

# Which semantics for the self-ascription of attitudes?

Fabrice Pataut

## ▶ To cite this version:

Fabrice Pataut. Which semantics for the self-ascription of attitudes?. 2023. hal-03958489

HAL Id: hal-03958489

https://hal.science/hal-03958489

Preprint submitted on 26 Jan 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# WHICH SEMANTICS FOR THE SELF-ASCRIPTION OF ATTITUDES?<sup>1</sup>

#### **Fabrice Pataut**

CNRS, UMR 8011 Sciences, Normes, Décision, Paris

- 1. Truth and its recognition
- 2. Internal checkings and introspective warrants
- 3. Logic
- 4. Propositional content and phenomenological content
- 5. Contingency and content

References

<sup>&</sup>lt;sup>1</sup> I must thank François Beets, Boris Grozdanov, Pascal Ludwig and Arnaud Plagnol for helpful comments and criticisms of earlier versions of this paper. I am particularly endebted to Jasmin Özel for pointing out the relevance of Evans's work on self-identification and self-knowledge to the topic.

#### 1. Truth and its recognition

Among the many conflicting views regarding the truth of our statements, two may legitimately take center stage. There is the view that if they are true, it must be possible for us to recognize that it is so by the methods of inquiry suited to their particular area of discourse. And there is the opposite view that they might be true unbeknownst to us. There is, of course, a debate about how this opposite view must be unpacked, to which I shall return shortly; but let me dwell first on two further disagreements that arise with respect to the first view. One concerns the construal of warrants, the second concerns their availability.

One might disagree about what must count as a warrant for statements of a particular class, i.e., about which necessary and sufficient conditions warrants must satisfy in order for them be genuine and to confer truth indeed on statements of a given class. And one might disagree about the availability of such truth-conferring items no matter how construed. In particular, one could insist that availability in principe is enough in case there is no strong reason to doubt, let alone to deny that we could retrieve the warrants or construct them as we proceed with our inquiry. Or one could on the contrary contend that availability *hic et nunc*, given our cognitive shortcomings is what we must secure, so that availability for us, should we reduce these shortcomings in the more or less long run of our inquiries, either scientific or common sense, is not an option.

My aim is to defend the view that statements of a particular class might be true unbeknownst to us, and the statements I'll take into consideration are self-ascription of propositional attitudes, i.e., statements of the form "I  $\phi$  [that] p." I'll spend some time discussing the two aforementioned disagreements for the simple reason that a stand must be taken regarding construal and availability if the second position is to be correctly assessed and defended. In other words, I'll unpack the notion at work in the idea of truth being independent from its recognition by us with the help of conclusions that the advocate of the opposite view might want to draw concerning the nature and availability of warrants for statements of that form, conclusions to the effect that their truth is constitutively linked to their warranted assertability (and, by parity, to the warranted thinkability of their content).

In ascriptions under scrutiny, "I  $\phi$ " plays the part of the main clause and "[that] p" the part of the subordinate declarative clause providing the content of whatever is  $\phi$ d. Greek lower case letters  $\phi$ ,  $\psi$ , ... are variables ranging over conjugated propositional attitude verbs such as "to believe," "to intend," "to desire," "to hope," and the like; p, q, ... are variables ranging over the sentences and statements expressing in English whatever it is we claim to believe, intend, desire, hope, and so on, and, by extension or indirectly, over the content of the attitudes thus aimed for or referred to.

<sup>&</sup>lt;sup>2</sup> The demonstrative "that" is between square brackets to indicate that it may be omitted in both written and spoken English.

There will be only one pronoun: the first personal pronoun in its subjective form, i. e., "I".<sup>3</sup>

#### 2. Internal checkings and introspective warrants

Ascriptions of attitudes may be either external or internal, i.e., either made by someone other than the ascribee, or made by the ascribee himself or herself. In the first case, the rationale for the ascription might be to make sense of the ascribee's linguistic or general behavior, e.g., typically, to make sense of the ascribee's public self-ascriptions. I'll restrict myself to the second case, where ascriptions are made by the ascribee, either publicly or privately, depending on whether he or she wishes to make a public annoucement or keep one's own attitudes to himself or herself. But in that case also, making sense (either silently or otherwise) might be the motivation. One might be wondering whether one really believes something, or one might have doubts about one's intentions and desires, or feel that one's hopes have been abandoned or revised, etc. This might be seen as part

There is also the case of the disjunctive pronominal form of the pronoun in colloquial English, either standing on its own ("Me") or with a copula ("It's me"), used when answering questions of the form "Who  $\phi$ s that p?". One may argue that the correct answer to such questions should be "I", "I do," or the rather clumsy "It is I" because the verb "to be" is a so-called "linking verb" which links the subject of a sentence to an expression that provides additional information on the person one refers to, or — as is the case here — that confirms or secures its identity. But if we accept "me" as a correct first personal pronoun in certain syntactic contexts, then "Me" and "It's me", qua direct answers to "Who  $\phi$ s [that] p?" count as bona fide instances of the self-ascription schema, in every way as explicit, or direct, or candid, given the right context, as instances with occurrences of "I".

of the life of one's mind, of one's own distinctive psychology. But one may also ask whether one *should* entertain these particular attitudes. Although these non factual second order questions are also part of the life of one's mind, and although psychology thereby has a legitimate interest in them, they point in the direction of justificatory or grounding matters that go way beyond psychology's legitimate scope.

I don't mean this to disparage psychology, or as a mere remark on the psychological facts or data that are constitutive of positive introspection. Although the psychology of what happens in one's mind matters, these are justificatory or epistemological matters in their own right. The standpoint adopted here is that psychology won't have the upper hand, either when determining whether one actually entertains an attitude under some form or other, or when deciding whether the entertaining is legitimate.

So what is the shape and content of these questions? One may ask which features and structure should internal checkings and introspective warrants possess in order to provide genuine justifications for the putative bearer's claims. One may also wonder whether oneself, qua putative bearer, should check the truth of one's claims in a finite time in order to provide a justification for them, i.e., whether checking that their truth-conditions obtain should be done *effectively* or *feasibly*, or whether it is enough that one should be able to do that *in principle* and perhaps not effectively, or feasibly, in any short polynomial time.

There are two distinct kinds of cases that involve both shape or structure and effectivity. In the first kind of case, I may retrieve the warrant immediately in favor of some particular instance of I  $\phi$  [that] p so that my investigation is a one-step affair. Furthermore, I may do that in two different ways. I may *judge* my warrant to be immediate because I count the steps that lead to its retrieving and stop at 1 (i.e., at the very step at which the warrant is retrieved, which happens to be the first, hence the immediacy). Or I may *experience* the warrant (or perhaps the very event or fact of its obtaining) to be immediate (perhaps in a non-defeasible way).

In the second kind of case, I may successfully check that I  $\phi$  [that] p provided I've previously checked that I  $\phi$  [that] q, or that I  $\psi$  [that] r and so on and so forth, so that the sets of  $\phi$ s and ps might turn out to be quite large. In that instance, a surveyability constraint might be imposed so that I positively introspect whether I  $\phi$  [that] p only provided my introspection doesn't tolerate marginal increases in length and complexity beyond a certain level.

This is *not* tantamount to a begging of the question in favour of some finitist or feasabilist outlook on the semantics of self-ascriptions. The point here isn't to defend a particular position with respect to the form of the semantics to be chosen — either one with a strong epistemic constraint on the truth of self-ascriptions, or some other with a weaker constraint or no constraint at all. The point is to be clear about the gist of the challenge and the point is this. The self-ascriber, as putative bearer, isn't trying to meet a skeptical challenge by looking for apodictic or non-defeasible warrants for the attitudes, i.e., for warrants that are warrants only relative to very high or

arbitrarily high skeptical or infinitist standards. To clear the way, we may impose an unskeptical or non-infinitist standard for warrants to the effect that no warrant for "I  $\phi$  [that] p" should be open to counter-arguments to the effect that (i) even when it is warranted that I  $\phi$  [that] p, it remains possible that I don't, or that (ii) if I  $\phi$  [that] p, then perhaps 0=1, or to the effect that (iii) I should yet find *another* reason to believe that I [really]  $\phi$  [that] p and then another one after that, and so on and so forth.

So the problem I want to consider here is not so much what actually happens in the mind of someone who considers these possibilities, but whether certain kinds of warrants, or modes of obtaining of warrants are legitimate, and whether their legitimacy depends not just on their particular form and content but also on the particular timing of their obtaining.

These worries clearly pertain to justification independently of skepticism. They involve both semantics and epistemology because it is debatable whether statements of the form "I  $\phi$  [that] p" should count as either (1) possibly true although not known by the self-ascriber to be true, or (2) if true, then in principle knowably true by the self-ascriber, or (3) if true, then effectively or feasibly known to be true by the self-ascriber.

#### 3. Logic

Logic, then, lies at the heart of the matter, in particular epistemic logic, if only because one must determine which property correctly captures how belief, knowledge and truth must be related with respect to introspection under the assumption that introspection gives us a privileged access to our attitudes and their contents or objects.<sup>4</sup>

As far as propositional logic is concerned, four possibilities are relevant with respect to the positive introspection property. Positive introspection might be construed so that the property is instantiated or exemplified, respectively for epistemic, doxastic and bimodal logics in the following ways:

- (i) POSITIVE INTROSPECTION PROPERTY FOR EPISTEMIC PROPOSITIONAL LOGIC  $Kp \rightarrow KKp$
- (ii) POSITIVE INTROSPECTION PROPERTY FOR DOXASTIC PROPOSITIONAL LOGIC  $Bp \rightarrow BBp$
- (iii) POSITIVE INTROSPECTION PROPERTY FOR BIMODAL PROPOSITIONAL LOGIC  $Bp \rightarrow KBp$
- (iv) POSITIVE INTROSPECTION PROPERTY FOR BIMODAL PROPOSITIONAL LOGIC WITH OPERATORS FOR INDIVIDUAL KNOWLEDGE AND INDIVIDUAL BELIEF ONLY, i.e., WITHOUT COMMON KNOWLEDGE AND COMMON BELIEF OPERATORS  $Bp \rightarrow KBp$

<sup>&</sup>lt;sup>4</sup> This flies in the face of Gareth Evans's point against the view that self-knowledge involves or (worse) requires introspection, in particular because of a point he makes about "inward glances" and knowledge of our own mental properties in connection with Wittgenstein and Descartes (see *Evans 1982*: ch. 7, p. 225). I return to this important question below in section 5.

Given the nature of the problem to be solved, (iv) is going to be the property we must get to grips with. Two preliminary remarks must be made in this respect.

First, if (iv) holds and Bp formalizes "p is believed by i" and Kp formalizes "p is known by i", then if I  $\phi$  [that] p, it is known by me that I  $\phi$  [that] p. A fortiori, then, in case (iv) holds, if I  $\phi$  [that] p, then it is in principle knowably true that I do. So a bimodal system that includes the axiom schema (iv), say Kraus and Lehmann's (Kraus and Lehmann 1988) or Voorbraak's (Voorbraak 1992), captures both the claim that self-ascriptions, when true, are in principle knowably true by the self-ascriber (claim (2) in the last paragraph of section 2) and, a fortiori, the somewhat stronger claim that self-ascriptions, when true, are effectively or feasibly known to be true by the self-ascriber (claim (3) ibidem).

Secondly — and this is going to be our point of contention —, in case positive introspection fails, could I nevertheless be justified in holding that I might be the bearer of an attitude? And if so, in case some argument grounds that modal claim, is there a bimodal system without Kraus and Lehmann's bridge axiom, or Voorbraak's, i.e., without (iv), which would provide separate accessibility relations for individual knowledge (K) and individual belief (B) and which would also capture both that failure and the claim that particular instances of "I  $\phi$  [that] p" could nevertheless be true

unbeknownst to a self-ascriber, because of the absence of positive introspective evidence in favor of the self-ascription (claim (1) *ibidem*)?

The difficulty here is that individual knowledge and belief are by the very nature of the case the only kind of attitudes on offer given that the warrant *must* be introspective. So we're in the unconfortable position where  $B_i$  and  $K_i$  are the only epistemic operators on hand *and* where positive introspection could very well fail to deliver a warrant so that, at first blush,  $\neg (Bp \rightarrow K_iB_i)$ .

#### 4. Propositional content and phenomenological content

In both the mediate and immediate cases, the occurrence of the attitude and our awareness of the occurrence have been construed as necessary and sufficient conditions for the obtaining of a warrant for some instance of "I  $\phi$  [that] p" (or at least for some instance of "I  $\phi$  [that] p at t"). But how exactly are such conditions co-satisfied? What is it for the occurrence and our awareness of it to conjointly warrant self-ascriptions? The question takes on a particular turn when the private justification is construed so as to be provided as it were instantaneously.

The view that the occurrence-cum-awareness of a mental state yields an immediate or quasi-immediate justification for the attribution of psychological properties has been defended by both Peacocke and Pryor (see *Peacocke 2008* and *Pryor 2005*) on the basis of *Burge 2003*.

Peacocke, in particular, claims that if I am aware that I entertain the thought that p, the application of the reference rule to the effect that "I" refers to the thinker of his or her own thoughts provides the adequate warrant for the corresponding self-ascription. In other words, it just takes the identity judgement " $I=_{id}$  the thinker of 'I  $\phi$  [that] p" to go from awareness or consciousness to warranted self-ascription. Under this construal of positive introspection, an identity judgement requires a reference rule, and the reference rule is applied just in case the owner of the thought that pallows himself or herself to act as a detached spectator that stands aside and contemplates his or her mental states "as though they were being unfolded upon a stage" (at least for the time it takes for the rule to be correctly applied). The last quote is from Ayer, who rightly remarks that the "inner theatre model" rests on a misguided analogy with the "outer" perception of physical events, (and more generally, one might say, of events in the external world whether physical or not) although "our thoughts and feelings do not normally 'pose for us'" (Ayer 1959: 50). Ayer is concerned with the distinction between knowing what one's thoughts are and merely having them, and with the mistaken idea that the two might be logically connected. The concern here is different, albeit related to Ayer's worry what if knowing what one's attitudes are, or whether they actually occur were a logical

consequence of our having them, the possibility of ignorance would be de facto excluded while the very idea of a genuine knowledge would turn out to be otiose. The words "I know that" in the sentence "I know that I believe that p" would add nothing, in terms of meaning or truth conditions, to those of the sentence "I believe that p". Although no modal operator occurs in (iv), at least implicitly or tacitly the bridge axiom (iv) would allow for cases where one has made the "easy transition" (Ayer again) from claiming that if one believes that p one then knows it, to claiming that if one believes that p, then one must know it, as if attitudes and the personal awareness of our having them were consubstantial.

The reason for rejecting the appeal to the reference rule, or to any device that would play a similar role is that propositional attitudes and mental states cannot be subjectless or representationally independent. What must be the case, rather, is that the awareness or consciousness of an attitude or of a mental state, i.e., the awareness of oneself entertaining a particular attitude or of being in a particular mental state, is *already* a warrant for the self-ascription. We don't experience ourselves as being presented with external autonomous states *not* representing the subject in whose mind they occur (i.e., ours). <sup>5</sup> The justification for our self-ascriptions should therefore be provided by the fact that we experience *ourselves* as  $\phi$ ying [that] p.

<sup>&</sup>lt;sup>5</sup> See *Coliva 2002* for a nice discussion of this point.

Pryor, for his part, argues that although we should reject the content requirement for mental states (the claim that a justifier for a mental state must have propositional content), the somewhat weaker endorsement of the premise principle (the claim that only mental states that assertively represent propositions may justify a belief that p) is neutral with respect to the idea that introspective or private experiences justify immediately. It just needs to be garanteed that such propositions are those which could be used as premises in an argument whose conclusion is p. Whether introspective justifications are mediate or immediate is irrelevant to the problem of determining which necessary and sufficient conditions a justifier must satisfy in order to be genuine.

But suppose with Pryor that we're not required to be in any particular representational state in order to access or retrieve warrants for self-ascriptions. What particular kind of *non*-representational state should we enjoy in order to access or retrieve these warrants? A mere raw experience with no representational content whatsoever, in Chisholm's sense of being-appeared to me in such and a such a way may not provide a warrant for the corresponding self-ascription. If I merely sense myself or appear to myself as the one that  $\phi$ s [that] p in that raw sense, I can't possibly claim to have a ground for the claim that I do, as a matter of fact,  $\phi$  [that] p. For the outcome of positive introspection to have any explanatory value, the content of our experiencing ourselves as  $\phi$ ing that p (as opposed to the content of

some external autonomous state that p is  $\phi$ ied simpliciter) must play a cognitive role.

The worry, here, isn't so much with the immediacy of the justification as with the claim that representative assertibility and the epistemic role of being a premise in a argument, rather than bona fide propositional content yield genuine justifications.

Under the assumption that positive introspection gives us a privileged access to our attitudes and their contents or objects, once the belief and knowledge operators of doxastic and bimodal propositional logic are restricted to individuals, I think it is fair to say that we are in the following predicament with respect to axioms (ii) and (iv):

Ι φ [that] <i>p</i>	Doxastic Positive Introspection Property $Bp \rightarrow BBp$	Bimodal Positive Introspection Property $Bp \rightarrow KBp$
The awareness simpliciter of the occurrence of $\phi$ provides a warrant	(i) Peacocke's argument  (ii) Pryor's argument	(i) Peacocke's argument  (ii) Pryor's argument
The phenomenal awareness of oneself <i>\phiing</i> provides a warrant	Argument?	Argument?
The propositional awareness of oneself <i>\phiing</i> provides a warrant	Argument?	Argument?

### 5. Contingency and content

Let me now move to the point about contingency I briefly alluded to at the end of section 3 when pointing to the idea that a ground should be provided for the modal claim that one could legitimately conceive oneself as the bearer of an attitude in case positive introspection fails. The point is twofold: it is about the semantic properties of our statements as much as it is about concept formation.

The truth conditions of statements of the form "I  $\phi$  [that] p" could be satisfied even though I ignore that they are because the recognitional abilities that allow me to determine that they are satisfied when they indeed are, either only in principle or downright effectively and feasibly, are only contingently linked to the fact that I  $\phi$  that p when I do. The independence of the semantic property of truth from introspectability in principle, or from introspectability *hic et nunc* is entailed by such contingency.

Notice that no substantive notion of truth is at stake here. If one were to favor the view that "I  $\phi$  [that] p' is true" is a metalinguistic variant of "I  $\phi$  [that] p" with no substantive referential relation involved over and above the disquotational "true", one would equally be in a position to rest on the contingency argument. In any event, no one properly defending either claim (2) or claim (3) could accept that it is possible for statements of the form "I  $\phi$  [that] p" to count as possibly true although not known by the self-ascriber to be true. The transcendence of the disquotational truth conditions of these

statements over their verifiability conditions by way of positive introspection follows from the possibility and flatly contradicts both claims.

As far as concept formation is concerned, the connected point is that I may form a bona fide conception of myself entertaining attitudes, say beliefs, independently of my being able to recognize that I do entertain them anytime I actually do, because the core recognitional ability I would have to activate to do so, i.e., positive introspection, is only contingently linked to the very fact of my privately entertaining them.

It is important to note that, with respect to both disquotational truth and concept formation, contingency is *not* an ad hoc solution. It is on the contrary something we may derive from the observation that the evidential relations brought about by positive introspection may (and actually often do) break down. The independence is a natural one although no naturalistic standpoint is involved here that would force us to understand introspection in a purely naturalistic fashion. <sup>6</sup> There is simply no way to guarantee that either the phenomenal awareness or the propositional awareness of oneself  $\phi$ ing must be as it were available upon request.

This brings about a particular problem with respect to Evans's claim that self-knowledge doesn't require introspection, and I would like to conclude by offering a rejoinder to Evans with the two possible construals of the

<sup>&</sup>lt;sup>6</sup> For the first point about our mastery "of a theory of nature" embedding the contingency claim but not necessarily the somewhat stronger naturalistic standpoint, see in particular *Loar 1987*: 105, 111.

awareness of oneself  $\phi$ ing — the phenomenal and the propositional — in mind.

Evans, commenting on Wittgenstein's anti-Cartesian remark (in discussion) to the effect that "If a man says to me, looking at the sky, 'I think it is going to rain, therefore I exist', I don't understand him", concludes that Wittgenstein is "forcing us to abandon the idea that [the knowledge of our own mental properties] always involves an *inward* glance at the states and doings of something to which only the person himself has access "(*Evans 1982*: 225).

I've assumed here that introspection gives us a privileged access to our attitudes and their contents or objects, not that it is the only one. Obviously, when warrants for statements of the form I've taken into account aren't in the least introspective, either in the phenomenal sense or in the propositional sense of being aware of oneself  $\phi$ ing, axiom (iv) plays no privileged role in our inquiries. I agree that, as Evan remarks, in many cases we'll answer the question whether we believe that p and the question whether it is the case that p by attending "to precisely the same outward phenomena". But what about the cases in which the warrants must be of a private nature so that we have to attend to inward phenomena to retrieve or construe them? In those cases, although the reasons we have to believe that p, if any, are also the very same reasons we have to believe that it is the case that p, the

phenomena we attend to in order to answer both questions are directed towards what we may call, perhaps for want of a better word, *the internal world*. Identity or indiscernability of warrants for both the occurrence of our attitudes and their proper contents says nothing against the inward glance view, especially if our experiencing ourselves as  $\phi$ ing that p rather than our being presented with an autonomous state that smacks of a third-person perspective must provide the expected warrants.

Perhaps Wittgenstein is indeed "trying to undermine the temptation to adopt a Cartesian position, by forcing us to look more closely at the nature of our knowledge of our own mental properties" (*Evans : loc. cit.*). In any event, I wouldn't go as far as saying that one will secure a Cartesian conclusion as to the existence of a *res cogitans* from an analysis of all the cases in which our belief that p and our belief that it is the case that p are justified by the very same "glance" directed upon the mind (as opposed to being directed upon the the external world).

What matters here is that it makes a defining and substantive difference whether our beliefs are about something other minds may form beliefs about rather than about something that's purely ours and cannot be shared with

<sup>&</sup>lt;sup>7</sup> One might perhaps conclude that, at each occurrence of a phenomenal or propositional awareness of oneself  $\phi$ ing while  $\phi$ ing, the mind exists insofar as it is a token of a mental event rather than as a genuine substance with the essential property of self-awareness.

others by the very nature of the case, i.e., by the very nature of positive introspection. In that case, there is no way around it: the awareness of oneself believing that p, whether purely phenomenal or somehow propositional does provide the required justifications.

There are of course vexing problems with the transparency thesis attacked by Evans and it is well beyond the scope of this paper to address them. I'm not convinced that transparency directly follows from immediacy and non inferentiality as if both were to provide immunity to error through misidentification. The problem here is to construe *introspectively* the observation that the evidential relations secured by positive introspection may and do break down, so that although some form of transparency is required if positive introspection is to play a genuine epistemic role, it must also leave room for an inward acknowledgement of failures.

Note that even if the modal position is secured, so that we may conceive ourselves as the occasional ignorant bearers of attitudes that are nevertheless fully ours, the possibility may be construed in quite different ways depending on whether the propositional or the phenomenal awareness of oneself  $\phi$ ing constitutes a necessary and sufficient condition for the obtaining of a warrant (or indeed constitutes a warrant). This is so because the breaking down of phenomenal awareness and the breaking down of

propositional awareness are quite different affairs that, as it were, pull the modality thereby involved in opposite directions. In the phenomenal case, it pulls it in the direction of a loss of the qualitative aspects of  $\phi$ ing; in the propositional case, it pulls it in the direction of a loss of its cogntive aspects.

If the inference from the claim about the breaking down of evidential relations, as a claim about introspective failure, to the modal claim simpliciter, had to be justified by an appeal to the common knowledge and common beliefs operators we have decided not to take into consideration in our formulation of the POSITIVE INTROSPECTION PROPERTY FOR BIMODAL PROPOSITIONAL LOGIC, the argument from contingency would fail.

What we need is an account of the argument that fits in an explanation that dispenses with (iv). I've suggested here that mental states that justify instances of negations of (iv) must include the experiencing of ourselves as failing in our private  $\phi$ ing that p, either phenomenally or propositionally. It of course remains to be seen how such failing should be construed.

#### **REFERENCES**

- Ayer (Alfred Jules), 1959, "Privacy", Proceedings of the British Academy, Vol. XLV, Oxford UP, pp. 43-65.
- Burge (Tyler), 2003, "Perceptual entitlement", Philosophy and Phenomenological Research, vol. 67, pp. 503-548.
- Coliva (Annalisa), 2002, "On What There Really is to Our Notion of the Ownership of a Thought. A Reply to John Campbell", *Philosophy*, *Psychiatry and Psychology*, vol. 9/11, pp. 41-46.
- Dummett (Michael A. E., Sir), [1973] 1978, "The Philosophical Basis of Intuitionistic Logic," in *Truth and other Enigmas*, Duckworth, London, 1st ed., pp. 215-247.
- Evans (Gareth), 1982, The Varieties of Reference, Oxford UP, Oxford.
- Kraus (Sarit) and Lehmann (Daniel), 1988, "Knowledge, Belief and Time", *Theoretical Computer Science*, vol. 58, pp. 155-174.
- Loar (Brian), 1987, "Truth beyond all verification", in *Michael Dummett:* Contributions to Philosophy, B. Taylor, ed., Martinus Nijhoff Publishers, Dordrecht, pp. 81-116.
- Peacocke (Christopher), 2008, Truly Understood, Oxford UP, Oxford.
- Pryor (Jim), 2005, "There is immediate justification", in *Contemporary Debates in Epistemology*, E. Sosa and M. Steup, eds., Basil Blackwell, Oxford, pp. 181-202.
- Voorbraak (Frans), 1992, Generalized Kripke models for epistemic logic, Morgan Kaufmann Publishers, San Mateo, pp. 214-228.
- Wright (Crispin), [1982] 1993, "Strict Finitism," Realism, Meaning and Truth, Basil Blackwell, Oxford, 2nd ed., pp. 107-175.