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# *De Se* Assertion

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**Abstract.** *De se* attitudes, that is, attitudes that we have about ourselves in a first-personal way, have long been recognized as interestingly different from other attitudes. However, speech acts and, in particular, assertions that we make *about ourselves* have barely begun to draw philosophers' attention. This chapter discusses some recent proposals that aim to bridge the gap between the significance of the *de se* phenomena in thought and the way that we express those attitudes in language. Section 1 provides some background on the *de se* and the essential indexical. Section 2 surveys proposals that make use of *centered* contents in modeling assertion and communication. Section 3 discusses the main motivations for the idea that centered contents are not only the contents of *de se* attitudes, but also of the corresponding assertions.

**Keywords:** *de se* attitudes; centered contents; the essential indexical; the first-person pronoun; subjectivity; disagreement; same-saying.

## 1 Introduction: thinking of oneself as oneself

While the concept of the self has always been of interest to philosophers, the tight connection between first-personal attitudes and action has been brought to attention through the work of Castañeda (1968), Anscombe (1975), Perry (1977, 79) and Lewis (1979), *inter alia*. The core issue that first-personal attitudes raise, also known as the problem of the essential indexical (Perry 1979) or of *de se* attitudes (Lewis 1979), amounts to the observation that we can have beliefs and desires that happen to be *de facto* about ourselves, yet such beliefs and desires will not motivate the right sort of

action, unless they are also beliefs and desires that we have about ourselves *as ourselves*, in a first-personal mode. The easiest way to see the problem is by way of examples:<sup>1</sup>

#### **The messy shopper**

John Perry once followed a trail of sugar on the supermarket floor, pushing his cart down the aisle on one side of a tall counter and back the aisle on the other, seeking the shopper with the torn sack to tell him he was making a mess. With each trip around the counter, the trail became thicker. But Perry seemed unable to catch up. Finally it dawned on him. He was the shopper he was trying to catch. Perry believed at the outset that the shopper with a torn sack was making a mess. But he did not believe that *he himself* was making a mess. It is only when he came to believe the latter that he stopped following the trail around the counter and rearranged the torn sack in his cart.

#### **The grizzly bear attack**

Fenrong and Deeti are hiking in the wilderness. They encounter a grizzly bear, which sets out to attack Fenrong. Both Fenrong and Deeti believe that a bear is about to attack Fenrong, and both of them want Fenrong to be safe. But they act differently. Fenrong drops to the ground in a fetal position and covers her neck with her hands, while Deeti reaches for a bear pepper spray in her bag and sprays it towards the bear.

These scenarios pose a challenge for theories which rely on these two tenets:

#### **Tenet 1: a content-driven account of action**

It is the content and only the content of the agent's attitudes that predicts and explains how a rational agent will behave or act.

#### **Tenet 2: the propositionality of attitude contents**

The content of any given attitude is best modeled by propositions.

The challenge posed by the messy shopper case is that John Perry had all along the relevant propositional attitudes. He believed all along the proposition that the guy with a torn sack of sugar, namely, John Perry, was making a mess, and he desired all along that this guy would rearrange his torn sack and stop making a mess. But since Perry had those attitudes without realizing that *he* was the person about whom he had them, he didn't look into his own cart. The puzzle is, what other beliefs, desires or intentions did Perry come to have when it finally dawned on him that he was the messy shopper, and that led to a change in his behavior?

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<sup>1</sup> Example 1 is almost literally taken from Perry (1979: 22), while example 2 is slightly modified from Perry (1977). There are many other examples in the literature: the crazy Heimson who believes to be Hume, the amnesiac Lingens lost in the Stanford library (Perry 1977), the author of the *Hiker's Guide to the Desolation Wilderness* who can't figure out which way to go (Perry 1979), the two gods in Lewis (1979) who have all the propositional knowledge available, yet don't know who they are, Kaplan who sees himself in a mirror with his pants on fire (Kaplan 1989), etc. Some of these examples, such as Perry's Lingens or Lewis's two gods, are primarily targeted against the idea that general, descriptive knowledge can provide *de se* knowledge; others, such as the Heimson-Hume case, involve subtle issues about personal identity.

The challenge posed by the grizzly bear case is that both Deeti and Fenrong have beliefs, desires and intentions that, when reduced to their propositional content, are the same: the belief that Fenrong is about to be attacked by a bear, the desire that she should avoid the attack, the intention that the bear should be prevented from attacking Fenrong. What is it, then, that explains that they behave so differently?

The problem of the essential indexical and of the *de se*, like almost any other important philosophical problem, defies unanimity. Not only is there no consensus on the solution to the problem; there is not even agreement that there is a single, well-delineated, distinctive problem that must be traced to the first-personal character of the attitudes at stake. There is controversy regarding the scope of the phenomena to be accounted for: are they distinctively about the first-personal way in which we think about ourselves, or do they generalize to all sorts of ways in which we think about all kinds of individuals, objects, events, and what not? Similar puzzles arise when we have a belief about a moment of time without realizing that the time at stake is *now*, or about a place without realizing that the place at stake is *here*, or about somebody without realizing that the person at stake is *the person standing right in front of us*. Over the past forty years, the literature on the problem of the essential indexical and *de se* attitudes has moved forward tremendously, both in terms of understanding the underlying phenomena and clarifying what the problems are and which theories they target.<sup>2</sup> What matters for the purposes of this chapter is that first-personal attitudes pose a certain challenge, whether or not it is distinctive and unique. The chapter examines how this gets reflected at the level of assertion and communication. With this in mind, the remainder of this section recalls the proposals from John Perry and David Lewis.

Perry's way out of the problem was to give up Tenet 1. The gist of Perry's view is that the content of a person's attitudes is not the only thing that explains the person's actions. What is equally crucial to action explanation is how these attitudes are connected to one another and how they contribute to the person's overall cognitive architecture. While Perry's views on the matter haven't ceased to develop over the past four decades (see e.g. Perry (ms.) for his most recent ideas on the topic), it will suffice here to schematize the proposal, as it was developed in Perry (1977) and (1979). The idea is to distinguish, for each attitude, between its content and its "role". In the messy shopper example, the belief that Perry had before realizing that he was causing a mess has the same content as the belief that he had afterwards. The change in his beliefs occurred not at the level of content but at the level of role. Only the posterior belief has a motivating role and is such that whoever has it will look for a torn sack in their own cart.

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<sup>2</sup> A lot of the critical discussion of the problem of the essential indexical and the *de se*, including Millikan (1990), Brinck (1997), Stojanovic (2001), Spencer (2007) or Magidor (2017), ultimately serves to clarify what the different problems are, rather than call into question the idea that first-personal attitudes pose a real challenge. For a recent defense of the idea that the challenge posed by the *de se* is distinctive indeed, see e.g. Ninan (2016).

In the grizzly bear example, the beliefs that Deeti and Fenrong have are beliefs with the same content, beliefs that are true under the same circumstances, but nevertheless, beliefs that differ in their roles. Only Fenrong's belief is first-personal and, although it has the same *content* as Deeti's belief, Fenrong and Deeti are in different *belief-states*. Had Deeti been in the same belief-state as Fenrong, she, too, would drop to the ground and would act just like Deeti.

Lewis's way out of the problem was to give up Tenet 2. Given Lewis's view about propositions, modeled as sets of possible worlds, to believe a propositional content is to be able to distinguish between worlds that, for all you believe, may turn out to be the actual world, from those that may not. Lewis's diagnostics of the problem of the *de se* is that we need contents that allow us not only to distinguish between worlds, but also, given one and the same world, to distinguish between possible locations that one may turn out to occupy within that world. In other words, not all beliefs are propositional; some are "self-locating" beliefs. Lewis (1979) proposes that just as the content of a propositional attitude is modeled by a set of possible worlds, the content of a self-locating attitude is modeled by a set, only not merely of possible worlds, but rather of *centered* worlds, that is, agent-time-world triples. For example, the content of a belief that one would express by saying "I am making a mess" is that content true at an agent, a time, and a world, if and only if the agent is making a mess at that time and in that world. Put in a more traditional jargon, centered contents are *properties*; the content of a person's *de se* belief that they are making a mess is the property of making a mess. Lewis's solution to the messy shopper is that there is also a change in the content of Perry's attitudes. For it is only when Perry realizes that *he* is the one with a torn sack of sugar that he acquires a belief whose content is the property of making a mess. In the grizzly bear example, Lewis suggests that Deeti and Fenrong have beliefs with different contents: Fenrong's belief has for its content the property of being about to be attacked by a bear, while the content of Deeti's belief is the proposition that Fenrong is about to be attacked by a bear.

One important further element is needed to complete Lewis's picture. It is the idea that to have a self-locating belief is to *self-ascribe* the content of that belief. When Perry realizes that he is making a mess, he comes to self-ascribe the property of making a mess. Now, Lewis (1979) generalizes all attitudes, including propositional ones, to the idea of attitude self-ascription. The general schema is that to believe a proposition *p* is to self-ascribe the property of inhabiting a world in which *p* is true. This being said, for many third-personal beliefs, there can be other alternatives. For example, in the grizzly bear attack case, Deeti could be self-ascribing the property of visually attending to a scene in which a bear is about to attack Fenrong.<sup>3</sup>

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<sup>3</sup> As has been pointed out by many, the mechanism of self-ascription plays a crucial role in Lewis's account so it may be said that he, too, gives up Tenet 1. Similarly, if we take into account Perry's complete writings, especially Perry (1986), we see that he is not committed to Tenet 2 either.

## 2 Centered content in assertion and communication

An immediate advantage of Perry's approach over Lewis's is that it sits well with the idea that one and the same content serves equally well as the content of an affirmative sentence that a person utters in context, the content of the belief that she expresses with such an utterance, the content of the assertion that she thereby makes, and, last but not least, the content that she communicates to her interlocutors. This conception of content as the appropriate level that fulfills all these functions is taken even further in the work of David Kaplan (1989), who identifies it with 'what is said'. Consider the grizzly situation transposed to the level of discourse:

1. Fenrong: "I am about to be attacked by a bear."
2. Deeti (looking at Fenrong): "She is about to be attacked by a bear."
3. "Fenrong and Deeti both said/asserted/claimed that Fenrong was about to be attacked by a bear."

The fact that Fenrong is referring to herself using the first-person pronoun and that Deeti is referring to her using the third-person pronoun does not seem to have any impact on the contents that they assert, or on the information that they communicate in (1) and (2). This intuition is further supported by the fact that a report such as (3) strikes us as true. For Perry and Kaplan, these intuitions are easy to accommodate: the content of Fenrong's and Deeti's beliefs as well as of their utterances is the proposition that (at a certain time *t*) Fenrong is about to be attacked by a grizzly bear. The relevant cognitive differences between Fenrong and Deeti, which account for the differences in their behavior, are captured at the level of belief-states (or at the level of *character*, to use Kaplan's terminology).

In Lewis's view, on the other hand, the content of Fenrong's belief is the property of being about to be attacked by a bear, while the content of Deeti's belief is a different property, namely, depending on how one decides to incorporate third-person reference into the view, the property of standing in a relevant relation to an individual who is about to be attacked by a bear, or the property of inhabiting a possible world in which Fenrong is about to be attacked by a bear. For Lewis, then, the question of how belief content relates to the content that a person asserts and communicates is far from trivial.

While Lewis himself, to my knowledge, never claimed that centered contents play a role in assertion and communication, over the past decade, surprisingly many such proposals have seen light. The aim of this section is to give a brief and non-exhaustive survey of those.<sup>4</sup> Some of the details need to be postponed to section 3, in which I will

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<sup>4</sup> I am grouping the views in two families. The term 'recentering' is from Weber (2013), while 'uncentering' occurs both in Kindermann (2016) and Pagin (2016); I am not aware that it is used by any of the proponents of such views. Kindermann (2016) uses the term 'multicentering', from Torre (2010), for the views that I will discuss in section 2.2. under the label 'sequence-relativizing'. For survey, comparison, and critical discussion of several among the views discussed here, see e.g. Kindermann (2016), Pagin (2016), or

look at the motivation for the idea that certain kinds of assertion – *de se* assertions – are best modeled by centered contents.

## 2.1. Uncentering and recentering

The most straightforward way of extending Lewis's proposal regarding *de se* attitudes to assertion and communication is to say that although the content of Fenrong's belief in (1) is the property of being about to be attacked by a bear, the content of her assertion is a different one, namely, an “uncentered” one, such as the proposition that (at a certain time *t*) Fenrong is about to be attacked by a bear. The combination of a Lewisian theory of attitude content and a Kaplanian theory of discourse content, at least for sentences such as (1), has been the preferred option for many theorists, including Egan (2007, 2012), Moss (2012) and Kölbel (2013). As Egan (2012: 576) puts it: “Given [a certain] acceptance conditions-based story about the theoretical role of content in an account of assertion and communication, we definitely do not want to go for a semantic theory that assigns *de se* content to indexical sentences. That combination is a big disaster. [...] So we ought *not* to believe that indexical sentences have self-locating content. We ought instead to believe the usual sort of Kaplanian theory.”

The idea that the content of a person's *de se* belief need not be the same as the content that this person can reasonably hope to communicate to others is reminiscent of Frege's view, at least as it is presented in this often-quoted passage (1918/1967: 25-26):

Everyone is presented to himself in a particular and primitive way, in which he is presented to no one else. So, when Dr. Lauben thinks that he has been wounded, he will probably take as a basis this primitive way in which he is presented to himself. And only Dr. Lauben himself can grasp thoughts determined in this way. But now he may want to communicate with others, perhaps in the sense of “he who is speaking to you at this moment”, by doing which he makes the associated conditions of his utterance serve for the expression of his thought.

While Frege has been often criticized for the idea of people having thoughts that cannot be grasped by others, the combination of a Lewisian account of attitude content and a Kaplanian account of speech content is not committed to such ungraspable thoughts. For anyone who thinks that they are about to be attacked by a bear grasps, in some relevant sense, the belief that Fenrong has when she thinks that she is about to be attacked by a bear. What the view does share with Frege's view is a demarcation between attitude content and communicated content.<sup>5</sup> And that may or

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the Appendix in Recanati (2017).

<sup>5</sup> As can be seen from the passage quoted from Egan (2012), proponents of this sort of view

may not be a problem, depending on how one conceives of the thought-language interface more generally.

Let me also stress that some among the uncentering views, Egan's and Kölbel's in particular, hold that in certain cases, it *is* the centered content that gets asserted and communicated. The cases at stake are those in which subjective matters, such as matters of taste, are under discussion; I will return to them in section 3.1.

Let's turn to the recentering view proposed in Weber (2013). Weber's aim is to see whether, and how, we can maintain the idea that *de se* attitudes have centered content, as well as the idea that the utterances based on such attitudes *express* centered contents, without running into what Egan calls “a big disaster”. Weber proposes that the speaker literally expresses a belief with a centered content, but the belief that the hearer acquires is not the one that the speaker expresses. Rather, they acquire a belief with a content suitably related to one expressed by the speaker. The acquired content is determined by the content expressed by the speaker together with the hearer's beliefs about how she is related to the speaker's context. To see how this works, consider the following variant of the bear example:

4. Deeti, speaking to Fenrong: “You are about to be attacked by a bear.”

Weber's desideratum is that if Fenrong assents to the truth of Deeti's utterance, then based on this, she ought to be able to self-ascribe the property of being about to be attacked by a bear. But the belief that Deeti expresses does not have that property for its content; rather, its content is the property of addressing someone who is about to be attacked by a bear, and that is also the content of Deeti's assertion in (4). On Weber's model, what Fenrong needs to do is put together her belief that Deeti expresses the above content with her belief that *she* is the person whom Deeti is addressing in (4). Based on this, Fenrong acquires the belief that *she* is the one who is about to be attacked by a bear; that is, she comes to self-ascribe the property that she herself would express were she to say “I am about to be attacked by the bear.”<sup>6</sup>

## 2.2. Sequence-relativizing

For Lewis, *de se* attitudes, that is, attitudes that we have about and hold towards

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typically take the asserted content to align with the communicated content, rather than with the attitude content. Theoretically, there is also room for the view in which the asserted content is the content of the speaker's belief, rather than the communicated content. Given that, as argued by Paul Grice and widely endorsed in contemporary pragmatics, there are independent reasons to keep apart what is asserted and what is communicated, such a view is worth exploring. (The view from Weber (2013), discussed below, could be seen as such a view.)

<sup>6</sup> While Weber's model is cast squarely within a Lewisian centered content account, there are other models that share the spirit of the proposal. One such is put forward in Maier (2016); it is cast within Discourse Representation Theory (Kamp and Reyle 1993) but improves on the latter by clearly distinguishing the speaker's production perspective from the hearer's interpretation perspective.



ourselves, are central, and all the other attitudes, *de re* and *de dicto*, derive from them. When Deeti and Fenrong look at the grizzly bear, call him Grizz, and when they both think that he is ferocious, their attitudes are only derivatively about Grizz. According to Lewis, the content of Deeti's and Fenrong's beliefs is the property of inhabiting a possible world in which Grizz is ferocious, and it is a property that both of them self-ascribe.<sup>7</sup>

Now, one may want to make room for the idea that Deeti's belief that Grizz is ferocious is a genuinely *de re* belief that Deeti has about Grizz, rather than a *de se* belief that Deeti has about herself. Here is a way to account for this idea without giving up the spirit of a Lewisian account. For Deeti to have the *de re* belief that Grizz is ferocious is for her to ascribe ferocity to Grizz directly. In other words, just as we may self-ascribe properties, we may ascribe properties to other individuals or objects. Similarly, we may ascribe *relations* to pairs of individuals or objects. Imagine that you are trying to choose between two melons, Mel, on your right, and Mil, on your left, and you believe that Mel is bigger than Mil. On a standard Perry-Kaplan account, the content of your belief is the singular proposition that Mel is bigger than Mil, and Mel and Mil come under suitable representations (or Kaplanian "characters"), such as "melon on my right" and "melon on my left". On a standard Lewisian account, the content of your belief is the property of having on your right a melon that is bigger than a melon that you have on your left, and you self-ascribe that property. On the proposed variant of Lewis's account, the content of your belief is, simply, the relation of being bigger than, and it is this relation that you ascribe to the ordered pair (Mel, Mil).

Recall from section 1 that an important set of motivations for a theory of belief is to account how having certain beliefs, desires and intentions may lead to action. We want an account that predicts that if you prefer a bigger melon, and you think that Mel is bigger than Mil, you will pick out Mel rather than Mil. In the Perry-Kaplan account, the connection between you and Mel, which secures that your action bear on Mel rather than some other melon, is mediated by your representation of Mel as the melon on your right. In Lewis's account, Mel's ending up being the melon that you pick out is secured by the fact that it uniquely satisfies the descriptive content of your thought. In the present account, the connection derives from your wordly relation to Mel, that is to say, from the fact that it lies right there on your right, that you are looking at it and touching it. Your external relation to it allows you to ascribe properties and relations to it directly, and to consequently act upon it. Of course, more would need to

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<sup>7</sup> This is the standard move for Lewis to convert *de re* attitudes into *de se* attitudes, but there are other options. Deeti may be self-ascribing the conjunctive property of inhabiting a world in which Grizz is ferocious and being related in such-and-such way to Grizz, while Fenrong may be self-ascribing a slightly different conjunctive property, being related to Grizz in such-and-such other way. Alternatively, the self-ascribed property may be that of being related in such-and-such way to *some* ferocious grizzly bear, so that their beliefs would remain the same if it were some other bear instead of Grizz, or even no bear at all. In any case, it is essential to Lewis's account that all those contents are ultimately properties that the attitude holder self-ascribes.

be said about the details of such an account. But the main idea is to allow for contents that are not propositional, but that, *pace* Lewis, are not always self-ascribed either, but can be ascribed to other individuals and objects and sequences thereof.

The idea to relativize contents to sequences and to use the resulting notion of content in an account of assertion and communication was proposed independently in Stojanovic (2008, 2016), Ninan (2010) and Torre (2012). For Ninan and Torre, the main objective is to extend Lewis's account of *de se* attitudes to discourse. Both Ninan and Torre aim to maintain the idea that communication succeeds when the common ground gets updated with the asserted content, but to avoid the consequence that when Fenrong asserts “I am about to be attacked by a bear” her interlocutors acquire a *de se* belief that *they* are about to be attacked by a bear. For me, the driving motivations were to allow for *de re* attitudes that do not boil down to *de se* attitudes, and make room for direct reference and for the idea that property-like and relation-like contents can be believed of and asserted about objects and individuals directly.<sup>8</sup>

What the three sequence-relativizing accounts have in common is the idea that contents are no longer to be modeled as functions that map *centered* worlds – that is, individual-time-world triples – to truth values, but rather, they map sequences  $(a_1, a_2, \dots, a_n, t, w)$  to truth values.<sup>9</sup> Since there are significant differences between, on the one hand, the accounts put forward by Ninan and Torre, and on the other, the account that I proposed, I will present them separately.

### 2.2.1. Sequence-relativizing (1): Ninan's and Torre's proposal

The idea common to Ninan and Torre is that the notion of a centered world should allow for there being more than one center. This is why their approach is also known by the name of “multi-centering”. For simplicity, let us focus on the version given in Ninan (2010), in which there are only two “centers”, occupied by the speaker and the hearer. The proposal combines two ideas. First, the content of an assertion is a pair-centered content; that is to say, it may be modeled as a function that maps quadruples  $(x, y, t, w)$  to truth values. Second, to each conversation there corresponds a conversational sequence, represented as an ordered pair  $(a, b)$ . The role of a conversational sequence is to “stabilize” the center, in the following sense. The first member of the quadruple, viz.  $x$ , is interpreted by the first member of the conversational sequence, viz.  $a$ ; and analogously,  $y$  is interpreted by  $b$ . Furthermore, if

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<sup>8</sup> The relevant notion of direct reference and aboutness is in the spirit of Donnellan's view (e.g. Donnellan 1966), which contrasts with the more popular Kripke-Kaplanian view according to which a mere use of a proper name already secures direct reference. A more recent source of inspiration is Dickie (2015), whose focus is on a cognitive rather than linguistic notion of reference. I discuss the motivations related to the notion of direct reference in Stojanovic (2006) and Stojanovic (2014). On the topic of *de re* thought, see also the essays in Jeshion (ed., 2010).

<sup>9</sup> For simplicity, I present here a generalization. However, in Ninan (2010), the sequence only contains two individuals, namely, the speaker and the addressee.

*a* utters a first-person sentence, using the pronoun 'I', the content that she asserts is the property  $\lambda x: P(x, t, w)$ ; if she utters a second-person sentence, using the pronoun 'you', then it is the the property  $\lambda y: P(y, t, w)$ . *Mutatis mutandis*, if *b* utters a first-person sentence, the content will be the property  $\lambda y: P(y, t, w)$ ; if she utters a second-person sentence, it will be the the property  $\lambda x: P(x, t, w)$ .

To see how this works, suppose that Deeti is talking to Fenrong. Deeti has a *de te* attitude, that is to say, an attitude *about* her interlocutor, that she is in danger. Let the context be such that its conversational sequence is (Fenrong, Deeti). Fenrong tells Deeti:

5. "You are in danger."

As Deeti is the second member of the conversational sequence, she assumes the role of *y* in the quadruple  $(x, y, t, w)$ . Hence the content that she expresses is  $\lambda x: x$  is in danger at *t* in *w*. Since Fenrong is the first member of the conversational sequence, she assumes the role of *x*, and thereby comes to ascribe to herself the above content and to believe what she herself could express by saying "I am in danger".

For both Ninan's and Torre's proposals, it is crucial that, within a conversation, the speaker and her interlocutors converge on what the relevant conversational sequence is. This is a crucial step that makes the transitions from 'I' to 'you' and from 'you' to 'I' possible. It is how a hearer can acquire a *de te* attitude on the basis of the speaker's *de se* assertion, and conversely, a *de se* attitude on the basis of a *de te* assertion whose addressee they are. How precisely a conversational sequence gets settled upon in a given context is a separate and non-trivial issue. Pagin (2016) raises the following objection to multi-centering proposals. (He targets Torre, but the same issue arises for Ninan.) For a conversation to be successful, the speaker and the hearer must agree on a conversational sequence, yet to do so, they must resort to some communication mechanism that cannot be captured in terms of a Lewisian theory of *de se* attitudes. Pagin further points out that if the way in which the speaker and the hearer establish a conversational sequence is mediated by some propositional content, then the way in which the speaker communicates *de se* information to the hearer must also rely on propositional content, thereby considerably weakening the idea that *de se* information ought to be captured non-propositionally.

Although Pagin has a point here, I submit that he is wrong to assume that settling on a conversational sequence must proceed by antecedent communication. To make such an assumption would be to assume that before somebody makes an utterance, they must first communicate to their interlocutors that they are the speaker. But this would be absurd. By the mere fact of making an utterance, the person makes available to their interlocutors the information that they are the speaker. Conversational sequences are established by a similar kind process – or so I suggest. The speaker and the hearer coordinate on a conversational sequence by means that are not properly semantic but involve joint attention and similar processes that are at play when we

make various things contextually salient and when we refer to things.<sup>10</sup>

### 2.2.2. Sequence-relativizing (2): Stojanovic's proposal

I would now like to present the main gists of the proposal that I have been defending over the last decade.<sup>11</sup> Like Lewis, I reject the idea that attitude content must be propositional. Unlike Lewis but like several other authors discussed here, I also reject the idea that *asserted* content must be propositional. Unlike the uncentering and recentring proposals but like Ninan and Torre, I endorse the idea that indexical sentences also express such non-propositional contents. Another feature that my proposal shares with Ninan's and Torre's is that it models those contents not merely as mappings from centered worlds to truth values, but rather, as mappings from larger sequences of the form  $(a_1, a_2, \dots, a_n, t, w)$  to truth values.<sup>12</sup> What is peculiar to my proposal is the idea that, for any parameter in the sequence, the speaker may, in principle, self-ascribe it, or they may ascribe it to something or somebody else. To see how this works, let us look at some examples. Consider again:

6. Fenrong: "I am in danger."
7. Deeti (looking at Fenrong): "She is in danger."

My proposal is that the content associated with both (6) and (7) is simply the property of being in danger. However, in (6), Fenrong self-ascribes this property, while in (7), Deeti ascribes this property to Fenrong. Since the terms 'self-ascribe' and 'self-ascription' have a strong cognitive connotation, and since our focus is assertion, let me coin the terms 'self-assert' and 'self-assertion'. Then in (6), Fenrong self-asserts the property that in (7), Deeti asserts of, or about, Fenrong.

(6) is taken to be a case of self-assertion because Fenrong is using the first-person pronoun. More generally, we expect there to be a correlation between the use of the first person pronoun and self-assertion, the use of the second person pronoun and *de te* assertion, the use of the demonstrative pronoun 'this' and assertions about proximal things, the use of 'that' and assertions about distal things, and so on. Nevertheless,

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<sup>10</sup> In Stojanovic (2014), I discuss the properties of the processes that underlie demonstrative and indexical reference, and I argue that they are neither semantic nor pragmatic but belong in what I label *prepragmatics*. Alternatively, if we work with a model according to which conversation always takes place against a common ground *à la* Stalnaker (2002), the reply to Pagin would be that common ground need not be initially established by communication. For yet another very insightful picture of the processes at stake, see Gilbert (1989, 2007).

<sup>11</sup> An early version of the proposal was given in Stojanovic (2008), though one that does not explicitly appeal to a Lewisian account of *de se* attitudes. Subsequent versions were circulated over several years under Stojanovic (ms.), leading to Stojanovic (2012) and Stojanovic (2016).

<sup>12</sup> The sequences should actually contain (at least) two time parameters and two world parameters, but since nothing relevant to the present discussion hinges on this, I will stick with the simplified framework; see Stojanovic (2016) for the more general version.

such correlations are not imposed by or encoded in the *contents* associated with the sentences that contain those pronouns. Rather, it is the pronouns' lexical function to indicate what kind of linguistic action the speaker is performing: whether they are referring to themselves, and relatedly, asserting something about themselves, or whether they are addressing their interlocutors and asserting (or, as the case may be, asking or commanding) something about them, and so on.

Before I wrap up this presentation, there are two more things to note. First, in the proposed account of (6) and (7), sequences are not needed; centered worlds would do. In this respect, the proposal differs from Ninan's and Torre's, whose accounts appeal to multicentering already for such simple sentences. The reason why I need sequences is that one and the same assertion can often be about more than one individual or object. Consider:

8. Deeti to Fenrong: "I will help you."

My proposal is that the content that Deeti expresses is a *relation*, namely, the one that holds, at time  $t$ , between two people whenever there is some later time  $t'$  at which the first helps the second. This content is a combination of self-assertion and assertion *de te*: Deeti self-asserts it as regards the first relatum, and asserts it about Fenrong as regards the second relatum.

The second thing to note is that there can be cases where it may remain unclear whether the content is self-asserted or asserted about somebody else. Consider:

9. Bator: "There is a shelter nearby."

The content of (9) is, once again, a property, namely, the one that is satisfied by an individual or object whenever there is a shelter nearby this individual or object. But, in contrast with (6) and (7), the sentence in (9) does not linguistically indicate whether Bator self-asserts this content or asserts it about something or somebody else. In many contexts, by uttering (9), Bator will be saying that there is a shelter nearby himself. But suppose that he is a ranger who is talking to Fenrong over a loudspeaker. Then he will likely be asserting this content not about himself, but about *her*, telling her that there is a shelter nearby her. In such a case, (9) becomes an instance of *de te* assertion. And yet in another context, Bator may not be addressing Fenrong but may still be asserting (9) about her; for instance, if he tells (9) to his fellow ranger as the two of them are watching the scene from distance.

### 3 *De se* phenomena in language

As must have become clear from the discussion so far, the driving motivation for many among the authors who use centered contents in their accounts of assertion and

communication comes from the desire to put together a Lewisian account of *de se* attitudes with the view that the content that a speaker asserts and communicates is the content of the speaker's underlying belief. However, this is not the only motivation, and for some not even the most important one. As we will see shortly, some authors, such as Stephenson (2007), do not commit themselves to a Lewisian theory of *de se* attitudes, but use centered contents in modeling assertion-related phenomena.

There are two main sets of motivations for using centered contents in accounts of assertion and communication. The first are related to subjectivity. The most discussed cases involve judgments of personal taste, although the scope may extend to aesthetic and moral judgments, epistemic judgments, and even vagueness. The second set of motivations relies on the observation that *de se* assertions, that is, assertions that we make about ourselves using the first-person pronoun, are interestingly different from other assertions. Although the two sets of phenomena may be related, they have been mostly kept apart. Accordingly, I will discuss them separately.

### 3.1. Asserting one's taste

One of the most debated issues in philosophy of language in the past decade or two has been the question of how judgments of personal taste can at the same time be deeply subjective and give rise to disagreements. Here is an illustration:

10. Deeti: "Monopoly is boring."
11. Fenrong: "No, Monopoly isn't boring."

The issue is complex and I don't hope to address it in this chapter. (For an early discussion, see Kölbel (2002); for an overview of the debate, see e.g. Marques (2015), Stojanovic (2017) or Zeman (2017)). My more modest goal is to show how centered contents have been used in different attempts to account for such disagreements.

Stephenson (2007) proposes that the truth value of sentences involving predicates of personal taste (such as 'boring' and 'delicious') and epistemic modals (such as 'might') be relativized to a so-called *judge* parameter, along with the world and the time parameter.<sup>13</sup> The resulting picture yields a notion of centered content – a content that must be evaluated for truth at a world, a time, and an individual. Importantly, however, the notion of a “judge” is to be distinguished from that of the speaker. The judge, that is, the person at whom the content is evaluated for truth, may be the speaker of the utterance that expresses the relevant content, but need not. Thus when Deeti utters (10), she assumes the role of the judge in taking the content that she asserts to be true, since Monopoly is indeed boring as evaluated from her perspective.

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<sup>13</sup> For predicates of personal taste, Stephenson (2007) follows Lasersohn (2005). In this chapter, for reasons of space, I leave aside the discussion of epistemic modality; but see Cariani (forthcoming). Note that Stephenson's proposal departs from Lasersohn's in that she holds that the judge-dependence is also reflected in the syntax through a silent pronoun PRO that takes its value from the judge parameter.

But consider what it would take for Bator to *accept* Deeti's claim: Monopoly would need to be boring *to him*.<sup>14</sup> (10) stands in contrast with judgments of taste that are explicitly first-personal, such as:

12. Deeti: "I find Monopoly boring."

To accept Deeti's claim in (12), Bator only needs to trust it that Deeti is accurately reporting her taste; his own appreciation of Monopoly becomes irrelevant.

Stephenson (2007), like Egan (2007, 2012, 2014), Kölbel (2013) or Moss (2013), works with a Stalnakerian model of assertion and communication (Stalnaker 1978, 2002), according to which the goal of assertion is to lead to an update of the common ground. For Stalnaker, the common ground is modeled as a set of possible worlds; namely, those that, given what has been accepted in the conversation, could turn out to be the actual world. But since contents are now to be evaluated for truth not only at worlds and times but also at judges, there is a non-trivial question of how to think of the common ground. Stephenson's proposal is that it be modeled as a set of judge-time-world triples (which is tantamount to centered worlds). She further proposes that, given a conversation, the judge element in all these triples represents the plurality of the group of participants in the conversation. However, she opts for a norm of assertion that only requires the speaker to believe the asserted content to be true as evaluated at triples containing him or her as the judge: "The norm of assertion is crucially weak in a certain sense. In order for A to assert that S, A only needs to believe that S is true as judged by A, [but does not need to believe that S is true as judged by the whole group of conversational participants.] But if A's assertion is accepted by the other speakers and added to the common ground, it has the same effect as adding the proposition that S is true as judged by the group of conversational participants" (Stephenson 2007: 701).<sup>15</sup>

As we have seen, Stephenson (2007) appeals to centered contents to account for predicates of personal taste and epistemic modals, without touching on the topic of *de se* attitudes. The proposals in Egan (2007, 2012) and Kölbel (2013) are fairly similar to Stephenson's, except that both of them appeal explicitly to Lewis's account of *de se* attitudes.

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14 This is debatable, and my own stance regarding sentences such as (10) is that they are interpretable in more one way, the idea being that, depending on the context, (10) may be understood as reporting Deeti's own experience of Monopoly (*viz.* that it is boring *to her*) or it may be understood as a kind of generic claim (*viz.* that it is boring *to people in general*); see Stojanovic (2007, 2017, forthcoming). If this is so, then there won't be any straightforward rule on how accepting (10) would lead to an update of the common ground, for what it takes to accept (10) would also depend on the context. Fortunately, this complication may be ignored for the purposes of the present discussion.

15 Stephenson thus endorses what may be seen as a hybrid view of assertion: she is committed to Stalnaker's model, but at the same time that holds that assertion has a norm. I thank Sanford Goldberg for pointing out this peculiar feature of Stephenson's account.

### 3.2. Speaking about oneself

In this final section, I'd like to discuss the phenomena that have motivated my own account, presented in section 2.2.2. In a nutshell, the phenomena highlight interesting properties of assertions that people make about themselves, that is, *de se* assertions, that are revealed in how people perceive and report what has been said or asserted. The phenomena at stake also pose a challenge for the mainstream accounts of assertion and what is said, especially regarding the contribution of the first person pronoun, a challenge that I call "the problem of *de se* assertion" in Stojanovic (2012). I am not aware that the problem has been discussed or even properly acknowledged elsewhere, except in Pearson (2012, 2013).<sup>16</sup> In what follows, I primarily wish to present the problem and then show it can be handled with the help of sequence-relativized contents. I will only sketch *en passant* why it is a problem for the mainstream view; for in-depth argumentation, see Stojanovic (2012, 2016).

Recall, from the beginning of section 2, that the Perry-Kaplan account appears to fare better than Lewis's when it comes to accounting for our intuitions regarding what people say and assert. Intuitively, what Fenrong said in (1), repeated below as (13), and what Deeti said in (2), repeated as (14), seem to be the same content, viz. the proposition that Fenrong is about to be attacked by a bear:

13. Fenrong: "I am about to be attacked by a bear."
14. Deeti (looking at Fenrong): "She is about to be attacked by a bear."

But now consider:

15. Bator: "I am about to be attacked by a bear."

There is also a strong intuition that Fenrong and Bator are saying the same thing; for each of them is saying that they are about to be attacked by a bear. The fact that whenever two people both say/assert something about themselves in a first-personal way, we may perceive them as saying/asserting the same thing, is further supported by a systematic ambiguity that we see in speech reports. Consider:

16. Deeti said that she was about to be attacked by a bear, and so did Bator.
17. Deeti: "I am about to be attacked by a bear. Bator said that, too."
18. Deeti and Bator both said that they were about to be attacked by a bear.

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<sup>16</sup> Pearson (2012) summarizes her work as follows: "We adopt Lewis' (1979) proposal that attitudes *de se* involve a self-ascription of a property and investigate how this view of mental content is reflected in natural language. The implementation favored is a strong version of Lewis' position: root and embedded clauses are uniformly treated as being of a property type." Regrettably, I am not able here to do justice to the complex set of motivations that Pearson discusses, many of which stem from the syntax and semantics of attitude-ascriptions.



In (16) and (17) there remains an ambiguity as to whether Bator said that Deeti was about to be attacked by a bear, or that *he* was about to be attacked by a bear; an ambiguity that, in line with a similar well-known syntactic ambiguity, may be called the *strict-sloppy* ambiguity in speech-reports.<sup>17</sup> The fact that the sloppy reading, disambiguated in (18), is semantically (albeit not necessarily pragmatically) available whenever the target sentence contains the first-person pronoun supports the idea that when two people assert the same thing, each about himself or herself, they are easily taken to assert the same thing *tout court*.

Now, it has been often pointed out that the notion of what is said is versatile and that we report what other people said in ways that often do not reflect the *content* of what they said. Lewis (1980) famously objected to Kaplan's identification of 'content' with 'what is said', based precisely on the intuition that in cases such as (13) and (15), we easily hear Fenrong and Bator as "saying the same thing". However, Lewis did not hypothesize that there was anything peculiar about first-personal discourse. Rather, he thought that the notion of what is said was, as it were, up for grabs, and that it was a poor guide to any semantic insights about language. My aim in Stojanovic (2012, 2016) was to demonstrate that there is something special about *de se* assertion, and that it is this, rather than the versatility of what is said, that accounts for the availability of sloppy readings in same-saying reports.

A first piece of evidence that the first-personal assertions behave differently is that if we take a pair of sentences that differ minimally from (13) or (15), in which we replace the first person pronoun by a third person pronoun, then sloppy readings are no longer immediately available:

19. Bator (pointing at Fenrong): "She is about to be attacked by a bear."
20. Tarek (pointing at Deeti): "She is about to be attacked by a bear."
21. ?? Bator and Tarek said the same thing.
22. Bator (pointing at Fenrong): ?? "She is about to be attacked by a bear. Tarek said that, too."

While in the case of the *de se* assertions in (13) and (15) the difference in the first-person pronouns' reference did not impede us from hearing the two utterances as same-saying, in the case of *de re* assertions, it does. To forestall a misunderstanding, I am not claiming that a sloppy report is never available for third-personal sentences. For instance, the same-saying report (22) becomes correct if the reporter makes it explicit that the two speakers were referring to different individuals:

23. Bator (pointing at Fenrong): "She is about to be attacked by a bear. Tarek said that, too, but about somebody else."

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<sup>17</sup> The ambiguity is typically discussed with respect to verb-phrase ellipsis. Thus "Deeti greeted her boss, and so did Bator" is ambiguous between the *strict* reading, viz. that Bator greeted Deeti's boss, and the *sloppy* reading, viz. that he greeted his own boss.

Even if (23) suggests that sloppy reports for *de re* assertion may be unavailable for *pragmatic* reasons, there remains an asymmetry between the *de se* and the *de re* that calls for an explanation.

A second piece of evidence that speaks in favor of a privileged status of *de se* assertion is that we can easily perceive different speakers who assert something about themselves as asserting the same thing, even if the sentences that they are using differ considerably:

24. Bator (talking to Tarek on Sunday 17 December): “I saw your sister last night at a concert in my neighborhood.”
25. Fenrong (on Thursday 21 December): “I saw Deeti on Sunday night at a concert in Poblenuou.”

In a situation in which it is common knowledge that Deeti is Tarek's sister and that Bator lives in Poblenuou, Bator and Fenrong are easily perceived as saying and even asserting the same thing:

26. Both Bator and Fenrong said that they saw Deeti at a concert in Poblenuou on Sunday night.
27. Bator asserted that he saw Deeti at a concert in his neighborhood on the night of Sunday 17 December, and Fenrong asserted it, too.

To be sure, as it stands, (27) remains ambiguous between reporting Fenrong as asserting that Bator saw Deeti at a concert that night vs. that she herself saw her at that concert.<sup>18</sup> We have again a strict-sloppy ambiguity for *de se* assertion, yet one that, unlike the case of (13)-(15), cannot be explained by appealing to a sameness of the sentences that the speakers utter.

For reasons of space, I will not delve here into the problems that these phenomena pose for the mainstream view.<sup>19</sup> Instead, I would like to sketch how the account from section 2.2.2. handles these cases. The proposal combines three ideas:

- (I) the content of a sentence is modeled as a mapping from sequences of the form  $(a_1, a_2, \dots, a_n, t, w)$  to truth values;
- (II) for any parameter in the sequence, the speaker may, in principle, self-assert the content, or they may assert it about something or somebody else;
- (III) intuitions about what a speaker has said or asserted are derivative upon the semantics and pragmatics of discourse reports and same-saying.

I have already discussed (I) and (II), so let me turn to the general idea behind (III).

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<sup>18</sup> In fact, (27) is three-ways ambiguous, since there is also a reading on which Fenrong is reported to have seen Deeti at a concert in *her own* neighborhood.

<sup>19</sup> See Stojanovic (2012, 2016). In particular, I show that the proposal to explain the same-saying in the case of (24)-(25) by allowing for combinations of content and character to play the role of 'what is said' does not succeed, for there are many such combinations that do not give rise to sloppy reports.

Our practices of reporting what has been said, asserted, claimed, expressed, etc. and of reporting different people to have said, asserted, claimed, expressed, etc. the same thing are governed by a complex set of syntactic, semantic and pragmatic rules. From these, we can extrapolate two central cases. For any given a parameter in the content-relativizing sequence:

(i) when two speakers self-assert the same content with respect to that parameter, they may be reported as same-saying (that is, as saying/asserting/claiming/expressing etc. the same thing);

(ii) when two speakers assert the same content about the same object or individual with respect to that parameter, and this is known to the reporter, they may be reported as same-saying (that is, as saying/asserting/claiming/expressing etc. the same thing).<sup>20</sup>

Let me now show how we can derive the right predictions for the cases previously discussed. The same-saying in (13)-(14) and (13)-(15) falls out straightforwardly. In (13) and (14), Fenrong and Deeti assert the same content, namely, the property of being attacked by a bear, and they both assert it about the same person, Fenrong. In (13) and (15), Fenrong and Bator assert again the same content, namely, the property of being attacked by a bear, and they both *self*-assert it.

Turning to (19) and (20), Bator and Tarek assert the same content, which is, again, the property of being attacked by a bear, but they assert it about different people, namely Fenrong vs. Deeti. They thus fail to fulfill the conditions under which it would be correct to report them as same-asserting. In other words, the reason why (21) does not strike us as a correct report is not that different contents have been asserted; rather, given the semantics of same-saying reports, the default interpretation of (21) is that if the contents asserted by Tarek and Bator are sensitive in truth value to an individual, they must have been either self-asserted or asserted about the same person. Nevertheless, this default interpretation can be cancelled, as in (23).

In (24)-(25), Bator and Fenrong assert the same content, which corresponds to a three-place relation that obtains of a sequence  $(x, y, z, t, w)$  iff  $x$  sees  $y$  at  $z$ , at time  $t$  in world  $w$ . With respect to  $x$ , both Bator and Fenrong self-assert this content; with respect to  $y, z$  and  $t$ , they both assert it about the same things, events or times, namely, about Deeti, the concert in Poblenu, and Sunday 17 December. The conditions in (I) and (II) are thus met, predicting that reports such as (26) or (27) are correct, which is a welcome prediction.

\* \* \*

My main aim in this chapter has been to discuss various accounts that try to bridge the gap between *de se* attitudes and assertion. The focus has been on accounts that appeal to centered contents, inspired by Lewis (1979). There are alternative proposals regarding the first-personal character of assertions, tightly connected with view about propositions and speech-acts, such as Moltmann (2012) or Hanks (2015), that I have left out for reasons of space. *De se* assertion constitutes a fertile area of topics where

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20 Let me stress that (i) and (ii) are extrapolations from a more complex set of correctness conditions for same-saying reports; see Stojanovic (2016: 212-214) for details.

many exciting developments are to be expected in the years to come.

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