Contextual Analyticity

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1. Introduction

My double aim in this paper is to argue for the claims that, when they are formed in certain ways, some judgements expressed by “I am here now” are both (i) apriori (although not solely in virtue of their meaning), *and* (ii) necessary (albeit trivially so). I will submit that such judgements are “analytic” in the same sense that some judgements are “immune to error through misidentification” when this notion is understood in a relativistic way: in both cases, no component of the content determines the referents upon which the truth of the corresponding judgement depends. I will attempt to show that, beyond *conventionally-analytic sentences* which are supposed to be (known apriori to be) true just in virtue of (knowledge of their) *meaning*, there are also *contextually-analytic judgements* that are (known apriori to be) true in virtue of (apriori knowledge of the) reflexive relation between the *context* of the judgement and the *circumstance* of evaluation which it targets.

The claim that occurrences of certain sentences like “I am here now” are both contingent and

apriori was part of an *argument*, in Kaplan's (1989) influential study on the logic of indexicals and demonstratives, against the (Fregean) descriptivist theory of sense and reference, and in favor of his own (Russellian) theory of direct reference, which involves *singular propositions*. It echoed Kripke's (1980) referentialist disentanglements, in his attack on the description theory of proper names, of what fixes the reference and explains cognitive value, on the one hand, and what gives the truth-conditional meaning, on the other hand; and correspondingly, of the apriori and the necessary, on the one hand, and of the aposteriori and the contingent, on the other.¹ Kaplan argues that the apriority of a sentence like "I am here now" stems from the semantical knowledge that there is no context in which the *sentence* can be uttered falsely, while the intuition of contingency stems from the empirical knowledge that the *proposition* it expresses in any particular context, *given that it is a singular proposition*, is only contingently true. Yet, I will argue, there is an alternative, *property* account of the same phenomena, inspired by Lewis (1979), which does not appeal to singular propositions and which can also capture an additional sense of apriority, one that has nothing to do with sentences. So the observation that certain statements like "I am here now" are in some sense(s) both apriori and contingent cannot be used to establish the theory of direct reference and a corresponding need to countenance singular propositions.

2. Kaplan on the Contingent Apriori

Logical empiricists took necessity and apriority to be co-extensive notions. Kripke (1980) disconnected them, arguing that the semantics of proper names requires to acknowledge that some truths are both necessary and aposteriori, and others both contingent and apriori. In the wake of his teacher Carnap, Kaplan (1989) devised a logic of demonstratives predicting instances of the contingent apriori which he continued to explain by reducing apriori truth to truth in virtue of conventional meaning.

¹ Kaplan (1989) makes the connection with Kripke's disentanglement clear in the Sections X ("Fixing the Reference vs. Supplying a Synonym," pp. 518-520) and XVII ("Epistemological Remarks," pp. 529-540).

In Kaplan's semantic framework, a (metaphysically possible) context of use c is represented by an agent a located in a place l at a time t in a world w —thus, by a quadruple (a, t, l, w) —while a circumstance of evaluation is represented by a world-time pair, (w, t) . At the stage of interpretation, the conventional meaning of an indexical sentence, its character, combined with a context, determines a content—which, for Kaplan, corresponds to a singular proposition. Then, at the stage of evaluation, that content, together with a circumstance of evaluation, determines a truth-value, the True or the False.

For instance, suppose that I utter the sentence “I am hungry” at noon on Monday, in my office, in the actual world. The context of use is then (me, noon on Monday, my office, the actual world). According to Kaplan, the character of the sentence and that context jointly determine that the content I expressed is the singular proposition *that [name of the author] is hungry*. That proposition is evaluated at circumstances of evaluation corresponding to world-time pairs. It is true relative to the circumstances in which I am hungry, and false relative to the circumstances in which I am not. This particular use of the sentence is true (absolutely) just in case “the circumstance of the context,” which is here the world-time pair (the actual world, noon on Monday), belongs to the set of possible circumstances determined by the singular proposition expressed, which here corresponds to the set of world-time pairs in which I am hungry, namely, $\{(w, t): [\text{name of the author}] \text{ is hungry at } t \text{ in } w\}$.

Kaplan intends his claims about the contingent apriori to support this semantical framework. Consider a context c_1 , featuring Marco in Venice in world w_1 on May 15, 1989. Marco says in c_1 ,

(1) I am here now.

According to Kaplan (1989, pp. 508-509), “the truth” expressed by Marco is both contingent and apriori. It is contingent because the *content* expressed by the sentence in c_1 is a singular proposition

which is false at some circumstances of evaluation—say, a circumstance (2012, w_2), in which Marco is in Rome.² And it is apriori because, for all contexts c , the *character* of this sentence determines at c a content that is true when evaluated at c .

In what follows, I want to challenge Kaplan's theses (a) that (1) is apriori only in virtue of its conventional meaning, and (b) that what is expressed by this use of (1) in c_1 is contingent.

3. Characters and the Apriori

We begin with (a). Kaplan holds that "I am here now" is both apriori and contingent. As I said above, Kaplan is echoing Kripke's disentanglement of necessity/contingency and apriority/aposteriority, which was part of an attack on the descriptivist picture of reference and content. He writes about Kripke:

I wish to parallel his remarks disconnecting the *a priori* and the necessary. The form of *a prioricity* that I will discuss is that of logical truth (in the logic of demonstratives). We saw very early that a truth of the logic of demonstratives, like "I am here now" need not be necessary. (Kaplan 1989, p. 538)

Let me take note of a similarity and a difference between Kripke and Kaplan. Kaplan (1989: 518) says, following Kripke, that in describing his senses Frege confused "a semantical rule which tells how to fix the reference to a directly referential term with a rule which supplies a synonym." (The same idea had been pressed in 1977 about indexicals by John Perry in *Frege on Demonstratives*.) But as he writes above, the notion of apriority which Kaplan (1989) considers is a *semantical* notion tied to logical truth and validity—and, under the influence of Carnap, with analyticity, i.e. (knowledge of) truth in virtue of

² Kaplan (1989) offers similar arguments, from the contingency of the proposition expressed to a distinction between descriptive character and singular proposition expressed, in the Sections V ("Argument for Principle 2: Pure Indexicals," pp. 498-500), VII ("Earlier Attempts: Index Theory," esp. p. 509), IX ("Argument for Principle 2: True Demonstratives," esp. pp. 512-514), X ("Fixing the Reference vs. Supplying a Synonym," pp. 518-520), and XVII ("Epistemological Remarks," pp. 529-540).

(knowledge of) the rules of language. He focuses on the relations between logical truth and necessity:

“All logical truths are analytic, but they can go false when you back them up to ‘ $\Box$ ’. One other notorious example of a logical truth which is not necessary,

I exist.

One can quickly verify that in every context, this character yields a true proposition—but rarely a necessary one. It seems likely to me that it was a conflict between the feelings of contingency and of certainty associated with this sentence that has led to such painstaking examination of its ‘proofs’. It is just a truth of logic!” (Kaplan 1989, p. 540)

So perhaps, it might be thought, apriority was not essential: what really matters to Kaplan’s view is the claim that some logical truths, *whether they are apriori or aposteriori*, are not necessary. Kaplan happens to further assume that all logical truths are apriori, but the connection is incidental.

But it seems to me that given the fundamental project of refuting the descriptivist theory of reference, the direction is actually opposite: Kaplan is interested, just like Kripke, in the referentialist disentanglement of necessity/contingency and apriority/aposteriority, and the connection with logical truth is incidental. It depends on a lingering Carnapian way of looking at apriority combined with the fact that the relevant apriority in the special case of indexicals belongs to their semantics/logic. In the case of proper names, Kripke had argued that some statements like “Neptune is the planet causing such-and-such perturbations in the orbit of Uranus” (as made by Leverrier before he could directly observe Neptune) are contingent and apriori. This happens when a descriptive condition (here: being the planet causing such-and-such perturbations in the orbit of Uranus) is used to fix the reference, and is thereby responsible for the apriority of the statement (its epistemic profile), but is not part of the content of the name, which is responsible for the contingency of the statement (its modal profile). The statement is contingent because the name is referential: *that referent* (Neptune), although we can know

apriori that it is what (if anything) satisfies the descriptive condition in the actual world, does not satisfy it in all possible worlds. Now, in the case of proper names, the descriptive condition responsible for the apriority is not part of their semantics (which is Millian, hence exhausted by reference) but of their *metasemantics* (i.e. of the facts that fix the semantics). But in the special case of indexicals, Kaplan (1989: 539) emphasizes that the descriptive element responsible for the relevant apriority is part of their *semantics*, and suggests that, for this reason, in their case we do not need to sever the (Carnapian) link between the epistemological notion of apriority and the semantical notion of analyticity.

Now, having tied apriority to logical truth, Kaplan (1989, p. 539) claims that it is the character of the sentence (1), not its content, which is logically true:

The bearers of logical truth and of contingency are different entities. It is the *character* (or, the sentence, if you prefer) that is logically true, producing a true content in every context.

However, this claim is controversial. On the one hand, Kaplan clearly means that, for any context *c*, the character of that sentence together with *c* determines a content, and this content (whatever it is) is true when evaluated at *c*. On the other hand, it seems that bearers of apriority, if there are such things, should correspond to *what* is known to be true—i.e., to contents—even if the *reason* why a judgement is apriori were tied to the character under which it is expressed. Kaplan himself does not take character to be a kind of content: characters are not themselves bearers of truth. They are not, he says, “objects of thought” (Kaplan 1989, p. 530). Characters only *determine* contents without being *part* of contents: once determined by character and some particular context, contents stand alone. So it is at least initially unclear how characters could be what is logically true.

Here is a possible clarification, which seems to me faithful to what Kaplan intended: what the competent speaker knows apriori is *that, for all contexts c, the character of the sentence (1) together*

with c determines a content which is true when evaluated at c . Now the content of this piece of knowledge is metalinguistic and general. It is a metalinguistic proposition about the sentence (1), and a general proposition about all (metaphysically) possible contexts of its use. So it does not, and could not, say anything about what a speaker in a *given* context knows *singularly* about herself.

It may be true and important that competent speakers know such metalinguistic-general propositions apriori—i.e., simply in virtue of their knowledge of the meanings of the relevant sentences at some particular time t , without needing *further* empirical investigation *after* t . But, even if that is so, I think that a purely metalinguistic account leaves out a different and interesting fact: *in another sense*, independently of the meaning of the sentence used, *what* he expresses with (1) *in* c_1 is known to be true apriori by Marco at that time in that world. I will now elaborate on what that different sense might be.

4. Towards a Contextual Notion of Apriority

When Marco utters (1) in c_1 , there is a sense in which he cannot be wrong about the identity of the referent, time, and place of his *utterance*, and thereby about its truth-value. But *that* sense has nothing to do with the *sentence* (1). It is not remotely connected with the fact that *in virtue of its conventional meaning, the sentence (1) would have expressed a truth even if it had been uttered in a different context involving another speaker, whoever he or she may have been*. Rather, this other sense involves Marco himself. What is known apriori in that further sense is *essentially contextual, singular*, and it seems tied to *what* the utterance expresses, not to *how* it expresses it. This sense is quite different from the unique, metalinguistic-general, sense acknowledged by Kaplan.

Let us try to elucidate further the non-metalinguistic sense in which Marco cannot be wrong. Not only is his judgement essentially singular, but it also seems to be “essentially indexical.” The judgement that he would express by using the non-indexical sentence (2) in the same context c_1 ,

(2) Marco is in Venice on May 15, 1989.

has (on common and plausible accounts) the same truth-condition as the one which he expressed with (1). Yet, apparently, when that same truth-condition is apprehended in the indexical way, it is apriori, whereas, when it is apprehended in the non-indexical way, it is aposteriori (see Kaplan 1989, p. 509).

Not only is it essentially indexical, but in case that would not be the same thing, it also seems to be “essentially *de se*.” In effect, the judgement that Diego, who is standing further in the same room, expresses when he says from his own context c_2 , pointing to Marco,

(3) He is there now.

has (on common and plausible accounts) the same truth-condition as the one which Marco expressed with (1). Yet, apparently, when that same truth-condition is apprehended in the *de se* way, it is apriori, whereas, when it is apprehended in the *de re* way, it is aposteriori (see also Kaplan 1989, p. 533).

Not only is it essentially *de se*, it also seems to be “essentially *de se* and identification-free.” The relevant notion of identification-freedom comes from Evans (1982, p. 180):

When knowledge of the truth of a singular proposition, ‘ a is F ’, can be seen as the result of knowledge of the truth of a pair of propositions, ‘ b is F ’ and ‘ $a = b$ ’, I shall say that the knowledge is *identification-dependent*: it depends (in part) on the second basis proposition, which I call the *identification component*. We might say that knowledge of the truth of a singular proposition is identification-free if it is not *identification-dependent*.

The judgement that Marco expresses in c_1 when he utters (1), explicitly pointing to that man in a mirror

there and judging that the man in question is himself, has (on common and plausible accounts) the same truth-condition as the one which he expressed without relying on any identification of someone as being himself. Yet, apparently, when that same truth-condition is apprehended in an identification-free way, it is *apriori*, whereas, when it is apprehended in an identification-dependent way, it is *aposteriori*.

In what follows, I will be exploring the idea that the sort of semantic relativism suggested by Lewis (1979) for *de se* attitudes can help to cast light on the relevant notion of *apriori* here. According to Lewis, the contents of *de se* attitudes (and of attitudes in general) are not propositions, but properties which the subject self-ascribes. The subject is not explicitly represented in the content of her *de se* attitude: rather, she is only implicitly present in the index or circumstance of evaluation. Lewis's view predicts that the content of Marco's utterance of (1) in c_1 is only a property—the property of being located at the place of the context. That property must here be evaluated at the centred world, (Marco, 1989, w_1). That is, the *complete content*—the pair consisting of this content plus that particular centred world—is true (absolutely) if and only if in w_1 Marco is in Venice on May 15, 1989. Lewis had introduced his relativist account of *de se* attitudes to solve the problem of the essential indexical, which he took to be identical to the problem of the essential *de se*. And, as we have seen, the judgement expressed by (1) in c_1 is essentially indexical and essentially *de se*.

5. Relativism and Immunity

There is yet another feature of the judgement expressed by Marco's use of (1) which the Lewisian account may arguably help to understand: it is “immune to error through misidentification” (“IEM”) (see Shoemaker 1968, Evans 1982, Ch. 6-7).

Consider an IEM-judgement involving bodily properties. If Marco comes to know through proprioception that his legs are crossed, he cannot be mistaken as to *whose legs* it is that are crossed.

The judgement formed on those proprioceptive grounds is IEM. According to Evans, it is IEM because it is identification-free: its grounds do not involve any identification component. Since there is no identification, there is also no room for *misidentification*. According to Recanati (2007, 2009), Evans's idea can be developed within a relativist framework inspired by Lewis's account of *de se* attitudes: there is no possible misidentification in this case because there is no identification of the referent *in the content* of the judgement and the other judgements on which it is directly based. The referent is not explicitly identified or represented by any component of the content (which Recanati calls the "lekton"); it is only presented in the circumstance of evaluation of the judgement. The subject is automatically determined to be part of the relevant circumstance in virtue of the *mode* in which the information was gained, in this case proprioception. The same treatment applies to information gained via introspection: information gained in that mode can only concern one's own thoughts. "Reflexive" modes—proprioception, introspection, kinesthesia—determine that the content of the judgement or the attitude is bound to be evaluated at a circumstance which is centred on their subject, so that no identification-component is needed for the subject in their content.

Now, notice that the judgement which Marco's use of (1) expresses, when it is formed in a normal way, is also IEM. He could hardly judge "I am here now" and then wonder, "Someone is here now, but is it really *me*?" —or "I am somewhere now, but is it really *here*?" or "I am here sometime, but is it *now*?" If Evans's insight applies here, then the judgement expressed in (1) is identification-free. And, in turn, if Recanati's Lewisian development of that insight is on the right tracks, then that means that the subject is not part of the content, but of the circumstance against which it must be evaluated.

Two analyses are compatible with this idea. The first puts the place in the content: it says that the content is the property of being located in Venice, which determines the set of centred worlds that are centred on someone who is located in Venice at some time, and that the judgement is true just in

case the world w_1 centred on Marco and on May 15, 1989, belongs to that set. The second analysis puts the place in the circumstance: it says that the content is the property of being located somewhere, which determines the set of centred worlds that are centred on someone who is located somewhere at some time, and that the judgement is true just in case the world w_1 centred on Marco, in Venice, and on May 15, 1989, belongs to that set. The first analysis preserves the Lewisian notion of an index—it is a triple consisting of a world, a time, and a subject. The second amends that notion: the index or circumstance becomes a quadruple consisting of a world, a time, a subject, and a place. I will not attempt to choose between those two analyses here, but I note that, granting the relativist framework under discussion, the latter analysis is supported by the observation made above that the referent of “here” is IEM.

6. The Reflexive Constraint

Marco can know apriori that the judgement he expresses with (1) is true because, *however he may represent his own situation*, he is aware that those representations are *irrelevant* in determining the referents upon which the truth-value of his judgement depends. The referents are not fixed through some content explicitly representing the referents, not even singular ones, but via a reflexive mode. Hence, even if Marco further believes in c_1 that he is Hume and that this city is Edinburgh, these representations of his situation in the world will not affect the truth-value of his judgement. This is because Marco lets other experiences or attitudes entertained in a reflexive mode, like proprioception or introspection, fix the referents of the concepts “I,” “here,” and “now” featuring in his judgement.

A characteristic feature of reflexive modes is that in their cases a “reflexive constraint” guarantees that the circumstance of evaluation completing the content of the corresponding judgement is the circumstance of its context (see Recanati 2007, Ch. 35). So here, if the context of Marco’s reflexive judgement is (Marco, t_1 , Venice, w_1), its circumstance of evaluation will be bound to be

(Marco, t_1 , Venice, w_1). When Marco accepts (1) under a reflexive mode, there is no room for misidentification of the subject, the world, the time, or the place, because all of these contextual parameters are automatically determined to be part of the relevant circumstance in a reflexive way.

Given this, we get two results. First, the content-*qua-evaluated-at-the-particular-circumstance*-of-that-judgement (what Recanati would call the “Austinian proposition”) becomes trivially *necessary*. (In general, no Austinian proposition could have had a truth-value different from the one it has, since an Austinian proposition—contrary to a lekton—is not a kind of thing that can in principle be evaluated at *various* circumstances.) If it is in fact true at that circumstance, it could not have failed to be true *at that circumstance*. Second, *given the (normal) way in which it was formed*, it can be known to be *true* apriori, for it can be known a priori that the reflexive constraint is operative in this type of judgement, and that, when it is operative, such a judgement just copies the context, and so cannot fail to be true.

7. The Intuition of Contingency

Let us now turn to (b), the thesis that what is expressed by this use of (1) in c_1 is contingent. One of Kaplan’s chief arguments for direct reference construed as a thesis involving singular propositions was that the truth expressed by any particular use of a sentence like (1) is intuitively contingent. On his view, the use of (1) in c_1 expresses the singular proposition *that Marco is in Venice*, and this proposition must be evaluated at circumstances corresponding to world-time pairs. As Marco is not in Venice *in all such possible circumstances*, Kaplan predicts that the proposition is contingent. By contrast, as we have seen, the relativist account predicts that the *complete* content of the judgement (the Austinian proposition), which involves Marco himself, is trivially necessary. Indeed, the (incomplete) content of the judgement (the property of being somewhere at some time in some world) *qua evaluated at some particular circumstance*—here, (w_1 , t_1 , Venice, Marco)—*could not* have failed to have the truth-value it

has *at that circumstance*. But now, does the intuition of contingency really establish by itself that singular propositions are needed and that relativist approaches are doomed to failure?

I think that Kaplan's argument for singular propositions was too swift. For the relativist has the resources to distinguish *two stages* in the generation of the relevant intuition of contingency. In the first stage, I *judge* in some reflexive mode that I am here now. The complete content of my judgement is necessarily true, in the trivial relativist sense that, in the unique circumstance that was contextually determined by the mode, I am currently here, and I could not have been elsewhere in this world at this time. But in the second stage, I form a different attitude: I *imagine* that I am not here now. But now the imagination is a different psychological mode, and precisely one for which the reflexive constraint does not hold (see Recanati 2007, pp. 208-209). I may imagine things concerning subjects, times, places, and worlds, other than me, now, here, and the actual world. Thus, when in this case *I go on to imagine* or to conceive that I am not here now, I in effect *shift* the original circumstance of evaluation. What I judged in the egocentric mode had to be evaluated at the circumstance of my context, but since the reflexive constraint is no longer operative in the case of imagination, what I now imagine can and must be evaluated at a *different* circumstance, a *counterfactual* world centred on me at some time.

So I conclude that the relativist approach has the resources to provide an alternative account of the intuition of contingency, one according to which the intuition is generated by a surreptitious shift from one circumstance to another between what are in fact two different attitudes. Hence, once the relativist approach to the apriori is recognised to be a relevant alternative among the possible theories under discussion, one central Kaplanian argument for singular propositions becomes inconclusive.

8. Conclusion

I have argued against Kaplan's claims that any judgement expressed by "I am here now" is apriori

because of its character or conventional meaning, and that any such judgement is contingent because it is false at some counterfactual circumstance of evaluation. On the account I have sketched, the judgement which Marco expressed by using (1) is indeed apriori, but not because of its conventional meaning. It is apriori because it is necessary (given relativism, it could not have been false, as it involves a *particular* circumstance of evaluation) *and* because its circumstance of evaluation is (and is known to be) determined in a reflexive way. On the resulting account, the idea that necessity and apriority are not co-extensive (which creates further puzzles that I have not discussed) need not be granted after all.

To conclude, I want to emphasise that the proposed account is compatible with the observation that *not all* uses of the sentence (1) are apriori. It has become a familiar point that some uses of “I am not here now” (some written notes or recorded messages) are true, and that this creates a difficulty for Kaplan’s account—see, e.g., Predelli (2011). However, the difficulty arises only for an account seeking a *conventional* sort of analyticity, applying to all occurrences of the sentence (1) in virtue of its character. It does not hinder the present account, which identifies a *contextual* sort of analyticity, applying to certain uses of (1). In all the cases that are problematic for Kaplan’s account, precisely, the reflexive constraint is *not* operative, and the speaker (and probably her audience as well) will be aware of that fact.

References

- Evans, Gareth. 1982. The Varieties of Reference (Oxford: Clarendon Press).
- Kaplan, David. 1989. “Demonstratives,” in Themes from Kaplan, eds. Joseph Almog, John Perry & Howard Wettstein, (Oxford University Press), pp. 483-563.

- Kripke, Saul. 1980. Naming and Necessity (Harvard University Press).
- Lewis, David. 1979. "Attitudes *De Dicto* and *De Se*," Philosophical Review, vol. 88, no. 4, pp. 513-543.
- Perry, John. 1977. "Frege on Demonstratives". Philosophical Review, vol. 86, no. 4, pp. 474-497.
- Predelli, Stefano. 2011. "I Am Still Not Here Now," Erkenntnis, vol. 74, no. 3, pp. 289-303.
- Radulescu, Alexandru. 2015. "The Logic of Indexicals," Synthese, vol. 192, no. 6, pp. 1839-1860.
- Recanati, François. 2007. Perspectival Thought: A Plea for (Moderate) Relativism (Oxford University Press).
- 2009. "*De Re* and *De Se*," Dialectica, vol. 63, no. 3, pp. 249-269.
- Shoemaker, Sidney. 1968. "Self-Reference and Self-Awareness," Journal of Philosophy, vol. 65, pp. 555-567.