Inferential Roles and Truth
Conceptual Foundations for Modest Inferentialism

Abstract: Use-theoretic approaches to linguistic meaning are often characterised by their contrast, if not incompatibility, with mainstream truth-conditional semantics. In the contemporary case of inferentialism, this contrast is usually embraced, with the exception of so-called 'moderate inferentialism', a combination of inferentialist metasemantics and truth-conditional semantics. However, despite offering the best of both worlds, moderate inferentialism lacks both foundations as well as a general formulation in the literature. Often enough, the compatibility between the chosen metasemantics and desired semantics is simply assumed, without any argument to their coherence. In this paper, I will provide a general motivation and outline for a version of moderate inferentialism, called *modest inferentialism*, on conceptual grounds, argue that all inferentialists ought to be 'modest', and discuss the proposed approach's relationship with truth-conditional semantics. Specifically, I will conclude that modest inferentialism will not just be a 'proof-theoretic' reconstruction of mainstream truth-conditional semantics.

1 Introduction

Consider a simple declarative such as Peter is snoring. When it comes to specifying its meaning, the 'standard answer' will indubitably be: its meaning are the conditions under which the sentence would be true. As a consequence, understanding this sentence – knowing what it means – is a matter of grasping these conditions. Furthermore, not only are these observations supposed to hold for Peter is snoring, but any declarative sentence whatsoever, if not beyond. It is in *contrast* to this backdrop that most *use theorists* characterise their own approach: the meaning of a declarative sentence is given, not by truth-conditions, but by the *use* of the sentence in the relevant linguistic community. Hence, depending on the details of the use-theoretic approach, the meaning of Peter is snoring is variably given by the relevant assent-patterns of speakers, or the rules that determine the sentence's correct use in communication, or other devices. In any case, there is thus a commonly assumed *dichotomy* between the truth-conditional and use-theoretic approaches to linguistic meaning: the two approaches are at best *complementary* yet *distinct*, at worst *incompatible*.

It would be most unfortunate for this dichotomy to be true, however. For use-theoretic approaches can easily account for a *huge* range of linguistic phenomena not easily amenable to truth-conditional treatment – greetings or expressives, for example (cf. Kaplan, 1997; Gutzmann, 2015) – and neatly tie together issues surrounding language acquisition and linguistic competence.[1] On the other hand, truth-conditional approaches are undeniably successful in predicting a vast variety of linguistic phenomena surrounding declarative sentences and their use in assertion. Thus, a true dichotomy would prevent a explanatorily rich combination of use-theoretic approaches with their flexibility and the already established successes of truth-conditional theories.

In order to assess this dichotomy, *inferentialism* provides a congenial object of study. It is arguably the most systematic and widespread use-theoretic alternative to mainstream truth-conditional semantics, and commonly prides itself on its contrast with the latter (cf. Brandom, 2000, introduction). Instead of giving explanatory weight to the concept of truth, rules of inference and their material validity are explanatorily basic. Specifically, their role lies in determining

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[1]For example, their motivation in the *Philosophical Investigations* stems precisely from such considerations on conceptual grounds (cf. Wittgenstein, 1953).

warrant for assertions and commitments stemming from such (cf. Brandom, 1994, 63-66). As such, inferentialist semantics are, by default, *assertibilist*, instead of truth-conditional. Let us call this variation of the inferentialist theme *strong inferentialism*. However, there are inferentialists that labour to combine their inferentialist approach with truth-conditional semantics. This so-called *moderate* or *(genuine) orthodox inferentialism* is a prime candidate for the fruitful combination of use-theoretic and truth-conditional approaches mentioned above (cf. Murzi and Topey, 2021, 2; Murzi and Steinberger, 2017, 200). Unfortunately, this type of approach suffers from two major drawbacks. First, truth-conditions are assumed to be determined by the respective rules of inference, yet no general account is given as to *why* rules of inference ought to preserve truth – an *un*defended key assumption in the literature on moderate inferentialism (cf. Rumfitt, 2000, 2022; Murzi and Topey, 2021). This is especially problematic given the strong version's insistence on rejecting such a role. For without any argument motivating a different semantics, moderate inferentialists appear to cherry-pick their semantics, with no regards to the resulting (in)coherence of their accounts. Second, whereas strong inferentialism knows a formulation with respect to sentences of arbitrary content, moderate inferentialism so far has been confined to special topics, such as logic (Rumfitt, 2000) or ethics (Wedgwood, 2007).[2]

In what follows, I wish to remedy these issues. I will argue that *all* use theorists, *qua* being use theorists, must incorporate the notion of truth into their semantic theorising. Thus, strong versions of inferentialism must do so as well, and hence will collapse into a moderate version. From this general argument, I will further derive readily available explanations as to *why* the rules discussed in inferentialism are determining truth-conditions. In addition to answering the 'why-question', I will also develop a general framework of answering the question of *how* rules determine truth-conditions. Last, but not least, I will compare my resulting *modest inferentialism* with mainstream truth-conditional approaches and conclude that modest inferentialism will not just be a 'proof-theoretic' reconstruction of the latter.

I will begin by detailing some of strong inferentialism's core commitments (section 2), before mounting my argument against it in favour of my modest proposal. I will do so by mounting a general argument from philosophical methodology against any use theory that eschews truth as an explanatory notion (section 3). Coming from these considerations, I will then place them in service of providing conceptual foundations for my modest inferentialism, and detail the account with respect to arbitrary sentences (section 4). In order to forestall the worry that modest inferentialism is simply a 'metasemantic' embellishment of mainstream formal semantics, I will discuss use-theoretic approaches to thick terms and mental vocabulary, and demonstrate how the resulting accounts differ from their mainstream counterparts (section 5). Further issues and open questions arising from the investigation will be surveyed at the end (section 6).

Before proceeding, two caveats must be mentioned. First, despite the explanatory ambition of either approach going beyond declarative sentences, I will focus on the latter (almost) exclusively, for reasons of space. This is congenial, since declarative sentences are the ones where the difference in treatment is most radical. Second, I will not discuss reference for the same reason of space. This is unfortunate, since it forms another topic usually eschewed by use theorists, especially by the ones discussed in this paper. I will, however, briefly (re)visit the issue throughout the paper and at the end.

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[2]Although Wedgwood (2007) does contain a general argument for a moderate version of inferentialism stemming from considerations about semantic values (cf. Wedgwood, 2007, 86f.), he once again simply assumes that a valid inference is one that preserves truth, not assertability or something else. He further couches his explanations in intentional terms and sees validity as arising from the semantic values in question (cf. ibid.), two points which I will address differently in the sequel.

2 Strong Inferentialism

In this section, I will give a general overview of strong inferentialism as a general theory of meaning. As already mentioned, the focus will be on declarative sentences, specifically their *assertoric* use, i.e. their use in making statements. After discussing some general and argumentatively crucial aspects of use theories, I will discuss some of the major themes in inferentialism of the Brandomian kind. At the end, I will zero in on their treatment of truth with respect to their semantics, which will form the dialectical target for the rest of the paper.

2.1 Use Theories in General

Before delving into the details of strong inferentialism, we must first gain a better understanding of use theories in general. To this end, the distinction between semantics and *meta*semantics will be of help. For our purposes, let *metasemantics* be the discipline that studies both what accounts for our knowledge of meaning, and what explains why a linguistic expression has the meaning it has. As such, metasemantics does not deal with meaning itself, but with the epistemological and metaphysical-*qua*-explanatory aspects surrounding meaning. In contrast to this, *semantics* proper studies the meaning of linguistic expressions, usually by systematically codifying them (cf. Murzi and Steinberger, 2017, 199; Burgess and Sherman, 2014, 1f.).

With this distinction in hand, we can now turn to spelling out the use-theoretic approach to linguistic meaning. At its core, the approach is usually characterised by the misquoted Wittgensteinian *dictum* that 'meaning is use' (cf. Wittgenstein, 1953, §43).[3] Spelling this idea out with our distinction gives us the following three readings:

(MT) An expressions has the meaning it has because of its use in the linguistic community.

(ET) Understanding an expression, i.e. knowing what it means, is a matter of using it correctly/in accordance with the linguistic community.

(ST) The meaning of an expression is constituted by its use in the community.

That is, we must distinguish different interpretations of the *dictum* along our three lines: metaphysical, epistemological and semantical (cf. Murzi and Steinberger, 2017, 199). While it is common to find all three theses to be endorsed simultaneously, this is by no means necessary. One could endorse (MT) but eschew (ST), for example, without contradiction, as many of the aforementioned moderate inferentialists do (cf. Murzi and Steinberger, 2017, 200).

While these theses themselves are still highly ambiguous, they allow us to distinguish different dimension of the use-theoretic commitment. From these three, (MT) is arguably most common to all use-theoretic approaches.[4] Given the platitudinous status of the idea that linguistic meaning is at least *partially* determined by use (cf. Peregrin, 2014, 43f.), weaker readings of (MT) that allow for other factors in determining meaning must be considered irrelevant. For they fail to distinguish use theories from other approaches. Thus, I will assume that use theorists are committed to a strong reading of (MT): use is *fully*, i.e. *exclusively*, determined by use. This, naturally, rules out other (meta)semantic approaches that locate the explanatory bedrock for meaning outside of communal conventions, such as semantic externalism (cf. Putnam, 1975). Given that the dialectical goal is to

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[3]For its misquoted nature, cf. ???.

[4]Most likely also because most use theorists endorse some version of (ST), and (ST) plausibly implies some salient rendition of (MT).

argue against strong versions of inferentialism, who endorse strict readings of (MT),[5] I will ignore such alternative approaches[6] and assume (MT) in its strict reading from here on out. Since it will be important later on, let us give the strict reading a name – the *Basic Assumption* (BA):

(BA) The linguistic meaning of an expression is *fully*, i.e. *exclusively*, determined by its use in a community.

Given the widespread endorsement of the strict reading of (MT) among use theorists, the label is well-deserved.

At this point, however, use is still underspecified. Arguably, not every aspect of an expression's use is relevant to the determination of its meaning, much less its meaning itself. For example, availing ourselves to the connection between understanding and meaning, consider snoring. Understanding this expression arguably comes with the requirement to recognise sounds that count as snoring. However, consider the norm that snoring people, given that they are asleep, should, by default, be left alone. Ignorance of this norm – and its associated inference(s) – might lead to rude behaviour, but does not betoken linguistic incompetence. Thus, we need to disambiguate use to receive a plausible account of linguistic meaning. At this point, the inferentialist has an answer to this 'disambiguation problem'.

2.2 The Basic Ideas of Strong Inferentialism

As the label suggests, *inferentialism* is a use-theoretic approach that sees the act of *inferring* as central to elucidating linguistic meaning (cf. Murzi and Steinberger, 2017, 197f.; Brandom, 2000, 11f.). Thus, use is disambiguated by equating it with *inferring*, and the three theses above are transformed into the following *inferentialist* key:

(MT$_I$) An expression's inferential use in the linguistic community determines its meaning.

(ET$_I$) Understanding an expression is a matter of using it correctly in inference.

(ST$_I$) The meaning of an expression is constituted by its use in inference.

Standardly, with respect to (ST), strong inferentialists equate an expression's meaning with its *inferential role*, usually given by the *rules* which determine what counts as a correct inferential employment of the expression (cf. Peregrin, 2014, sect. 3.4).

The most important and central idea in this regard is what I will call the *Basic Tenet* (BT). It is the name for the characteristically inferentialist mode of explanation when it comes to elucidating linguistic meaning, and can be put thusly:

(BT) The validity of inference rules is explanatorily basic, i.e. not dependent on independently given facts about the meaning of an expression, and the rules determine the standards of semantic correctness, accordingly.

In other words, the validity of an inference rule such as

$$\frac{x \text{ is snoring}}{x \text{ is sleeping}} \, (*)$$

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[5]Although not explicitly endorsed as such, Brandom often invokes the communal standards as determiners of meaning, without mentioning any other sources. Cf. e.g. Brandom (1994, 77; 2000, 23). Consult also Murzi and Steinberger (2017, 202f.).

[6]For an excellent defense against semantic externalism, for example, consult Hanfling (2000, ch. 12).

is not to be explained by drawing upon a previously established or given meaning of snoring, but by the fact that the community's treatment of snoring establishes it as a valid one, which *in turn* endows snoring with its conceptual content (cf. Brandom, 2000, 30). This is plausible, since explanations such as "This rule is valid since one cannot snore without sleeping" are either a restatement of the rule or presuppose its validity[7] – and in any case, the Basic Assumption seems to require such a mode of explanation. As the example also demonstrates, it is not (just) the *formal* validity that is to be explanatorily basic, but (rather) the *material* validity of such rules. This forestalls worries related to Achilles and a certain tortoise (Carroll, 1895), and avoids treating every inference a competent speaker makes as an implicitly logical one. The latter is particularly problematic, given its explanatory idleness (cf. Brandom, 2000, 53).

At this point, a deeper look at inferential roles is in order. Inferentialists commonly distinguish two aspects of a sentence's inferential employment that are crucial to its meaning: the grounds which warrant an assertion and the consequences of such. This so-called *two-aspect model of meaning* stems from Gentzen's seminal work in proof theory (1934), which was adopted for inferentialist purposes by Dummett (1991) and later Brandom (2000). Thus, a sentence's inferential role is given by *introduction rules*, which specify under what conditions its assertion is licensed, and *elimination rules*, which detail my commitments that follow from an assertion of the sentence. For example, an assertion of Peter is snoring commits me to the claim that Peter is sleeping, as given by (∗). This commitment should not be misunderstood as an obligation to assert that Peter is sleeping, however, for this would obviously trap speakers in an endless string of assertions. Rather, the idea is that a commitment is to be understood as a type of accountability: a *preparedness* to further *defend* or *assert* the consequences, or to retract the original assertion in case the consequences are shown to be unwarranted, etc. (cf. Brandom, 2000, 43). As far as warrant is concerned – or what Brandom calls "entitlement" (ibid.) – they are constituted by what counts as a good reason to assert the sentence in question (ibid.). Thus, my observation of Peter snoring entitles me to assert Peter is snoring, as would a report from someone reliable, and so on.

These two notions – commitment and entitlement – allow for defining a third: incompatibility. Two claims are incompatible just "[...] in case commitment to one precludes entitlement to the other." (Brandom, 2000, 44). For example, Peter is snoring and Peter is awake are incompatible, since the behavioural criteria that allow me to claim that Peter is awake are precisely the ones excluding cases where he is snoring.

These are the semantic primitives that strong inferentialism is usually founded upon, which are often taken to be determined by the introduction and elimination rules governing the correct use of the expression in question. From this rough outline, a number of inferentialist 'trends' can be gleaned. First, inferentialist semantics are *criterial*, *justification-based*, or *reason-based*, in the sense that what counts as a *good reason* for the assertion of a statement and to what statements I become therefore entitled are central (cf. Peregrin, 2014, 30). This *criterial* approach underlines inferentialism's commitment to the *Basic Assumption*. For it is seen as conventionally determined what constitutes a good reason for which claim – indeed, this embedding in a justification-practice generates assertion-content in the first place (cf. Brandom, 1983, 643), hence the phrase "the game of giving and asking for reasons" (Brandom, 1994, 106). Naturally, these reasons are those we exchange in *actual* language use. Second, inferentialism's 'semantic unit' is the sentence with its meaning, not subsentential expressions. Its point of departure is the speech act of assertion with its governing norms, such as warrant and commitment (cf. Brandom, 1983). Third, subsentential expressions are accounted for by their systematic contribution to sentence-meaning, allowing for

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[7]We will revisit possible explanations with respect to truth-preservation in due time. However, given the general equivalence of p and 'p' is true, it is to be expected that such explanations would face similar difficulties.

a kind of *de*compositionality (cf. Brandom, 2000, ch. 4; Peregrin, 2009). Fourth, the strong inferentialism presented so far is a *normative* theory of meaning, in the sense that it makes use of normative notions in explaining meaning, such as warrant, commitment, or the appeal to what counts as a good reason (cf. Murzi and Steinberger, 2017, 211; Brandom, 1983, 640). While we will not dwell on the issue of normativity much here, there is a highly relevant angle to this. As can be seen from the picture painted above, strong inferentialism does not use the notion of truth in explaining meaning whatsoever. Instead, it is a kind of *assertability theory of meaning*, treating notions such as warrant and commitment as primitives (Murzi and Steinberger, 2017, 209f.).

2.3 Strong Inferentialism and Truth

Thus, we come to the relationship between strong inferentialism and truth. As we already saw, the meaning of a sentence such as Peter is snoring is not given by the conditions under which it would be true, but what warrants an assertion of such a sentence and what follows from such. This two-aspect model thereby gives the meaning of a sentence in terms of its inferential role, itself determining *assertability* conditions. Thus, truth plays *no* explanatory role in elucidating (sentence-)meaning, exemplifying the often-assumed contrast between use-theoretic and truth-conditional approaches.

This rejection of truth as an explanatory notion in semantic theorising is itself nothing new. It has an infamous historical precedent in the debate surrounding semantic anti-realism, i.e. Dummett's attempt at "[...] dethron[ing] truth and falsity from their central place in the theory of meaning" (Dummett, 1978, 19). In a nutshell, Dummett's contention is that the idea that understanding a sentence is a matter of using it correctly (and manifestly so) is at odds with the idea that such understanding lies in the grasp of potentially *verification-transcendent* truth-conditions (cf. ibid., ch. 1; Miller, 2002, sect. 2). Luckily for us, we do not have to contend with the details of the debate, since strong inferentialism does not recognise any explanatory role for truth-conditions in semantic theorising.[8] That said, the overall argumentative strategy is the same: from the defense of some deflationary account of truth which presupposes an antecedently intelligible notion of propositional content, it is inferred that truth cannot serve to elucidate meaning, on pain of (explanatory) circularity (cf. Dummett, 1978, 7). This strategy is pursued by Brandom as well, by arguing for a so-called *pro-sentential theory of truth* (cf. Brandom, 1994, ch. 5; 2002, 117). Peregrin, by contrast, continues Sellars' original idea of treating truth as a nickname for the correct assertability used in inferentialist semantics (cf. Peregrin, 2014, 83; but also Brandom, 2000, 11f.).

Let us first look at Brandom's deflationism about truth. It builds upon Grover's *pro-sententialism* (Grover, 1992), but modifies it in a few ways. The basic idea of Brandom's pro-sententialism is to treat is true not as a 'genuine' predicate that ascribes some substantial property to a class of things – such as truth to propositions – but as a *pro-sentence forming operator*. That is, is true combines with sentence-nominalizations or terms that refer to some antecedently given sentence-token to form a so-called *pro-sentence*. This sentence, just like in analogy to *pro*nouns, has the same content as its antecedent token that it refers to (cf. Brandom, 1994, 302-305). Thus, sentences such as

(1) "That is true!"
 (as a response to, say, World War I ended on November 11, 1918)

(2) "Peter is snoring" is true

(3) Everything Sara says is true

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[8]It is, of course, theoretically a challenge to the ultimate conclusions of this paper. However, I believe Miller (2002) to have settled that debate in favour of the 'realist', i.e. the proponent of potentially verification-transcendent truth-conditions. Much of the impetus for my discussion is indebted to his paper.

have the same content as

(1*) World War I ended on November 11, 1918

(2*) Peter is snoring

(3*) For anything one can say, if Sara says it, it is true

That is, we must first determine the sentence-token(s) that are anaphorically picked out, and then determine the sense of the pro-sentence accordingly, depending on whether it is 'lazy', such as in (1), disquotational, as in (2), or quantificational, as in (3) (cf. also Brandom, 2002, 105-108). Crucially, this shows – according to Brandom – that truth plays a merely *expressive* role: it can help to make *explicit* the commitments incurred by an assertion that otherwise remain *implicit*. In this way, the pro-sentential theory of truth arguably also accounts for 'truth-conditional talk': In order for this to be true, this-and-that must be the case is understood as making explicit a commitment incurred by an assertion of the sentence anaphorically referred to by it. As Brandom puts it: "Taking a claim to be true must be understood in the first instance as [...] endorsing the claim and so acknowledging a commitment." (Brandom, 1994, 324), i.e. ascription of truth is analysed with reference to inferential doings (cf. also Brandom, 1983, 639).

At certain points, Brandom also seems to adopt the stance that truth is the name for what is preserved in good inferences, rendering the truth-predicate an appendix to our explanation of propositional content in terms of inferential commitments and entitlements (cf. Brandom, 1994, 326; 2000, 12). This is similar to Sellars (1968) original idea, taken up by Peregrin (2014). As the latter puts it:

> However, must the inferentialist give up the appealing idea that consequence, and hence also inference, is truth-preservation? I do not think so; the only view that she must relinquish is the reading of this relationship according to which the concepts of consequence and inference are reducible to that of truth. But there is, I think, no reason not to embrace the relationship read conversely: instead of saying that consequence is a relation of truth-preservation, we can say that truth is that property that is preserved by [...] inference. We may perceive the moves of the game of giving and asking for reason as a matter of handing down, by means of sentences, a specific stuff – the truth. (Peregrin, 2014, 116)

Let us call this account – which treats truth as nickname for the correct assertability as specified by the inferential rules governing a sentence – the *nickname account*. Sellars puts it quite bluntly when he says that "[...] for a proposition to be true is for it to be assertible, where this means [...] *correctly* assertible" (Sellars, 1968, 101, emphasis in the original).

It should be clear that these two approaches go hand-in-hand: is true is not seen as a genuine predicate, but as an expressive tool to make the inferential commitments explicit, i.e. as a way of codifying the correct assertability of sentences. It should be noted that the notion of assertability in play here is *not* the one usually adopted by contemporary linguists and philosophers of language, who treat it as distinct from truth (cf. e.g. ??? and ???). The notion of assertability appealed to by strong inferentialists is arguably a *primitive one*, which serves as a basis for explaining sentence-meaning and which is determined by the rules governing the relevant sentences. This must be so, for otherwise the nickname account is clearly untenable: the assertability, as commonly understood in the contemporary semantics literature, of This place will be a desert in 4000 years is assessed by current geographical, meteorological and geological *tendencies*, but its truth-conditions do not involve such, hence assertability and truth come apart.

Thus, we see that strong inferentialism avoids drawing upon the notion of truth in explaining the concept of sentence-meaning, relegating it to the status of an appendix. Indeed, strong versions of inferentialism generally define themselves by this contrast with truth-conditional approaches in natural language semantics, even if authors such as Brandom undertake considerable labour to make their accounts compatible with disciplines such as contemporary formal semantics (cf. Brandom, 2000, ch. 4). As such, strong inferentialism is a congenial object of study to ultimately show that use-theoretic and truth-conditional approaches are far from incompatible or necessarily distinct.

3 The Case for Modesty

Having spoken at some length about the commitments of strong inferentialism, it is time to assess the account with respect to its treatment of truth. I will do so in three steps. First, I will take a step back and consider our ordinary ways of talking about meaning, truth and assertion. This will reveal a number of conceptual connections between these notions. Second, I will provide a general argument to the conclusion that every use-theorist endorsing the Basic Assumption must take these conceptual ties seriously. Third, I will claim that strong inferentialists – the pro-sententialism of Brandom and the nickname account – fail to do so. However, our discussion will reveal a way in which a moderate inferentialism can – and then will be – defended.

3.1 Truth, Assertion and Meaning

As we saw in the previous section, the strong inferentialist's starting point is the speech act of assertion. However, as I will endeavour to show, the speech act of assertion, propositional content, and truth are intimately connected. Specifically, there are three main dimensions along which these notions are tied together.

First, consider the proper target for is true. It cannot be applied to sentence-types – considered as strings of symbols – or sentence-tokens. For on the one hand, there are way more truths than sentence-tokens; on the other, the same sentence-type can be used to say something true and something false on different occasions (cf. Glock, 2003, 119ff.), as indexicals and proper names demonstrate. Most damagingly, however, true applied to a string of symbols – whether as a type or a specific token – is meaningless. For sentences in either sense are simply not the proper target for true: This sentence [i.e. this string of symbols] is true is as meaningful as Chomsky's "Colorless green ideas sleep furiously" (Chomsky, 1957) or The number 2 is blue (cf. Strawson, 1950, 326). The same moral applies to sentences such as The meaning of this sentence is true or What this sentence means is true, thus *even* the *meaning* of a sentence is not a proper target for true (cf. Hacker, 2013, 112f.). Rather, what true applies to is the *claim*, *statement* or *proposition* that is being made or expressed, respectively, on a given occasion of utterance (Glock, 2003, 154). The same goes for the word assertion. While it is ambiguous between the act of asserting something and *what* is asserted, it is the latter sense that allows for meaningful combination with true. Despite all these points, what a sentence says on a particular occasion of utterance is obviously, in part, a function of its meaning (cf. ibid.).[9]

Second, consider ways of characterising the speech act of assertion. What differentiates it from making promises, commanding or asking a question? As Brandom himself puts it, asserting a sentence is putting it forward as true (e.g. Brandom, 1983, 639 and 641).[10] This, naturally, is also enshrined into our practice of assessing claims with respect to their truth. By asserting that p, I

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[9]We will revisit this point in section 4.

[10]We shall ignore the conceptual blunder about sentences and their alleged truth for the time being.

become committed to the truth of p, and must be prepared to defend my claim *with respect to this standard* (cf. Hanfling, 2000, 105f.). Such glossings of the speech act of assertion via use of the notion of truth are commonplace (cf. Miller, 2002, 364f., and the cited authors therein), and with good reason. In connection to our first observation, we must have expected this: claims are the things that can be called true or false, and asserting that p is the same as claiming that p. Thus, it is unsurprising we find the common insistence, against strong inferentialists, that at least one sense of correct assertion is that of true assertion (e.g. MacFarlane, 2009, 86). This, however, does not go far enough. As we have seen in section 2 above, strong versions of inferentialism deal a lot in reasons and criteria for warrants and commitments. Phrasings involving justificatory responsibility are commonplace in inferentialist writings (e.g. Brandom, 2000, 18; Peregrin, 2014, 115f.). Yet it is obvious that no matter how much warrant and justificatory responsibility I bring to the table, if my claim turns out to be false, I am barred from further asserting it. Thus, the standard of truth is not just one of many, but arguably *the central – qua overriding –* standard of correctness for assertions. Again, this is unsurprising, given the defining nature of assertion as incurring commitment to the truth of a statement.

The third and last[11] observation is even more commonplace, and involves the notions of linguistic understanding and competence. As McDowell puts it:[12]

> Now there is a truistic connection between the notion of the content of an assertion and a familiar notion of truth [...]; the connection guarantees, as the merest platitude, that a correct specification of what can be asserted, by the assertoric utterance of a sentence, cannot but be a specification of a condition under which the sentence is true.
> (McDowell, 1998, 319)[13]

Indeed, coming from the text itself, the "familiar notion of truth" in play seems to be the same invoked by other authors above, and is none other than the notion expressed by true, truth and its cognates in natural language. Using once again the ties between understanding and meaning, it follows that understanding a sentence is at least, in part, a matter of grasping the truth-conditions of the proposition expressed on a given occasion of utterance (cf. Miller, 2002, 365), given the connection between sentence-meaning and the expression of a specific proposition from the first observation above. This is plausible, given our reluctance to ascribe understanding to someone who mistakes the truth-conditions of the claims they are making. If I utter The house is on fire and understand my claim to be true just in case snow is white, I do not understand the *sentence*. Hence, understanding what truth-conditions claims made by a declarative sentence would have is a necessary condition for understanding the latter.

In summary, we can see that our ordinary notions of meaning, truth, assertion, and others are intimately connected with each other. First, assertions, i.e. understood as contents of the relevant act, are simply the paradigmatic objects which can be called true. Second, assertions are primarily, and centrally, assessed with respect to their truth. Last, but not least, understanding a declarative sentence, i.e. knowing what it means, consists at least partially in knowing under which conditions a claim made with the sentence would be true.

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[11]This is not to say that not further observations can be made, especially with respect to the substitution of referring terms and changes in truth-values of statements (cf. Glock, 2003, 152), or the implication that two sentences that express claims with differing truth-values for the same situation cannot be synonymous (Cresswell, 1982, 69).

[12]I am indebted to Miller (2002) for the reference.

[13]Once again, the ascription of truth to a sentence would have to be reformulated in accordance with the first observation from above.

3.2 Against Strong Inferentialism

The results of the preceding paragraphs paint a rather different picture to the received inferentialist semantics discussed in section 2 above. Nerverthless, strong inferentialists – and by the same token other use theorists that eschew truth as an explanatory notion in semantic theorising – might remain unimpressed. For they could claim that while these observations are correct, they fail to impinge on their accounts, for one of two reasons. First, because such observations have no bearing on philosophical investigations into meaning, either because their accounts target more technical senses of the relevant concepts or because these ways of speaking are not constitutive of the concepts in question. Second, because they can account for such truth-talk by means of some deflationist theory of truth. I will tackle these objections in turn.

First, then, consider the rebuttal on methodological grounds, and recall the Basic Assumption (BA): meaning is *fully* determined by use. With the BA in hand, the methodological objection can be quickly proven to be a non-starter. First, the philosophical investigation in question started – or is at least implicitly guided by – a Socratic question, viz.: What is the meaning of a (declarative) sentence? Second, it is a general methodological truism that conceptual matters antecede matters of fact. For in order to investigate phenomenon X – be it empirically or otherwise – I must already posses a notion of X-ness. Otherwise, my investigation cannot get off the ground in the first place. This does *not* mean that we must have an *analytical* definition of X-ness at hand, but merely some general criteria for X-ness (cf. Glock, 2017, 95). Third, in our case, the notion in question, viz. sentence-meaning, is given by our initial question, and *that* question has been phrased using ordinary vocabulary. Last, but not least, deviating from this notion of X-ness constitutes a change of topics. Thus, if we wish to stay on topic, we ought to best stick to the observations. For according to the BA, our ways of using the relevant expressions such as meaning and truth are *determinative* of what these mean, i.e. of what concepts they express.

In other words, strong inferentialists and related use theorists, *qua* being use theorists, i.e. subscribing to the BA, must take our observations about the talk of truth, meaning and assertion seriously. Otherwise, they risk the charge of changing topics, for our use of the relevant expressions is determinative of what concepts are expressed. For this reason, our ways of talking about these things *are* relevant to the investigation at hand, and the flight to 'technical notions' is no help, for it would only reinforce the worry about changing topics. This conclusion has the immediate consequence that all attempts at banishing truth from semantic theorising *completely* are doomed from the start.

This, by their own lights, does not hold true of strong inferentialists. They argue that their deflationary accounts of truth allow for the accommodation of such truth-talk, yet without invoking the notion of truth in explaining the notion of meaning. In order to assess this claim, I will consider both pro-sententialism and the nickname account in turn.

Recall that under Brandom's pro-sentential theory of truth, is true is a pro-sentence forming operator. As Künne complains, however, this account fails to adequately treat cases of belief ascriptions. Consider the sentence

(G) Goldbach's conjecture is true

According to Brandom, this sentence has the same content as the sentence Every even natural number greater than two is the sum of two primes. This is because Goldbach's conjecture refers anaphorically to some sentence-token, whose content it acquires. However, it seems possible that someone, say Hannah, could know that there is such a conjecture, and that it is about prime numbers, but fail to distinguish them from others. If she were to read that the conjecture has been proven, she would believe that Goldbach's conjecture is true. However, her belief would *not* be that every even

natural number greater than two is the sum of two primes. This contradicts Brandom's theory, which treats (G) and the full statement of the conjecture as having the same content (cf. Künne, 2003, 86).

It must be observed that Künne's argument does not just present an inconvenient consequence of pro-sententialism. It also licenses the retrospective conclusion that it also fails for assertion-content. For what A believes can be what B asserts, so there is no difference in kind between assertion- and belief-content. Hence, since pro-sententialism fails for belief-content, it fails for assertion-content as well. I believe this point also answers an objection due to Gross (2015). In a nutshell, the charge is that Künne equivocates between two senses of content: the ordinary sense and Brandom's. The latter is to be understood as a short-hand for bundles of incompatibilities as well as commitment- and entitlement-preservation. Accordingly, there is nothing bogus about Hannah having the same commitments as when uttering Every even natural number larger than two is the sum of two primes, even if she may be ignorant about them (Gross, 2015, 59f.). However, this now burdens the inferentialist with a dilemma. Either these two senses are explanatorily independent or not. If not, the inferentialist's sense is insufficient to elucidate assertion-content, as per my argument. If this notion is not supposed to explain content in the ordinary sense, it arguably fails to reach a *central* goal of semantic theorising, viz. account for the content of our statements. Thus, this objection to Künne renders strong inferentialism either explanatorily impotent or idle.

[In the same vein, pro-sententialism will have trouble to account for the connection between understanding (G) and knowing under which conditions an utterance of it would constitute a true claim. Assume Hannah were to learn more about the conjecture and came to distinguish it from other theorems about prime numbers. If we were to ask her what would be the case if the conjecture were true, a response of the form

(G+) If Goldbach's conjecture were true, every even natural number bigger than two would be the sum of two primes

cannot do, since according to Brandom, the antecedent of this conditional has the same content as the consequent, rendering the content of Hannah's assertion tautological – hardly the evidence for understanding we would ordinarily ascribe on the basis of uttering (G+). Thus, it seems that our locutions about specifying contents by means of explicating truth-conditions cannot be accounted for after all.[14]]

At this point, the strong inferentialist might flee to the nickname account. They might abandon the pro-sentential theory, yet commit to the claim that the correct assertability invoked in their semantics is what underlies our truth-talk. After all, such truth-conditional talk might be captured by treating sentences such as (G+) as simply making inferential commitments explicit. In this vein, consider the previous quotes by Sellars and Peregrin, the latter claiming that "[...] truth is nothing more than a nickname for a status certain sentences have vis-à-vis the rules of the game of giving and asking for reasons" (Peregrin, 2014, 83). However, at this point, the *moderate inferentialist* is happy to agree. In their lights, that is precisely what the rules invoked by inferentialists are doing: they determine truth-conditions (cf. e.g. Murzi and Topey, 2021).[15] Indeed, at this point a crucial question arises: What explanatory upshot does this primitive notion of correct assertability provide, if what we call 'truth' has been but a nickname for this notion? To put it differently: In

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[14]Keeping in mind the two senses of content distinguished above, this argument assumes that the ordinary sense is the *explanandum* for the inferentialist.

[15]Indeed, it seems to me that Sellars could be seen as agreeing with this as well, since correct assertability for him means that my assertion satisfies the conditions laid out in the "semantic rules", but does not mention what those rules specify *precisely*.

order to account for all our conceptual observations, this primitive notion of assertability will have to play the role that includes the one truth usually plays in the above 'platitudes'. This issue is exacerbated by the nickname account's phrasing: How is the claim to be understood except for an *identification* of correct assertability with truth?

Alas, Peregrin will disagree with this charge of identification. As he claims:

> What is crucial about the rules of the game is that they state when it is correct to make an assertion. And though in the most straightforward sense in which I am correct in making an assertion is when I can justify it (i.e., when I can infer it from some agreed upon premises), there are other, related senses, e.g., the sense in which my assertion is correct if there is a justification (though I am not in its possession), and such senses yield our concept of truth.
> (Peregrin, 2014, 115)

Hence, Peregrin distinguishes multiple notions of correct assertability, with truth suggested to be some kind of possibility for justification. Moreover, the centrally relevant notion of correctness is that of actually possessing some (adequate) justification. I take several issues with this line of defense. Apart from not specifying what makes this sense 'straightforward', it seems to me that at least the *common* way to express disagreement and to reject statements is with No, usually followed with the negation of what was asserted or with an ascription of falsity, as in: No, Peter is not snoring or No, that is false. Yet this should not be so if the common standard were justification. For in those cases, I should retort with I don't believe you, thereby expressing my *doubts* in the warrant for your claim. Explicitly negating statements seems rather indicative of another standard, namely that of *truth*. Even so, this counter does nothing to 'dethrone' truth as the central standard of correctness, with central understood as overruling, as explained and argued for above. Lastly, sentences such as We will never be able, even in principle, to find out whether this is true or not do not seem meaningless or inconsistent. Quite the contrary: it seems a reasonable assessment concerning claims about life after death, for example. Thus, we can consider the truth of claims for which we could not, even in principle, attain any justification. But these could be true nevertheless – and this statement is not conceptually incoherent. However, such a possibility would be ruled out if truth and justification were analytically tied as suggested.[16] Thus, truth is not some 'ideal form', 'existence' or 'possibility' of justification.

Let us return to the question about the explanatory upshot of the primitive notion of correct assertability. The only answer I can think of is that strong inferentialism is committed to the existence of semantic normativity, and since truth is not a normative property, this aspect would otherwise be unattainable. This conclusion would be too hasty, however. Even if we grant that truth is not a normative property, there are ways of accommodating semantic normativity into moderate forms of inferentialism. Here are two pertinent ways. First, even if a rule such as $(*)$:

$$\frac{x \text{ is snoring}}{x \text{ is sleeping}} \; (*)$$

is read purely as specifying truth-conditions, there is still the matter of using snoring in accordance with this rule or not, which is itself then rendered not as a matter of saying something true (or false), but as using the word correctly or not (cf. Glock, 2019, 208f.). Second, one can adopt Peregrin's own approach by seeing the rules as delimiting a space of permissible actions with an expression

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[16]Notice that Peregrin does not appear to engage in linguistic revision or legislation, so the flight to dealing with technical notions for the sake of theorising is not available.

in a language game (cf. Peregrin, 2014, 72). Thus, rules in general contribute something like a permission, and only all the rules that govern an expression *together* form the distinction between correct and incorrect. This leaves the content of individual rules free to state truth-conditions, much in the same way that Hacker conceives of semantic correctness as using an expression to say something that *could be* true *or* false (cf. Hacker, 2013, 460). Therefore, it seems semantic normativity can be preserved despite drawing upon the notion of truth in semantic theorising.

After the dust has settled, we can see that strong inferentialists have their work cut out for them. They must further refine their deflationary theories of truth and establish an explanatory relevance for their notion of correct assertability, lest they succumb to the above objections. In the meantime, we shall instead take our observations from section 3.1 at face value. This means we shall pursue the idea that the meaning of a sentence – still considered its inferential role, i.e. the rules governing its 'introduction' and 'elimination' in discourse – has, perhaps among other things, the function of supplying the truth-conditions for statements made with that sentence.

4   Inferential Roles and Truth

From our previous discussions, the positive contribution was the idea that, while the meaning of a sentence is not the proposition expressed by it on a particular occasion, the former, together with potentially other factors such as context (cf. Glock, 2003, 154), *determine* the latter.[17] Thus, we can finally proceed to flesh out the idea of a specific version of moderate inferentialism. Before we do so, however, we must first deal with some preliminary issues concerning the notion of inference. After this, I will quickly discuss some aspects of moderate inferentialism in the existing literature, and argue that it has been underdeveloped and undermotivated so far. I will then develop a 'master argument' in favour of my specific version – *modest inferentialism* – and flesh it out in detail with respect to arbitrary declarative sentences. Lastly, I discuss some of the account's general virtues.

4.1   On the Notion of Inference

Peregrin mentions that inferentialists not only study inferences between propositions – themselves guided by the relevant rules operating on linguistic expressions – but also from situations to propositions and from propositions to actions (cf. Peregrin, 2014, sect. 2.5). This is needed in order to account for empirical vocabulary, and to connect, for example, normative statements to actions or mental states, or statements to pointing gestures (cf. ibid., 7; Incurvati and Schlöder, 2020, 20[18]). Hence, we see that even in order to account for declarative sentences, the notion of inference must go beyond what is ordinarily called inference, which is constrained to an act of drawing a conclusion from observations or other statements. Thus, as conceded by Peregrin, inferentialism is a mislabel (cf. Peregrin, 2014, 37).

This is issue is exacerbated by the inferentialist's ususal rejection of the analytic-synthetic distinction (cf. Peregrin, 2014, sect. 3.6). Without such a distinction, (almost) all inferential relations an expression features in counts towards its meaning. As Glock puts it:

> [The rejection of the analytic-synthetic distinction] makes all inferential relations (deductive, conceptual, inductive) part of the meaning of an expression. This implies, implausibly, that any difference or alteration in general beliefs amounts to a difference

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[17]Much in the spirit of Kaplan's *characters*, for example. Cf. Kaplan (1979).

[18]The page number refers to the manuscript page, found on https://philpapers.org/archive/INCIEA.pdf [last accessed: 27.07.23].

or change of concepts, with the consequence that two scientific theories featuring apparently incompatible empirical claims cannot be talking about the same phenomena. (Glock, 2019, 198)[19]

Furthermore, it should be obvious that even with an analytic-synthetic distinction at hand, going beyond declarative sentences to greetings or expressive vocabulary will mandate an abandonment of the ordinary notion of inference (ibid., 198f.). However, arguably we also need rules that link sentences to specific situations – such as The square is red to some token like ■. And arguably, someone who does not know that an utterance of What you are doing is wrong is, *inter alia*, a command to stop their action, does not understand the sentence.

All these points are well taken. However, there is one sense in which the term inferentialism can be preserved. Since what still remains after this criticism is the idea that meaning is constituted by linguistic rules, yet making these explicit will more often than not involve (bi)conditionals of some sort, or statements of incompatibilities. Thus, on a *metalinguistic* level, inferentialism is a legitimate label, emphasising the rule-based nature of meaning. This, of course, should not be confused with the claim that competent speakers *reason* with these *explicit* rules all the time – be it consciously or 'unconsciously' – for all the reasons stated elsewhere (cf. Peregrin, 2014, sect. 4.1; Glock, 2019, 198; or Brandom's *logical expressivism*, e.g. Brandom, 2000, 56-61). Thus, from here on out, by inferentialism I shall mean a theory of meaning which sees meaning as constituted by *rules*, which, *if* specified metalinguistically, will be statements of the form which *can* always figure in inferences.

4.2 The Current State of Modest Inferentialism

The meaning of a declarative sentence is given by rules, at least some of which have the function to specify under which conditions a statement made with that sentence would be true. This basic idea of my *modest inferentialism* to be developed is *not* how pre-existing accounts of moderate inferentialism apporach the issue, however.

Consider Rumfitt's seminal work on moderate inferentialism (2000), with the aim of solving Carnap's problem. The latter is the issue that the usual natural deduction rules for the sentential connectives do not determine a unique truth-table for each. For example, the rules of ∨-introduction and -elimination are consistent with a truth-value assignment which assigns $A \vee B$ the value 'true' if both disjuncts are false (cf. Carnap, 1943; Bonnay and Westerståhl, 2014, sect. 4). In attempting to solve this issue, Rumfitt makes several claims about the relationship between rules of inference and truth-conditional contribution, of which the central one is the idea that rules of inference preserve truth (cf. Rumfitt, 2000, 806). However, this semantic principle is simply assumed, without argument to its coherence with the assumed inferentialist *meta*semantic background.[20]

This is a trend seen among many other writers that can be classified as moderately inferentialist, such as Hodes (2004), Wedgwood (2007), and Rumfitt again in newer publications on the philosophy of language, e.g. (2022). The issue with assuming such a semantic principle without argument are two-fold. First, an explanation must be given and supported about how the inferential practice of a linguistic community would endow their rules of inference with the function of preserving *truth*, specifically. In other words, some story about how the inferentialist metasemantics lead to a truth-conditional semantics is needed, otherwise their combination appears unmotivated. Second, given

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[19]Ultimately, Glock (2019) seems to arrive at conclusions not too dissimilar from my own. However, our dialectical goals, ways of approaching the topic, and arguments made *are* dissimilar. Furthermore, I will also disagree with him on certain points, cf. below.

[20]Technically, that the Fregean *sense* of a logical connective is to be given by the rules governing its deductive use (cf. Rumfitt, 2000, 787). However, the details of Rumfitt's account are not relevant for our purposes.

that other authors who share their inferentialist metasemantic commitments would *not* endorse such semantic principles – or if they did, then in a merely deflationary manner as explanatorily redundant – assuming them seems even more unmotivated. For without any argument as to where their metasemantic compatriots go wrong, the semantic premises of the modest inferentialist appear to be a case of cherry-picking semantic primitives.

In addition to this issue, another big problem is the lack of a general account for arbitrary declarative sentences. While some idea about how inferential roles are fixing truth-conditions seem to be in play among the aforementioned authors, none give a detailed general account for arbitrary declarative sentences, such as Brandom does with the two-aspect model of meaning. Last, but not least, none of these writers have so far explored a moderate inferentialism that is still rule-based, where rule is understood as a binding convention, not a mere regularity in speaker-behaviour.

In what follows, I wish to remedy all these issues by developing *modest inferentialism*, which will still draw heavily on its Wittgensteinian roots in being a rule-based semantics.

4.3   The Basics of Modest Inferentialism

So far, we have adopted the guiding idea of Strawson, namely that the meaning of a sentence is to be understood, at least among other things, as given by "[...] general directions [...] for making true [...] assertions" (Strawson, 1950, 327). Importantly, none of our observations made in section 3.1 rule out other aspects of sentence-meaning unrelated to truth, which the occurrence of expressives in declarative sentences plausibly mandate (cf. Gutzmann, 2015, 4). Hence, the general flexibility of the use-theoretic approach beyond truth-conditional content is preserved. With these two points out of the way, let us approach the issues above in turn.

In order to remedy the issue of moderate inferentialism being unmotivated, our observations from section 3 come in handy. For now, after having criticised the strong inferentialist's treatment of truth, we can take these conceptual considerations at face value. This allows us to provide a master argument for modest inferentialism, by using the strong inferentialist's own Basic Tenet:

(P1) The rules that constitute the meaning of an expression – now not necessarily rules *of inference* anymore – determine under which conditions semantic correctness is achieved. (from the Basic Tenet)

(P2) In the case of the employment of *declarative* sentences in making claims, the central notion of semantic correctness is truth. (from our second observation in sect. 3.1)

(C) The meaning of such sentences, i.e. the rules that govern their use, must, *inter alia*, determine truth-conditions for the claims made with them.

With this argument in hand, we can recognise why, in the case of genuine rules *of inference* as relevant to logical constants, such rules would 'preserve' truth: They do not 'preserve' it by accident, but trivially so because they *determine* the truth-conditions in the first place. And this function stems from the employment of such sentences in the practice of making claims.[21]

Thus, any worries about their being an unrecognised incoherence in combining inferentialist (meta)semantics with truth-conditional semantics can be put to rest, for the very reason expounded in sect. 3.2. Since the use theorist is committed to recognising the role of declarative sentences in making claims that are evaluated as true or false, their semantics must accommodate such aspects *of*

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[21]This ties neatly into those accounts of the analytic-synthetic distinction that see analytic truths as *grammatical propositions*, i.e. as expressions of linguistic rules. For such rules, when expressed in a declarative sentence that is asserted, render the assertion vacuously true (cf. Schroeder, 2009; Büttner, 2021).

use. This point, however, is even more general. Recall the initial issue of the supposed distinction, if not incompatibility, between truth-conditional and use-theoretic approaches. We can now see that the supposed dichotomy is false: such a crucial aspect of use *must* be incorporated by any use theory of meaning. This was achieved via an argument of a quite general nature that pertains to all use theorists. Ultimately, and by way of repetition, all use theorists must be *moderate*: they must recognise and account for the conceptual ties between truth and meaning.

Having arrived at this conclusion in favour of incorporating the notion of truth into semantic theorising, let us turn to detailing the *modest approach*.

First, we keep the identification of sentence-meaning with its 'inferential' role, as mentioned before. Thus, despite advocating a form of moderate inferentialism, we do not 'just' combine inferentialist metasemantics with truth-conditional semantics (cf. Murzi and Steinberger, 2017, 199f.). Second, however, we must now provide a model on how at least some of the rules in the inferential role of a sentence determine truth-conditions for the associated claims.

Ironically, the two-aspect model of meaning serves this purpose quite well. Consider an exceptionally straightforward example such as $\wedge$:

$$\frac{A \quad B}{A \wedge B} \wedge\text{-I} \qquad\qquad \frac{A \wedge B}{A} \wedge\text{-E} \qquad\qquad \frac{A \wedge B}{B} \wedge\text{-E}$$

Paraphrasing these rules of inference into our modest key, we can see the introduction rule as stating a sufficient condition for $A \wedge B$'s truth, and the elimination rules as specifying the necessary ones. Since the same sentences appear in both roles, we obtain:

(T$_\wedge$) $A \wedge B$ is true if, and only if, A is true and B is true.

As was already mentioned, the case of other connectives is already not so straightforward. Moreover, this style of example promotes two rather debilitating tendencies in moderate inferentialist writings. First, the use of proof-theoretic notation, as perspicuous as it might be, is no longer adequate once the rule-based approach is freed from its restriction to specifically rules *of inference*.[22] Second, it might suggest a picture by which each declarative sentence comes with individually necessary and jointly sufficient conditions for its truth.

Both of these tendencies must be rejected. First, according to the *metalinguistic* inferentialism advocated here, there is nothing problematic about treating Tarskian conditions such as

(T$_\vee$) $A \vee B$ is true if, and only if, A is true or B is true.

as stating a linguistic rule belonging to the inferential role of $A \vee B$, specifically the part that establishes the truth-conditions relevant to its assertoric use. Therefore, I must confess I see no reason to pursue the issue of Carnap's problem any longer, assuming we can – as we usually do – prove that such assignment yield a unique value for each (set of) input(s). As relates to the other point, I agree with conceptual analysts that there is probably no such set of rules forthcoming for the 'atomic' sentence This is a chair. Thus, we best not assume that each sentence will come with such rules. This is, accordingly, a strength of the account, not a weakness. For it can pay respect to the criteria according to which terms are actually employed, including their 'openness', i.e. their 'failure' to determine clear application criteria for all possible applications, such as with family resemblance concepts (cf. ???). Moreover, even when it comes to stricly necessary or sufficient conditions, we remain open to the possibility that some conditions may merely be necessary, whereas others are only sufficient, without forcing each to figure in both aspects.

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[22]In fact, the situation is even worse, since proof systems usually deal in rules of *deduction*, but not all inferences are deductions.

Keeping these points in mind, we can nevertheless generate a general 'recipe' based on the two-model aspect of meaning for excavating truth-conditions for an arbitrary declarative sentence. We take introduction-rules as stating sufficient conditions – or, in staying with the usual inferentialist reason-based idiom, sufficient *criteria* – for a statements truth, whereas elimination rules state necessary ones. Thus, we gain the following recipe:

> A sentence S_1 figures in the metalinguistic specification of the truth-conditions for statements made with another sentence S_2's, if, and only if, S_1 occurs as a free-standing premiss in an introduction rule for S_2, and as the conclusion of an elimination rule for S_2.

The qualification with respect to S_1 occurring un-embedded is, of course, important for reasons of dealing with (hyper)intensional phenomena. We only wish to use S_1 in specifying truth-conditions for statements made with S_2 if the truth of a statement made with S_1 is directly relevant to the truth of a statement made with S_2.

With this model, we now have also dealt with the other issue of moderate inferentialism, namely that it has been employed only in dealing with specialised topics so far. The reinterpreted two-aspect model of meaning and the resulting recipe allow us to specify, for any declarative sentence, the relevant resulting truth-conditions. As should be obvious at this point, these truth-conditions will be much closer in appearance to the assertability-*qua*-good-reasons conditions of the strong inferentialist, than the Tarskian T-sentences derived in most truth-conditional approaches. However, by rejecting the assertabilist reading yet embracing the criterial nature of the rules, we can pay respect to our actual assertoric practices of exchanging reasons, yet treat these criteria as sufficient or necessary ones for a statement's *truth*, as we ordinarily do. This yields genuinely informative truth-conditions that are not merely disquotational (cf. Peregrin, 2014, 65).

Before discussing some general strengths of the proposed account, let us analyse a concrete example. Consider once more Peter is snoring. As I have mentioned before, snoring entails sleeping, as mediated by (∗) above. Obviously, more rules are relevant to the meaning of snoring. Crucially, snoring is taught by means of samples, viz. people that make certain characteristic sounds while breathing in their sleep. Furthermore, the circumstance that x is snoring is incompatible with other semantically relevant[23] circumstances, themselves of course codified by rules. Thus, snoring is incompatible with being unconscious, for example. Putting these criteria together, the truth-conditionally relevant rule for x is snoring will – forgoing the proof-theoretic presentation from the start – look something like this:

> x is snoring is used to say something true (uttered in context C) just in case x refers to someone (as used in C), that someone is asleep, and they make certain types of sounds [as taught by samples] while breathing.

Some of these criteria are presuppositions (successful reference of x), others are necessary (x sleeps) and some are jointly sufficient (x is asleep and makes certain sounds while breathing). The first part touches upon the issue of reference, of which I cannot say too much for reasons of space. That said, it would appear that a rule-based approach to semantics can allow for rules specifying reference-conditions, whatever they may look like. Hence, the meaning of Peter – roughly: (contextual)

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[23]I have largely neglected issues surrounding the demarcation of semantic rules from others. This is a general issue for any rule-based approach to semantics, hence not specific to my proposal. As an advocate of the analytic-synthetic distinction, however, I am happy to drawn on Glock's proposal of demarcating the rules on the basis of what is necessary for ascribing understanding of the relevant expression to someone, and what rules would be expressed in explanations of an expression's meaning. Cf. Glock (2019, sect. 10).

reference-conditions – can combine with the meaning of snoring to allow for making claims that can be evaluated with respect to its truth.

This example not only neatly showcases the compositionality inherent in my approach (cf. also section 4.4 below), but the way the notion of truth plays an explanatory role. We distinguish assertion from other speech acts with respect to its central norm of truth, and elucidate the meaning of a declarative sentence with respect to this employment. Since we disagreed with the reductive approaches of the nickname and pro-sentential account, this explanation is not be further reinterpreted in a way that does away with truth after all.

[This brings us to the issue of explanatory circularity. As I mentioned above, strong inferentialists generally eschew any explanatory role of truth in semantics due to their endorsement of some deflationary theory of truth. However, as multiple authors have pointed out, the type of explanations sought in the philosophy of language might be of a "reciprocal" (Horisk, 2008, 290) or "connective" (Glock, 2019, 206) kind. That is, instead of seeing such explanations as breaking down concepts into their constituent – and hence more 'basic' – parts, the goal is to elucidate the connections *between* concepts, especially as relevant to philosophical issues and puzzles. Thus, some kinds of circularities in explanation are *not necessarily* vicious (cf. Glock, 2019, 207). Most importantly, however, connective analysis does not, therefore, treat its *explanantia* as being ontologically or otherwise more 'basic' than others (cf. Horisk, 2008, 291).

This point is crucial. As the quotes by strong inferentialists above showcase, these authors seems to deal in 'reductive' analyses only, i.e. as seeing themselves as breaking concepts into more 'basic' parts. However, this is simply not the only way of understanding such endeavours. Thus, it may now seem that there is no longer a deep incompatibility between adopting some deflationism about truth *and* an account of (sentence-)meaning that makes explanatory use of truth – of course, depending on the precise accounts in question. In any case, however, as long as Brandomians insist on their expressivism about truth, my modest inferentialism will remain incompatible with it, even if the former overcomes the issues discussed in section 3.2. For the way I have defended and argued for my proposal was precisely in the spirit of connective analysis, hence my route of making substantial use of the notion of truth is at least as legitimate as others, considered as an illumination of notions we are already familiar with (cf. Horisk, 2008, 292). Hence, I am not committing myself to any order about how speakers come to grasp the concepts in question, which may or may not be at odds with the proffed explanations. Therefore, arguments to the extent that my account would fail to teach someone the concepts in question would miss their target.[24]

The possibility of a non-vicious combination of deflationism about truth and my modest inferentialism is also crucial for another reason. Many use theorists suggest that the ordinary notion of truth – the one appealed to – might require a deflationary treatment (cf. Armour-Garb et al., 2023, introduction). If that is truly so, modest inferentialism would not have to be given up automatically. Non-reductive yet deflationary accounts of truth might very well be compatible with my modest inferentialism, assuming the relevant explanatory ambitions to be kept in mind.

In addition to this, it allows us to account for one explanatory 'circle' that appears hard to eliminate. One further semantic premise that Rumfitt (2000) uses – that no proposition is both true and false – seems itself based on an incompatibility in application between true and false (cf. Price, 1990, 226). However, incompatibilities, in the 'modest idiom', would be elucidated by saying that incompatible statements are *contraries*, i.e. they cannot both be true simultaneously. Thus, the circle may appear very small indeed. For now an explanation of the incompatibility in

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[24]Moreover, as Horisk notes, recounting deflationary theories are hardly criteria for ascribing competence with true to begin with, so any claim about the correct order of grasping the notion from the deflationist is tenuous (cf. 2008, 289f.).

application between true and false is explained by saying that both cannot be truly apply to the same proposition at the same time. Furthermore, one might sense that drawing upon a primitive notion of incompatibility might betray the spirit of any moderate inferentialism.

However, my version is not moderate, but *modest*. It is not just a metasemantic embellishment of truth-conditional semantics, but makes many concessions to strong inferentialism, such as the identification of sentence-meaning with 'inferential' roles. Hence, it already maintains a middle-position between strong and moderate-*qua*-strictly-truth-conditional forms of inferentialism. Thus, it can make space for a further semantic primitive, *if* the (explanatory) need arises. Heyndels might even be right in suggesting that

> [o]ne might go as far as to argue that the notions of truth and falsity, and that of incompatibility, are too fundamental and too essentially interrelated for one order of explanation to be conclusively preferable over the other.
> (Heyndels, 2022, 20)

Indeed, from the perspective of connective analysis – and of modest inferentialism – this choice engenders yet another false dichotomy. We need not choose one direction over the other. Therefore, allowing explanations to proceed by drawing upon incompatibility would be no betrayal of the moderate spirit either, since these explanations need not be seen as reductive. That said, the incompatibility between true and false is but *one* aspect of true's meaning. Thus, even in the modest idiom, the explanation need not be circular, given the availability of connecting each involved notion with others, thereby distinguishing them on other grounds.[25]

Thus, for the time being, I do not consider my modest inferentialism threatened by any of the issues surrounding explanatory circles. Either the circles can be embraced or be done away with, in both cases in the spirit of connective analysis.]

4.4   The Many Advantages of Modest Inferentialism

Before discussing some applications, let me first list some of the many advantages that my account has to offer, both by way of summary and by adding further ones.

First, the metalinguistic modest inferentialism developed here does not fall prey to category mistakes such as identifying sentence-meaning with the proposition expressed by a sentence on a given occasion. In the same vein, it avoid the needless and conceptually confused reification of 'meanings' as objects for which the expression stands (cf. Glock, 2019, 187f.). Thus, we neither end up making conceptually incoherent claims, nor are we inviting the criticism of changing topics.

Second, as already mentioned, we retain the generally flexibility of the use-theoretic approach in dealing with other types of sentences beyond declarative ones and their employment in assertion. Clearly, questions, commands, promises etc. cannot be called true or false, but this does not mean they have to be devoid of any notion of semantic correctness (cf. Glock, 2019, 208f.). Just as the point of assertion consists in making true claims, so does the asking of questions serve to gather information, or the issue of commands serve the purpose of springing people to action. Hence their contents can equally be elucidated with respect to certain roles.

Related to the second point, even within the realm of declarative sentences, their function in making claims can be mediated by rules that specify more than just truth-conditions (cf. below). Again, there is nothing inconsistent or unmotivated in assuming some rules governing the use of declarative sentences in assertion deal with presuppositions (cf. Strawson, 1950, 331ff.), the

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[25]Indeed, I see no explanation of truth and falsity forthcoming while drawing *only* on incompatibility. Perhaps Heyndels overestimates the interrelation in question.

expressive dimension of terms (cf. section 5.1) or stating merely defeasible criteria (cf. section 5.2). The rule-based approach to semantics is flexible enough to accommodate such aspects of meaning without issue.

Furthermore, the truth-conditions, given their criterial specification, will turn out vastly more fine-grained than usually possible, yet without collapsing into a fine-grainedness that mirrors syntax. For example, Peter loves Mary and Mary is loved by Peter will have the same behavioural-criterial conditions, rendering them truth-conditionally equivalent. On the other hand, analytic sentences such as Bachelors are unmarried and Vixen are female foxes will not be treated as synonymous, since their respective meaning will be constituted by different rules. Moreover, the truth-conditions specified by these rules will also differ, even if the resulting claims will be vacuously truth-conditionally equivalent (cf. Büttner, 2021, 119). Thus, neither are the truth-conditions on the present account as fine-grained as syntax, nor are they as coarse-grained as in intensional semantics.

Third, we retain compositionality with my approach, without having to go the route of *de*-compositionality endorsed by Peregrin (2009). As has been demonstrated throughout, rules for sentences – even if 'atomic' ones of the form 'x is F' – are inherently *schematic*. Their very formulation pays heed to the syntactic combination of the expressions that constitute the ultimate sentence. This is in line with both Hacker's (cf. 2013, 143) and Glock's (cf. 2019, 200f.) remarks on the issue. There is nothing preventing one from interpreting these rules as pertaining to "lexical items" (ibid., 201) and as specifying their contribution to sentence-meaning as based on their possibilities of syntactic combination. However, as such, their meaning is specified via their contribution to units of communications, viz. sentences. Thus, these rules *are* rules for sentences. Glock's 'spectre' of individual rules for both sentences *and* subsentential expressions seems therefore unmotivated (cf. Glock, 2019, 200f.), and the two usually coincide for all intents and purposes.[26]

Fourth, as I have pointed out above, the normativity of meaning can be integrated into the account, irrespective of how normatively neutral the notion of truth turns out to be. This is, naturally, only an advantage for readers sympathetic to the existence of such normativity, but it is nevertheless an advantage to be compatible with one of the strong inferentialist's core commitments, without denying the explanatory relevance of truth in semantics.

Fifth, if my argument above is sound, the abandonment of a strictly proof-theoretic approach to sentence-meaning and the recognition of rules as specifying truth-conditions allows us to circumvent Carnap's problem – not just for logical vocabulary, but general vocabulary. It must now appear as an artificial difficulty for the moderate inferentialist to be committed to recover truth-conditional contributions from 'proof rules' alone. The reason for the belief that this would be necessary might have been the often-assumed dichotomy between use-theoretic and truth-conditional approaches. It leads to the thought that only if we can recover truth-conditional contributions from sources related to use yet *distinct* from concerns about the former, is moderate inferentialism a tenable position. However, this is precisely what made moderate inferentialism appear unmotivated, since this very approach is what drives a wedge between use and truth in the first place. Hence, I suggest we abandon this line of thought altogether. It must be kept in mind, however, that this does mean that we must abandon the study of correct 'inferences' as guides to meaning. For the criterial approach to truth-conditions enshrined into modest inferentialism *mandates* such study.

Sixth, our outlook of rules as specifying, *inter alia*, truth-conditions, and drawing upon the conceptual incompatibility between truth and falsity, allows us to avoid worries related to deviant connectives such as tonk (Prior, 1960). For the rules of tonk, read as metalinguistic specifications of necessary and sufficient conditions for the truth of a claim made with A tonk B, will tell us that

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[26]'Usually', since proper names, given the way I analysed Peter is snoring, will not have their referents specified with respect to the content of claims in the first place, but a specification of the latter contains a 'slot' for the former.

the truth of A is sufficient *even if* B is false, yet at the same time mandating that B is a necessary condition (cf. Rumfitt, 2017, 244 and fn. 27).

Thus, my proposal has many advantages over its competitors, and as such deserves serious considerations as a flexible account of the meaning of declarative sentences, if not beyond. That said, there remain two objectives. First, it should be generally worthwhile to see the account in action, and to discuss some potential limits, especially of the two-aspect model. Second, given the account's truth-conditional nature, it might be suspected that it is little more than some variation of mainstream truth-conditional semantics. In the remainder of this essay, I wish to demonstrate the opposite.

5   Applications of Modest Inferentialism

We shall discuss two major applications of the account developed so far. The first turns on vocabulary that is clearly violating the idea that truth-conditions come as individually necessary and jointly sufficient. This concerns normatively *thick concepts*. The second application deals in a topic on which truth-conditional approaches and use-theoretic ones are considered as radically at odds. The issue surrounds mental vocabulary, to be discussed via the example of belief reports. I will argue for two things. On the one hand, assuming naive interpretations of formal semantics, modest inferentialism will radically depart from the latter's treatment of belief reports. On the other hand, sketching a different take on the status of the models of formal semantics, the two approaches are once again compatible, albeit pursuing different goals. In either case, however, the modest inferentialism proposed in this paper will neither be a metasemantic embellishment of pre-existing accounts from mainstream semantics, nor will it be a proof-theoretic reconstruction of the latter.

5.1   Thick Concepts and Expressives

Turning first to thick concepts, a general characterisation is in order. In general, a thick concept, as opposed to a thin one, combines descriptive as well as normative aspects. Examples of thick concepts are selfishness, honesty, gullibility, or gracefulness. These concepts combine descriptive content, such as ways of behaving with respect to one's own needs and those of others, while also containing an evaluative component. For example, selfish people are behaving *badly*, while an honest person is *deserving* of respect and imitation, and a graceful performance of a dance is *beautiful*. In contrast, the use of expressions such as bad or right in expressing the relevant concepts allows no inference to any descriptive content, understood as distinct from their clear evaluative dimension (cf. Väyrynen, 2021, introduction).

Consider now the case of murder. An ascription of murder proceeds by the following criteria, assuming x and y to refer to people, with x being the perpetrator:

1. x killed y

2. x's killing of y was pre-mediated.

3. x's killing of y lacked appropriate justification.

Not only are those criteria jointly sufficient, but can also always be inferred from a report of the form x murdered y. Thus, given our recipe from section 4.3, the truth-conditions for the claim that x murdered y will look like this:

> x murdered y just in case x killed y in a pre-mediated way while lacking appropriate justification for the act.

However, an application of murder has a central *consequence*: it is morally wrong. In other words, one rule for the employment of murder will state:

> If x murdered y, x has done wrong.

Such examples are often relied upon in disputing the fact-value distinction and the associated Hume's Law (cf. Väyrynen, 2021, sect. 2.1; Hanfling, 2000, 146).

However, this debate is orthogonal to our concerns. What matters with respect to the use of murder is that wrongdoing is *only* a consequence of its application, not an ascription condition, i.e. a criterion by which we evaluate whether something is a case of murder. Therefore, we would best avoid treating it as part of the truth-conditions for statements of the form 'x murdered y'. Luckily, my account will only treat wrongdoing as a necessary condition, not as part of a sufficient set of conditions. As such, the actual correct use of murder is preserved, the truth-conditional content as commonly specified by means of a bi-conditional will be devoid of any normative dimension, yet the latter will be retained as an entailment. Thus, my account neatly balances these aspects of thick terms, allowing criteria to only appear on side of the divide given by the two-aspect model of meaning.

5.2 Belief Reports

A long-standing tradition in mainstream formal semantics treats belief reports of the general form 'x believes that p' as a relation between two things: an agent and a proposition. Thus, the doxastic agent x believes that p just in case they stand in the appropriate attitudinal relation of belief to the proposition that p (Nelson, 2023, introduction). This is usually further analysed in terms of possible worlds, with the attitude understood as dividing the space of possible worlds into two: those compatible with the attitude in question, and those that are not (e.g. Hintikka, 1969, 25). While this is not shared by all semanticists, all of them seem to support a broadly *relational analysis* nevertheless (e.g. Moltmann, 2003).

It seems commonplace to regard this model of belief reports not just as a purely mathematical model for the compositional effects related to the contents of x and the that-clause expressing p, but as a metaphysical account of belief (e.g. Williamson, 2002, 21). In other words, believing is not just best modelled by means of intensional semantics vis-à-vis its compositional aspects, but *is* a matter of holding a certain attitude, viz. standing in a certain relation, to a proposition.

Contrast this approach with the tradition of the late Wittgenstein (1953) and Ryle (1949), who place heavy emphasis on the criteria by which belief is ascribed, specifically the *public manifestations*[27] of belief. Thus, Ryle suggests the following *defeasible* criterion for ascribing belief:

$$\frac{x \text{ believes that } p}{x \text{ behaves as if } p} \qquad \frac{x \text{ behaves as if } p}{x \text{ believes that } p}$$

While by no means everything to be said about the ascription of belief,[28], it appears to be an important criterion. If we are in what Hanfling calls a "commenting situation" (Hanfling, 2000, 96f.),[29] we would withdraw an ascription of the belief that it is raining outside if x does not bring

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[27]For a concise explanation of this term, cf. Glock (2020, 211).

[28]Cf. Hacker (2013, sect. 5.9), for an impressive overview of the myriad uses of believe. I will remark on some of those aspects further below.

[29]He considers this type of situation in the context of knowledge ascriptions, not belief. However, it seems an analogous situation occurs with respect to belief. For sometimes we are interested mostly in predicting people's behaviour on the grounds of what they believe, as opposed to finding out *what* they believe, resulting in different ascription criteria (cf. Hanfling, 2000, 96ff.).

an umbrella or a rain coat with them when they venture there (cf. Ryle, 1949, 34f.). This emphasis on public *manifestations*, as opposed to mere behavioural 'cues' for inner processes, stems from considerations on the possibility of private languages and the resulting rejection of the "inner-outer-picture of the mind" (cf. Glock, 2020, 205ff.) – or, in a similar vein, concerns over the possibility of distinguishing and identifying such 'private entities' (cf. Strawson, 1959, ch. 3).

Once again, the details of such larger debates and issues – this time not of metaethics, but concerning the philosophy of mind – are immaterial to our concerns. Coming from the Basic Assumption, the ways in which beliefs are actually correctly attributed are determinative of the meaning of the associated words. Thus, Hacker seems right in arguing against the relational account in that it is conceptually confused. For what Sara believes can be the same as what Peter fears, but Peter fears the proposition that p is meaningless (Hacker, 2013, 168f.).[30] Thus, if it is the *meaning* of believe we are after, the criterial approach adopted by authors such as Hacker seems to be on the right track. Therefore, I submit that from the perspective of modest inferentialism, the rules that constitute the meaning of believe will be those expounded by such conceptual analysts.

This point has a central consequence with respect to the possible objection that the present account is merely a proof-theoretic reconstruction or a metasemantic embellishment of pre-existing truth-conditional theories. In light of rules such those pertaining to belief above, this objection fails to take into consideration the startling difference in treatment for mental vocabulary that use theories promote. This conclusion is, of course, further reinforced by the already noted departures from certain versions of the truth-conditional approach. This included the accommodation of other dimensions of meaning besides the determination of truth-conditions, the rejection of a slavish devotion to proof-theoretic tools only, and the strongly criterial nature of the approach.

Despite this, my brand of metalinguistic modest inferentialism does not have to be incompatible with the relational analysis. Consider the following rule for believe:

$$\frac{x \text{ believes that } p}{x \text{ affirms } p} \qquad\qquad \frac{x \text{ affirms } p}{x \text{ believes that } p}$$

with affirmation including verbal behaviour such as asserting that p and agreeing with such assertions. As I have pointed out earlier, this proof-theoretic depiction is deceptive, because it hides many presuppositions and additional conditions not made explicit. A better *qua* more complete statement looks like this:

> x believes that p is used to make a true claim just in case, and among other things, x refers to some person[31] and that person affirms the claim that p, unless there are reasons to suspect the person is engaging in deception.

The formulation demonstrates a degree of compositionality. x is required to affirm the claim that p, and what claim is expressed by p is of central relevance. And *in this minimal sense*, when ascribing belief, we 'relate' the content of certain claims to the behaviour of people. Thus, the relational account – considered as a mathematical model of compositionality – is left untouched. As a final consequence, even if the meaning of expressions such as believe is analysed differently in the context of modest inferentialism, there does not have to be any competition with mainstream formal semantics, presuming a philosophically reflected understanding of the latter's practice.

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[30]Once again, I took a piece of writing originally about knowledge ascriptions and apply its arguments to belief reports. However, once more, the cases are analogous.

[31]Potentially, as disambiguated with respect to the relevant context of utterance, since, for example, the same proper name can refer to different people (cf. Strawson, 1950, 326ff.). Recall, in this vein, the example of Peter is snoring from above.

Before concluding, there are aspects of belief-reports that have important consequences for modest inferentialism as well, however. First, we have seen that the incorporation of defeasible criteria is paramount in dealing with mental language. Given that the rules constitutive of meaning are allowed to go beyond the ones found in proof theory, stating defeasible criteria should not be an issue.[32] Second, however, there appear to be limits of the two-aspect model of meaning, coming from the case of belief-reports. While an utterance of I believe that p allows other interlocutors to infer a great many things, and I am held accountable for such an utterance, I do not need to consult any criteria for uttering it. In other words, first-person belief-reports are "criterialess" (Hacker, 2013, 237) and most probably not assertions in the first place, but merely avowals. For responding to I believe the Earth is flat with No, you are wrong would not be understood as a disagreement about my belief-state, but about what is believed (Hacker, 2013, 233).[33] While this does not necessarily break the two-aspect model of meaning – after all, =-introduction is similarly 'citerialess' – it showcases that both aspects are not *always* relevant to an expression's meaning. Sometimes, perhaps, only defeasible consequences are constitutive of meaning.

6   Outlook

In conclusion, then, we have seen that the prospects of the type of modest inferentialism advocated in this paper are looking good. By first detailing the strong inferentialist approach and its treatment of truth, we saw that strong inferentialism is an impressive and systematic use theory of meaning. However, as endorsers of the Basic Assumption, i.e. the claim that use is fully determined by meaning, they must take the ways we speak about meaning, assertion and truth seriously. For otherwise, they change the topic of their investigation. However, those ways of talking about these things, themselves constitutive of the concepts in question under use-theoretic metasemantics, painted a different picture, where truth plays an important, if not exhaustive, role in elucidating the meaning of declarative sentences. The way strong inferentialists try to account for these conceptual connections was found wanting, and instead we explored the possibility of exploring a type of inferentialism that, while staying largely criterial, puts explanatory emphasis on the notion of truth. To this end, the current state of modest inferentialism was equally found to be insufficiently motivated and generalised, which was promptly remedied by a general argument establishing why semantic rules are in service of determining truth-conditions, and how they do so. The Dummettian two-aspect model of meaning turned out congenial for the task of specifying sufficient and necessary criteria for a statement's truth. However, this model met its limits vis-à-vis mental and normative vocabulary, at least if one presupposes that every application of any term comes with individually necessary and jointly sufficient conditions. I argued that modest inferentialim is flexible enough to accommodate many phenomena connected with truth-conditional content, such as defeasible criteria and one-sided inferential imports, and that this is, as such, no weakness, but a strength.

Nevertheless, the account sketched so far is only that – a sketch. I have focussed entirely on declarative sentences and left out any discussion of reference. Thus, further avenues of research are opened up. As I have remarked before, the rules for expressions contain the latters' syntactic combinations, and arguably often presuppose successful reference for referring terms. This provides an opportunity for the metalinguistic inferentialist to utilise their flexibility and consider, apart from rules specifying truth-conditional contributions of claims as mediated by sentences, also rules laying

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[32]If it was any to begin with, given the formal work in defeasible reasoning. Cf. ??? for an overview.

[33]Thus my 'most probably': I *can* also accuse people of having lied when they avowed to me what they believe. Yet if lying is saying something false, their use of I believe that p was truth-evaluable after all, hence, arguably, also an assertion.

down *reference conditions.* In a similar vein, an expression's 'inferential' role might well contain rules for its employment in syntactic combinations other than declarative sentences, further providing an angle for tackling questions, commands, and other speech acts sharing largely the same vocabulary.

A related critical research direction is a deeper study of the compositionality claimed to be inherent in modest inferentialism. This ought to be especially relevant with respect to the suggested compatibility of modest inferentialism with mainstream formal semantics. These two approaches may turn out to be compatible, assuming the latter to be given a philosophically reflected understanding as suggested above. These issues must be postponed for future occasions, however.

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