kaplan's machinery by which mere utterances can become true or false propositions. Kaplan's crucial idea is to make a further differentiation within the already established Fregean differentiation between the expressed sense (*Sinn*) and designating reference (*Bedeutung*) of a word or expression. The sense of an expression is its intelligible, mental structure which comes with the expression and the reference is the non-mental thing or state of affairs outside of itself it is referring to. Frege's own short and exact formula is:

> A proper name (word, sign, sign combination, expression) *expresses* its sense, *stands for* or *designates* its reference. By means of a sign we express its sense and designate its reference (Frege: 40; italics in original).

Kaplan makes the distinction within the Fregean concept of sense between the ordinary meaning of an utterance (its *character*) and its propositional aspect (the *content*). This distinction is helpful to deal with context-sensitive terms. For example, when one utters 'he was there', the expression only states the ordinary meaning, or *character*, that 'some male was somewhere'. It has no clear sense,

let alone reference yet. The utterance has to be paired with the context in which it was spoken to generate a testable proposition. To bring back Lena and the Office Case, if she made that utterance in the tavern to her friend, her friend would have understood that by saying 'he was there' that Lena actually expressed the proposition 'John was at the office (at a certain time)', which circumstance was relevant to the bet and could have been verified. Kaplan names this proposition generated by the pairing of the *character* of the expression with its context, the *content* of the utterance. The sequence of Klaplan's machinery can be formalized as follows:

> (2) Utterance + understanding → character; character + context → content; content + circumstance → truth or falsity

Kaplan's contribution is that he identifies a two-level structure in Frege's concept of sense in which the character-meaning of an utterance has to be paired with the context of utterance to determine its underlying propositional content-meaning.[3]

§2.6. Perry's Unarticulated Constituents

Because utterances do not always express the full content of the underlying proposition it makes sense, as John Perry does, to highlight and further analyze the idea that the propositional content of an utterance often has "*unarticulated* constituents" (Perry: 138; italics in original). Perry's example is his son telling him 'It is raining', which propositional content can be established *per* Kaplan by bringing in the context of the utterance, i.e. both are in Palo Alto, and therefore the proposition expressed by Perry's son is 'It is raining in Palo Alto'. In this example the place was the unarticulated constituent, which could only be derived from the context of utterance. Though this looks simple and straightforward, Perry's framework of analysis in the form of five initial assumptions makes the issue a bit more complex. Because of its importance for this paper, I will summarize this framework.

From the following set of assumptions Perry draws a principle, which later proves to be problematic: 1) statements express propositional content; 2) propositions have *constituents*; 3) statements have *components;* 4) a statement's meaning is systematically tied to its components' meanings; and 5) if the proposition expressed by the statement is true, then the statement is true. The principle derived from the above he called *homomorphic representation* and runs as follows:

> Each constituent of the proposition expressed by a statement is designated by a component of the statement (Perry: 140).

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[3] The justification for the use of spatial metaphors like 'two-level' and 'underlying' is to already pre-fit this epistemological discourse to the spatial structure of the inter-level mechanistic explanations of the later more naturalistic discourse.

This one-to-one relationship between constituents and components is absent when one compares the constituents in the proposition 'It is raining in Palo Alto' with the components in the utterance 'It is raining'. Of this counterexample Perry states the obvious that "... the problem is that there is no component of the sentence that designates the unarticulated constituent ..." (Perry: 141). The pressing question then becomes how we can determine these constituents for which there are no corresponding components. Perry's proposed solution is that the unarticulated constituents are determined by the *whole* of the statement, which includes its context of use like background facts of time and place and the speaker's intentions and beliefs.[4]

> The unarticulated constituent is not designated by any part of the statement, but it is identified by the statement as a whole. The statement is *about* the unarticulated constituent, as well as the articulated ones. So, the theory is (i) some sentences are such that statements made with them are about unarticulated constituents, (ii) among those that are, the meaning of some requires statements made with them to be about a fixed constituent, no matter what the context, while (iii) others are about a constituent with a certain relationship to the speaker, the context of use determining which object has that relationship (Perry: 141; italics in original).

In short, crucial components can be absent from statements though their presence is more or less clearly implied by the context of the statement. The absent components are the unarticulated constituents of the underlying proposition. The full meaning and truth of a statement is determined by the full meaning and truth of its underlying propositions.

§2.7. Context-Sensitive Gradable Knowledge

The most important element of the formula is of course the idea that knowledge can be graded according to the context in which a knowledge claim is made. And it has to be noted that the formula is a compound proposition in which arguably a sufficient amount of determining contextual constituents are integrated, which mostly go silent. Just to repeat, the formula as it stands is:

> (1a) In the role of X, individual S knows *p* relative to epistemic standard N, which is prevalent in social context C.
>
> But often this proposition is expressed by the statement:
>
> (1d) S knows *p.*

As is the case in ...

> (1e) As an informed layman, Jones knows that polio is caused by a virus, and knows so relative to an above average epistemic standard, which is operative when he has drinks with his educated friends.

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[4] These elements will be added to the SACF in a later formulation.

… which can be expressed as,

(1f) Jones knows that polio is caused by a virus.

For the justification of the three constituents of the formula—situated role X, epistemic standard N and social context C—I present the following considerations. Though DeRose usually works with a binary epistemic standard of HIGH and LOW (or skeptical and quotidian) in his examples and more or less backs off in pursuing the idea that knowledge tracks the behavior of *context-sensitive gradable adjectives* very well, I think the comparison between the two is very fruitful.[5] When two teachers discuss the length of their student John and conclude that 'John is tall', while the two basketball coaches at the same school conclude 'John is *not* tall', we have to solve this little paradox by bringing out the context-sensitive unarticulated constituent reigning gradable adjectives formalized as 'for an X'. So, John is considered tall 'for a student', but is *not* tall 'for a basketball player'.

Transposed to knowledge claims, and following David Annis' example in this, one could say that in one context Jones, as a layperson, can be considered justified to know that 'polio is caused by a virus' (hereafter *h*), but that this statement is not justified to count as knowledge if Jones, as a medical student in an exam, would give this as an answer to the question 'what causes polio?'. Jones knows *h* 'for a layperson', but does *not* know *h* 'for a medical student'. As Annis states the point:

> Thus relative to one issue-context a person may be justified in believing *h* but not justified relative to another context" (Annis in Rysiew: 5).

Therefore the social context and the different roles played in such contexts can be considered as the unarticulated constituents of knowledge claims in the form of 'S knows *h*'.

Though the three constituents of the formula seem to imply each other and could all three be considered as hanging and swaying together in their gradability, I thought it best to consider them as different constituents for clarity's sake. The

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[5] It is a bit of a puzzle to me why DeRose did not fully pursue the topic of this parallel. He states on numerous occasions that the gradable adjective 'tall' and the verb 'knows' have many parallels. They behave "remarkably similar" (DeRose, 2009: 172); track each other "impressively" (173); and even that the parallel is "almost eerie" (173). But, tucked away in a footnote he let us know that the only reason he addresses the parallel is "to rebut certain objections to contextualism" (169n8). A major reason for DeRose not to pursue the parallel further is that, besides the many parallels, there are also big differences, one being the fact that we are comparing an adjective with a verb. I would counter that argument by transforming the verb 'to know' into an adjective by the following procedure. If a) 'to know' is about having knowledge; b) knowledge is 'justified true belief'; c) the term 'justified' is recognized as an adjective; d) justification comes in context-sensitive gradable shadings; then e) knowledge itself is gradable and f) the verb 'to know' will *necessarily* track the behavior of the gradable adjective 'justified' in the remarkable manner DeRose observed.

best defense for their differentiation is that in complex social situations the roles and standards of participants are very different. For example in a court case there is a whole roster of participants playing different roles, having different interests and applying different epistemic standards. One could say that most court cases are essentially a tug of war between the defense and the prosecutor regarding the epistemic standard by which the defendant might be considered innocent or guilty. The defense will try to set the standard high enough to plead not guilty while the prosecutor will try to lower the standard to get a guilty verdict.

Based on the above elaborated ideas that a) a difference has to be made between a statement and its underlying proposition; b) that that not all constituents of propositions are expressed by components in the statement; c) that it is the context of the statement which will determine the content of the unarticulated constituents; d) that the context-sensitive constituents in knowledge claims are the situated role of the claimant—including its interests and beliefs--and the appropriate epistemic standard prevalent for that role and/or situation; one can make the case e) that,

> (3) 'S knows *p*' is the simple statement which expresses the underlying compound proposition 'In the role of X, individual S, with interests i_1-i_n and beliefs b_1-b_n, knows *p* relative to epistemic standard N, which is prevalent in social context C at place *p* and at time t.

This formulation I will baptize as the *Fully Articulated Epistemic Contextual Formula* (FAECF) with which I will conclude this section.

§3.1. Inter-Level Mechanistic Explanation

The idea occurred to me to bring into place the idea of 'compositional explanation' hired from recent developments in the philosophy of the biological sciences in order to possibly understand better the two-tier structure of simple utterances and their underlying complex proposition(s). The idea, as best developed by philosophers of science Carl Craver and Carl Gillett, is that a natural entity is mostly composed of a certain set of components with their own properties, powers and processes which together in their specific, mechanistic interactions can satisfactorily explain the properties, powers and processes of the composed entity. Because the entity's behavior is on one level and the behavior of its components on one level deeper one could say of this explanatory model that it is an *Inter-Level Mechanistic Explanation* (ILME). The formula best capturing this idea is as follows:

> (4) A whole composed individual *s** has the powers and properties G_1-G_n, which can robustly be explained by the joint role-playing of its component entities s_1-s_n with their own qualitatively different powers and properties F_1-F_n, enabled by the background conditions $\$_1$-$\$_n$.

For example the explanation of why a diamond can scratch glass--which is a process on one level containing two entities and their interaction--can be brought

about by bringing in the properties and powers of the underlying components at the lower level, which are the carbon atoms composing the diamond and the molecules composing the glass. In this case the explanation is that the carbon atoms are stronger bonded than the glass molecules and that when the right pressure is exerted and the right movement executed, the stronger bonded carbon atoms break up and displace the weaker bonded glass molecules creating the scratch. Note that on the higher level one can say that it is the harder diamond which causes the scratch in the softer glass. This might suffice as an *intra-level* explanation. When the process is explained by bringing in the lower-level entities and their properties, i.e. carbons and molecules and the way they are bonded, the explanation is *inter-level*.

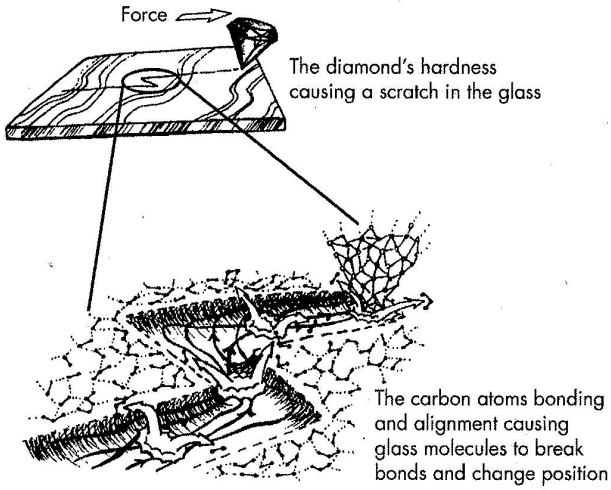

Figure 4.2 The lower-level mechanisms of carbon atoms breaking the bonds between, and displacing, specific glass molecules implement the process of a diamond scratching a pane of glass

Fig. 1. Inter-Level Mechanistic Explanation of a diamond causing a scratch in glass. From Gillett (2007).

Note here some important structural features of this example: We are dealing with a) *two* levels: one, the diamond and the glass, the other, the carbon atoms comprising the diamond and the molecules comprising the glass; b) there is a *mechanism* involved by which we can explain the phenomenon scratch; c) that all the elements in the account add up to an *explanation; and* d) the concept of *composition* is central to the explanation.[6]

§3.2. Some Key Features of the Concept of Composition

Based on careful descriptive work, especially in the biological sciences, Gillett was able to tease out a set of about a dozen key features of successful inter-

[6] The last two paragraphs were taken over verbatim with minor additions from my paper on scientific composition.

level mechanistic explanations (Gillett, 2013: 317-8). Though most of them could be put into play in EC, I will just highlight four of them.

1. *Qualitative distinct relata*, which is the feature that the properties and powers of the entity are qualitatively different from the properties and powers of the components. One can easily observe that a diamond is hard and its carbons are strongly bonded, but not that the carbons are hard or the diamond is strongly bonded.

2. *Inclusivity or Co-location*, which is the feature that all components are located within the spatial confines of the entity and that all components have spatio-temporal relations and interact with each other. All carbons are within the diamond and all directly or indirectly are related.

3. *Natural necessitation*, which feature is that under certain conditions the bonded carbons necessitate the hardness of the diamond and its ability to scratch glass.

4. *Katanoesis*, which is the feature of understanding why and how the carbons through its properties and powers ground the hardness of the diamond.

This topic of ILME is much richer and more complex than I can convey here and there might be overlooked aspects which might completely undermine the intention of this paper. Nevertheless I will proceed and present certain succinct formulations of ILME to serve my purpose, for example the following condensed formulation by Gillett of his concept of composition:

> ... composition involves teams of individuals bearing spatio-temporal, powerful and/or productive relations, where all the team members are spatially contained within the constituted individual, and such that the properties of the individuals in the team realize the properties of the constituted individual and the processes grounded by the individuals in the team implement the processes grounded by the constituted individual (Gillett, 2013: 318).

This brings the presentation of the two sets of ideas to an end. From here the work, if I did my job well unto this point, will be possibly quite easy because of the already suggested structural congruency between EC and ILME.

§4.1. Combining EC and ILME

It is my contention that both EC and ILME have certain features in common which make them, with some appropriate calibrations here and there, quite congruent, combinable and fruitful in their combination to tackle academic skepticism and some other vexing philosophical conundrums. Applied to the phenomenon of knowledge and meaning one could argue that the meaning and truth of an utterance can only be determined by the interaction between its relevant constituents, articulated or not, especially the context-sensitive ones like

roles, social settings and epistemic standards.

The crux seems to lay in combining EC and ILME into a coherent formula or model. This could be done by calibrating the scientific composition formula (4) in terms of EC, or, in other words, plugging EC terms into the ILME formula and replacing the idea of natural entities having causal 'properties, powers and processes' to linguistic entities having implied 'sense, reference (Frege), character and content (Kaplan)'.[7]

> (5) The simple statement *'S knows p'* has the character-meaning M and property T v F, which can sufficiently be determined by the joint role-playing of its constituent propositional entities s_1-s_n with their own qualitatively different content-meanings F_1-F_n and properties T v F, enabled by the background conditions $\$_1$-$\$_n$.

In other words, *the full meaning and truth of a knowledge claim can only be assessed if and only if a sufficient amount of contextual and non-contextual, lower-level 'unarticulated constituents' are brought out of hiding and are seen, in their meaningful interaction, as composing the meaning and truth of the higher level linguistic entity*.

§4.2. Testing the Combination

To test this idea on a deeper level I propose to assess how this formula fares with some of the identified key features of scientific composition enumerated above.

1. *Qualitative distinct relata*, which is the feature that the meaning and truth of the entity are qualitatively different from the meanings and truths of the constituents. One can easily observe that the meaning of 'Jones knows that polio is caused by a virus' is different from the meanings of its constituents like 'Jones is an educated layman' or 'Jones is with his friends at a bar'. Though it seems trivial, the point is that the relata are qualitatively different.

2. *Inclusivity or Co-location*, which is the feature that all constituents are located within the spatial confines of the entity and that all constituents have meaningful relations and interact with each other. Again, a bit trivial maybe, but if one brings back Perry's observation that a statement is about both its articulated constituents as well as about its unarticulated ones, then one could argue that the statement contains the constituents.

3. *Natural necessitation*, which feature is that under certain conditions the meaning and truth of the constituents of a compound proposition

[7] The reverse procedure, to calibrate the SACF (1) in terms of scientific composition, does not fly as well.

> 'S is *p*' is the simple statement which expresses the underlying compound proposition 'Entity S, with properties i_1-i_n and powers b_1-b_n, has the predicate *p* relative to background conditions $\$_1$-$\$_n$ at place *p* and at time t.

necessitate the meaning and truth of a simple statement. If all constituent elements of the proposition a) 'As an informed layman, Jones knows that polio is caused by a virus, and knows so relative to an above average epistemic standard, which is operative when he has drinks with his educated friends' are understood and are true then this necessitates the understanding and truth of the simple statement that b) 'Jones knows that polio is caused by a virus'.[8]

4. *Katanoesis*, which is the feature of understanding *why* and *how* the interaction of the meaning and truth of the constituent elements of the compound proposition ground the meaning and truth of the simple statement. The interaction of role, social context and prevalent epistemic standard is of course not causal, but is an inter-connection at the level of meaning at which they imply, hang and sway together along a wide spectrum of different social contexts from low epistemic taverns to mid epistemic editorial offices to high epistemic courts to ideal epistemic philosophy classes. Instead of natural causality the operative term might well be social and linguistic appropriateness. It would not be proper to challenge a judge's pronouncement with the BIV argument or take someone to court for telling a tall tale at a pub.

So far I think the formula is passing the test quite well. And even though the first two features look trivial, the last two are from that.

The salient features are that both incorporate in one way or another 1) 'compositional explanation', a feature ILME is quite explicit about; 2) a methodology of creating variations in or with entities to tease out hidden properties and problems (Craver's Mutual Manipulability Account and Unger's tests with modifiers and paraphrases); 3) the notion of contextuality, especially developed by EC; and 4) the notion of fallibility and error in perceptions and knowledge claims which is an essential component of knowledge's gradability.

§5.1. Generating and Solving Skeptical Arguments

Having developed this multilevel mechanism of knowledge production I propose to further test it on a few prominent cases like the 'Brain in a Vat' argument (BIV) and at least the first of the Gettier problems.

Maybe the best manner to proceed with analyzing the BIV argument is by juxtaposing again two opposing statements, in this case the recurring skeptical issue whether I know if I have hands or not. The negation of the statement is the conclusion derived from what DeRose named the 'Argument from Ignorance' (AI) and the affirmation is supported by the influential British philosopher G.E. Moore

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[8] A logician might argue that b) is already entailed by a), because it is a part of a), therefore he might wonder what the fuss is about. The point is that, if the other constituents change, like to the context of a virology exam, then b) might not be true anymore.

by holding up his hands and asserting he has hands (DeRose 1999: 183 & Moore: 24). When plugging into the AI the hand issue together with the Brain in a Vat idea (BIV), the following argument can be constructed:

(6) I don't know that I'm not a BIV.

If I don't know that I'm not a BIV, then

I don't know that I have hands.

I don't know that I have hands.

To fall back on formula (3) one can say that the seemingly absurd utterance 'I don't know that I have hands', when made in a very specific context, very well expresses the following underlying compound proposition:

(7) As a student in a philosophy class, with the interest to discuss skepticism and the belief it will sharpen my philosophical skills, 'I don't know that I have hands' because I do not know I'm not a Brain in a Vat relative to the very high epistemic standard reigning while discussing skepticism (which actually happened for a moment at DuSable 474 in the fall of 2012).

Though only for a moment and in the quite specific context of a philosophy class, the thought that 'I don't know I have hands' was a true thought, because it expressed a specific underlying compound proposition, all of which constituents were for a moment true. And it was true only for a moment because applying the very high standard in an experientially lived manner--as opposed to merely entertain it in a verbal, hypothetical manner--is so counter-natural and counter-intuitive that a real effort has to be made to execute it and once it is executed one would quickly fall back into a more natural attitude reigned by more quotidian epistemic standards by which it is no problem whatsoever that one knows that one has hands. And this brings us to Moore.

In order to quickly demonstrate for a lecture audience the existence of an external world while holding up his hands Moore stated: “Here is one hand … and here is another” (Moore: 24), which obviously expressed the idea that he knows he has hands and knows so in a very common sense, obvious manner. Moore's statement is also true because it expresses the proposition,

(8) As a public lecturer and philosopher, Moore, with the interest to challenge skepticism, knows he has hands relative to a more common sense epistemic standard prevalent in the context of a public lecture.

Therefore, and again, we have two opposing statements, both of which are true because of the differing contexts in which different epistemic standards are set by the interests of its participants. In the BIV argument it is an experimental exercise in stretching one's epistemic standard to almost impossible heights in the context of a philosophy class, while Moore firmly keeps the epistemic standard at a more

quotidian level from which he can actually make fun of skeptical arguments in general.

In fact, the participants could actually be arguing against each other over the heads of their respective audiences with at stake the soundness or unsoundness of skepticism and using as their main weapon conversational techniques to set the epistemic standard at their preferred level. If the skeptic gets away with setting it high and his opponent is not resisting (which usually seems to happen), he wins. But if the opponent successfully resists and convinces the skeptic of the soundness of his position, he wins. Most of the time there will be disagreement though with each sticking to their epistemic guns. It reminds me of the court setting in which a subtle battle is enacted over the level of the reigning epistemic standard to either get the defendant convicted or released.[9]

§5.2. The First Gettier Case

To deal with the vexing challenge American philosopher Edmund Gettier created with his two scenarios undermining the standard idea that knowledge is justified true belief, I will initially follow a recently proposed solution to the problem by American student of medicine Lukasz Lozanski in *Philosophy Today* and then deepen it with my proposed model. Lozanski thinks that the first Gettier example is a case of 'reference-muddling' and the second contains an 'inherent logical flaw'. I will try to show how exactly the 'reference-muddling' is executed in the first example.

Gettier's very unlikely hypothetical 'Case I' concerns two acquaintances, Jones and Smith, who both happen to have applied for the same job. Smith, has reasons to believe the following things about Jones: 1) Jones will get the job for which they have both applied; 2) Jones has ten coins in his pocket; 3) based on 1) and 2) one can validly infer that 'the man who gets the job has ten coins in his pocket'. But, by a quirk of fate, what actually happens is that 4) Smith gets the job and 5) Smith has also ten coins in his pocket, which facts do not change the truth of 3), i.e. that 'the man who gets the job has ten coins in his pocket'! Smith, assuming to have a justified, true belief that 3) is the case based on 1) and 2), is indeed right, but for the wrong reasons for 3) is now correct because of 4) and 5). In other words, this seems to be a case in which we have true premises and a true conclusion, but the reasoning is somehow invalid. What happened here?

My proposal is to to treat 3) as a statement which underlying proposition is being messed with by Gettier. The statement 3) is 'the man who gets the job has ten coins in his pocket', which underlying compound proposition is:

(9) Jones is the man who applied for a specific job and he is the man who

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[9] The issue of debating skeptical arguments is addressed by DeRose (2009) in chapter 4 in which he brings David Lewis' idea of 'scoreboard semantics' into play together with his own 'Gap view'.

gets the job and he has ten coins in his pocket.

What Gettier then does is a three-step operation on the proposition. First he silences some of the crucial constituents of the proposition, which could be rendered visually by putting the silenced parts between brackets:

(10) (Jones is the man who applied for a specific job and probably he his) the man who gets the job (and unrelated to the job hunting context he) has ten coins in his pocket.

The next step is that he just cuts out the silenced, but still implied, parts, which we can visually render by crossing the relevant parts out:

(11) (~~Jones is the man who applied for a specific job and probably he his~~) the man who gets the job (~~and unrelated to the job hunting context he~~) has ten coins in his pocket.

Then, because by an improbable sequence of circumstances, Smith gets the job and he also happen to have ten coins in his pocket, which renders (11) true, though the underlying proposition now has become:

(12) Smith is the man who applied for a specific job and he his the man who gets the job and he has ten coins in his pocket.

The difference between (10) and (11) is that, even though both are the same utterance, the propositional meaning of (10) is still about Jones, while (11) is about an unspecified 'man', which opens the way to apply it to Smith and generate (12), which miraculously happens to be the case even though Smith does not know it! In this way Gettier could construct the apparently knowledge-undermining scenario in which Smith has the seemingly justified true belief that 'the man who gets the job has ten coins in his pocket' but cannot be said to have real knowledge.

But, as Lozanski pointed out, and I will re-phrase in terms of Kaplan and Perry, it is not clear what exact proposition the statement (11) expresses. If it is (10) and the component 'man' stands for constituent Jones, then the statement is false, and if it is (12) and the component 'man' stands for constituent Smith, then Smith has no justification believing that, because he still believes (10). As Lozanski concludes:

> The first possibility violates the truth requirement for justified true belief, while the second case violates the justification requirement. Gettier has tried to use semantic obscurity to trick the reader into believing that justified true belief is not enough for knowledge. However, it can be seen that in this case the ‘knowledge’ was either not justified or false, and thus never constituted *knowledge* in the first place (Lozanski; italics in original).

In other words, the 'reference-muddling' can be construed as a bait-and-switch strategy which was exposed by Lozanski and further clarified by an inter-level linguistic explanatory model as formulated in (5).

§6.1. Conclusion

The conclusion is that it is not only quite feasible to show that knowledge is context-sensitive and that academic skepticism is a special case depending on a specific context, but also to show the underlying mechanism by which skeptical cases can be generated and solved with the effect of safeguarding the notion of knowledge.

Origin

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Sources used and cited

Braun, David. "Indexicals". *The Stanford Encyclopedia of Philosophy* (Summer 2012 Edition), Edward N. Zalta (ed.).

Craver, Carl. (2007). *Explaining the Brain: Mechanisms and the Mosaic Unity of Neuroscience*. New York: Oxford University Press.

DeRose, Keith (1999). “Solving the Skeptical Problem”. In *Skepticism: A Contemporary Reader.* Keith DeRose and Ted A. Warfield (Eds.). Oxford: Oxford University Press. Pp. 183-218.

DeRose, Keith (2008). “Gradable adjectives: A defense of pluralism”. *Australasian Journal of Philosophy* 86 (1):141-160.

DeRose, Keith (2009). *The Case for Contextualism: Knowledge, Skepticism, and Context. Vol. 1.* Oxford: Clarendon Press.

Frege, Gottlob (1960). “On Sense and Reference”. In *Translations from the Philosophical Writings of Gottlob Frege.* P. Geach and M. Black (eds. and trans.). Oxford: Blackwell. Pp 56-78.

Gettier, Edmund. (1963). “Is Justified True Belief Knowledge?”. *Analysis* 23:121-23.

Gillett, Carl (2007). *"*The Metaphysics of Mechanisms and the Challenge of the New Reductionism". In *The Matter of the Mind: Philosophical Essays on Psychology, Neuroscience, and Reduction.* Maurice Schouten and Huib Looren de Jong (Eds.). Oxford: Blackwell Publishing. Pp. 76-100.

Gillett, Carl (2013). "Constitution, and Multiple Constitution, in the Sciences: Using the Neuron to Construct a Starting Framework". *Minds and Machines* 23 (3):309-337.

Halliday, Daniel (2007). “Contextualism, Comparatives, and Gradability”. *Philosophical Studies* 132 (2): 381-393.

Kaplan, David (1989). “Demonstratives.” In *Themes from Kaplan.* J. Almog, J. Perry, and H. Wettstein (Eds.). Oxford: Oxford University Press. Pp. 481–563.

Lozanski, Lukasz (2015). “The Gettier Problem No Longer a Problem”. *Philosophy Now* (Apr/May 2015).

Ludlow, Peter (2005). "Contextualism and the New Linguistic Turn In Epistemology". In *Contextualism in Philosophy*. G. Preyer and G. Peter (Eds.). Oxford: Oxford University Press.

Moore, G.E. (1962). “Proof of an External World”. In G.E. Moore, *Philosophical Papers*. New York: Collier Books. Pp. 144-8.

Perry, John, (1986). “Thought without Representation”. *Proceedings of the Aristotelian Society Supplementary.* Vol. 60. Pp. 137-151.

Rysiew, Patrick. “Epistemic Contextualism”. *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (Ed.).

Schiffer, Stephen (1996). “Contextualist Solutions to Scepticism.” *Proceedings of the Aristotelian Society*, New Series 96. Pp. 317-333.

Schuller, Govert. “To know or not to know--or somewhere in between”. Final Paper. December 14, 2012. Philosophy 390, “Knowledge, Skepticism and Context Sensitivity”, Northern Illinois University, DeKalb, IL. Fall 2012.

Schuller, Govert. “Comparing Two Accounts of the Notion of Scientific Composition”. Final Paper. April 28, 2014. Philosophy 461, “Metaphysics of Science”, Northern Illinois University, DeKalb, IL. Spring 2014.

Sokolowski, Robert (1974). *Husserlian Meditations: How Words Present Things.* Evanston: Northwestern University Press.

Unger, Peter (1971). “In Defense of Skepticism”. *The Philosophical Review* 80 (2):198-219.

Zagzebski, Linda. (1994). “The Inescapability of Gettier Problems”. *The Philosophical Quarterly* 44 (174):65–73.