

Impersonal pronouns and first-person perspective

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Abstract

I survey recent findings on the interpretation of impersonal pronouns such as English generic *one*, German *man*, French *on* and Italian *si*, as well as impersonally used personal pronouns like English *you* and German *ich* and *du*. A particular focus is the relationship that these pronouns bear to first-person perspective. This relationship can be seen in (i) inferences of first-person experience associated with use of these pronouns, (ii) their interpretation in attitude reports, including referential dependency on the attitude holder and the de se/de re distinction, and (iii) additional meaning components carried by impersonally used personal pronouns involving a presumption of empathy or (dis)agreement. I end by identifying some common themes emerging from recent formal semantic analyses of impersonal pronouns. One of the key notions here is the treatment of impersonals as Heimian indefinites, which in generic contexts get bound by the generic operator.

Impersonal pronouns and first-person perspective

1. Introduction

Impersonal pronouns are pronouns that do not denote specific individuals; rather, they can be used to express generalizations that apply to any individual meeting certain relevant conditions. They are thus natural candidates to occur in *generic* sentences. A paradigm example of an impersonal pronoun is so-called ‘generic *one*’ in English (Moltmann 2006, 2010a, 2010b):

- 1a. At Oxford, one gets a sabbatical every three years.
- 1b. These days, one is required to wear a mask on trains.
- 1c. As a parent of a young child, one doesn’t get enough sleep.

At a first pass, the sentences in (1) seem to be equivalent to the following:

- 2a. People at Oxford get a sabbatical every three years.
- 2b. These days, people are required to wear a mask on public transport.
- 2c. Parents of young children don’t get enough sleep.

As its name suggests, generic *one* can only occur in generic sentences; the following sentences are most naturally construed as episodic statements. On this reading, use of generic *one* leads to ungrammaticality.

- 3a. *One will get a sabbatical next year.
- 3b. *One wore a mask on the train yesterday.
- 3c. *One didn’t get enough sleep last night.

Other impersonal pronouns that have received attention in the literature include French *on* (Cabredo Hofherr 2004), German *man* (Kratzer 1997, Zobel 2014), Italian *si* (Cinque 1988, Chierchia 1995), and Multicultural London English *man* (Hall 2020). Unlike generic *one*, many of these can also occur in episodic statements, and receive an existential construal:

- 4a. In Italia ieri si e giocato male
 In Italy yesterday SI has play badly

‘Yesterday in Italy people played poorly.’

[Italian; Chierchia (1995): p. 108, ex (2b)]

- 4b. Gestern hat man ein Haus abgebrannt.
 Yesterday has MAN a house burned

‘Yesterday, someone burned a house.’

[German; Malamud (2006): p. 99, ex 171b]

Many also have uses that are reminiscent of indexical pronouns:

5a. Es war völlig klar, dass man sich nie mehr
 It was completely clear that MAN refl. Never again
 wiedersehen würde
 See again would

‘It was completely clear that we would never see each other again.’

[German; Kratzer (1997), p. 3, ex 5]

5b. Before I got arrested man paid for my own ticket you know.
 = ‘Before I got arrested I paid for my own ticket you know.’

[Multicultural London English; Hall (2020), p. 121, ex 6]

In this review, I set aside many interesting questions regarding the relationship between these various uses, the linguistic environments that condition them, and the source of cross-linguistic variation in their availability. Instead, I focus more narrowly on the role of *first-person perspective* in the interpretation of impersonal pronouns.

Moltmann (2006) observes that generic *one* appears to have what she calls a ‘first person orientation’, which can be observed in (6).

6. One can see the picture from the entrance.

[Moltmann (2006): 258, ex (1)]

As Moltmann puts it:

‘In [(6)], *one* seems to stand for human beings in general, but at the same time it bears a particular relation to the intentional agent of the utterance, the speaker’s self or the first person in the philosopher’s sense of the term. Suppose the speaker is standing at the entrance, looking at the picture. In that case, an utterance of [(6)] is appropriate as an immediate expression of the speaker’s own experience, while at the same time making a generalization. Other generic sentences such as *People can see the picture from the entrance* or *A typical person can see the picture from the entrance* would not have the same status: while they may make the same generalization, they do not serve as an immediate expression of the speaker’s own experience.’

[Moltmann (2006): 258]

According to Moltmann, generic *one* sentences have a meaning component that their counterparts with other generic noun phrases (bare plurals, singular indefinites) lack. This component seems to provide information about the epistemic grounds for the speaker’s claim: in the unmarked case, that it is based on first-person experience. If this is correct, then the characterisation of the data in (1) and (2) should be revised, or at least qualified. The claims made by the sentences in (1) are distinct from those in (2) in that they are (or can be) anchored to first-person perspective, in a manner to be made precise.

We should like, then, to address the following questions. First, what is the evidence for the first-person orientation of impersonal pronouns? Second, what is the nature of the contribution of this meaning component? Is it part of the truth conditions of the sentences in which impersonal

pronouns occur, or does its contribution figure in some other level of meaning? In this paper, I review evidence from previous work bearing on these issues, occasionally adding observations of my own.

Before proceeding, let me mention one further point concerning the empirical landscape. In addition to dedicated impersonal forms, many languages also permit impersonal uses of personal pronouns. This is common for second person pronouns, which have impersonal uses in Spanish (Alonso-Ovalle 2002), German (Zobel 2014), among others. I illustrate with the following English examples.

- 7a. At Oxford, you get a sabbatical every three years.
- 7b. These days, you are required to wear a mask on trains.
- 7c. As a parent of a young child, you don't get enough sleep.

As with their counterparts with *one*, the sentences in (7) appear to have roughly the same meaning as the generic statements in (2). Yet here too, the question of first-person orientation arises: (7) seems to both make a generalization about the possibility of seeing the picture from the entrance, while also being naturally construed as reporting the speaker's experience.

- 8. You can see the picture from the entrance.

Apparently less common cross-linguistically, but nonetheless attested, are impersonal uses of first-person pronouns. Zobel (2014) discusses this at length for German, showing that first-person *ich* has an impersonal use:

- 9. Ich kann doch als Brautpaar nicht von meinen Gästen
I can PRT as bridal-couple not from my guests

Erwarten, dass sie mir quasi die Feier finanzieren!
Expect that they me more-or-less the party finance

Lit: 'I can as a bridal couple not expect of my guests that they more or less pay for the party!'

[Naturally occurring example cited in Zobel (2014): 1, ex 2]

Strikingly in (9), the *as*-phrase *als Brautpaar* restricts the interpretation of the pronoun to range not over individual people, but rather over couples; Zobel provides (10) as a translation of (9).

- 10. A bridal couple can't expect their guests to more or less pay for the party!

In this paper, I consider both dedicated impersonal pronouns such as *one* and *man*, and impersonal uses of personal pronouns.

2. Inference from the first person

Consider again Moltmann's example.

- 11. One can see the picture from the entrance.

Moltmann observes that in a context where the speaker is standing at the entrance and looking at the picture, (11) is a natural way for her to express her experience. This case involves what Moltmann calls ‘Inference from the First Person’: a generalization about the ability of people to be able to see the picture from the entrance is made based on the speaker’s own experience, under the assumption that the experience can be generalized to relevant others. She reports that the sentences in (12) have a different status.

12a. People can see the picture from the entrance.

12b. A typical person can see the picture from the entrance.

It is not entirely clear to me what Moltmann takes this different status to be: in the context above would (12a) or (12b) be infelicitous? Or is it assertible, with the consequence that the inference that the statement is based on first-person experience goes away? These are subtle cases, but as far as I can tell, the latter is the more accurate description. In a context where the speaker is asked, ‘Can people see the picture from the entrance?’ and walks to the entrance to find out, (12a) would be an appropriate response. In such a case, there is no additional inference that the ‘epistemic grounds’ (as Moltmann puts it) for the assertion consist in first-person experience, whereas (11) naturally communicates such grounds.

There is a further complication, however. While Inference from the First Person involves generalization from the speaker’s experience, Moltmann notes that this is not the only generalizing strategy that generic *one* can participate in. She notes that a speaker who has not seen the picture (say because she is for some reason unable to) may nonetheless assert (11). In such a case, Moltmann proposes that the speaker puts herself in the shoes of someone who is ‘normal’ in relevant respects, and via a process of simulation, reaches the conclusion that (11) holds.

It is unclear to me precisely what conclusions about the semantics of generic *one* can be drawn from the discussion so far. It seems that (11) is felicitous in a context where the speaker stands at the entrance and sees the picture. Yet it is also felicitous in a context where she has not had this experience. So we have learned merely that (11) is *compatible* with situations where the assertion is based on first-person experience - a rather weak claim. Moreover, replacing generic *one* in (11) with some other generic noun phrase also yields a statement that is felicitous in such situations. So far, it seems that we lack sufficient evidence to suggest that generic *one* has a meaning component encoding first-person orientation.

Yet I share Moltmann’s intuition that generic *one* somehow involves an anchoring to first-person perspective that we do not find with other generic NPs. Moreover, Zobel (2014) reports that it would be infelicitous for a blind person to utter the German counterpart of (11) with impersonal *man*:

13.	#Man	kann	als	Besucher	das	Bild	vom	Eingang
	One	can	as	visitor	the	picture	from-the	entrance
	aus	sehen						
	of	see						

‘#As a visitor, one can see the picture from the entrance.’

[Zobel (2014): 272, ex 99]

I set aside the question of whether Zobel's observation carries over to generic *one*, or whether this is a point of cross-linguistic variation. Instead, I will offer some examples that may help to illuminate these issues further. In particular, it will be helpful to drop the modal *can*, which may be adding additional complexities. Instead, I will use the experiential predicate *feel*:

14a. One feels/You feel exhausted after running a marathon.

14b. People feel exhausted after running a marathon.

(14a) suggests that the speaker has run a marathon before; if I were to utter one of these sentences, those who know me (and my dislike of physical exercise) would no doubt be surprised. (14b), by contrast, carries no such inference. Consequently, it is possible to follow (14b), but not (14a), with a denial that the speaker has ever run a marathon:

15a. One feels/You feel exhausted after running a marathon. #But I've never run a marathon before.

15b. People feel exhausted after running a marathon. But I've never run a marathon before.

Now let's add the sentence-initial modifier *in my experience*:

16a. In my experience, one feels/you feel exhausted after running a marathon.

16b. In my experience, people feel exhausted after running a marathon.

This modifier conveys that the speaker's claim is based on personal experience but leaves the exact nature of this experience unspecified. Yet (16a) evokes different types of experiences from (16b). In (16a), the speaker draws on the experience of having run a marathon: in Moltmann's terms, the speaker recalls how she felt afterwards, and generalizes this to others. In a context where the speaker has never run a marathon but has merely stood at the finish line and observed how runners felt immediately after the event, (16a) would be infelicitous, but (16b) would be appropriate.

These facts seem to be limited to occurrences of impersonals with experiential predicates. Consider (17).

17a. One/You should rest after running a marathon.

17b. People should rest after running a marathon.

In (17a), the speaker's assertion may be based on her own experience of running a marathon, but it needn't be. Indeed, it is felicitous to deny that these are the grounds for what she says:

18. One/You should rest after running a marathon. I've never run a marathon before, but I know how important that is.

Modification with *in my experience* further highlights the difference between this case and *feel*. In (18), the speaker's recommendation may but need not be based on personal experience of marathon running. If the speaker instead bases what she says on experience as a personal trainer, the sentences are still felicitous.

19. In my experience, one/you should rest after running a marathon.

All of this points towards a conclusion very much in the spirit of Moltmann's claims. The data with *feel* suggest that with experiential predicates, impersonal pronouns give rise to the inference

that her claim is based on first-hand experience. Moreover, the experience must be of a particular kind: it is not enough for the speaker to have been an observer at an event such as a marathon. Rather, she must have performed the action in question (eg running a marathon) herself. Such cases look like plausible instances of what Moltmann calls ‘Inference from the First Person’: the speaker expresses a generalization based on first-hand experience of a suitable kind.

By contrast, in cases involving deontic modality ((17), (18), (19)), the impersonal imposes no such requirement of first-personal experience. Indeed, even when explicit reference to the speaker’s experience is made by adding *in my experience*, it is left open exactly what kind of experience is being invoked. This is of a piece with Moltmann’s remarks on what she calls ‘Inference to the first person’, which she identifies as arising in deontic contexts (among others). Moltmann characterizes such cases as involving an independently established generalization, which the speaker proposes to be applied either to the addressee, or herself. Notice, for instance, how natural the sentences in (17), (18) and (19) would be as uttered by a personal trainer talking to a client who is preparing for their first marathon.

It seems then that one of the ways that first-person perspective plays a role in the interpretation of impersonals concerns impersonal subjects of experiential predicates like *feel*. Such cases carry an inference that the epistemic basis of the speaker’s claim is first-hand experience of an appropriate kind. At a first pass, an experience meets this condition only if it involves the speaker performing the action in question herself, rather than merely observing it being performed by others. Note that in case this condition is not met, it does not suffice for the speaker to instead *simulate* the experience, perhaps on the basis of putting herself in someone else’s shoes in the manner proposed by Moltmann for *One can see the picture from the entrance*. This is puzzling in itself: although I have never run a marathon, it seems I ought to be able to put myself in the position of someone who has, reason about what is involved, and say *One feels exhausted after running a marathon*. Yet this is not possible, unless one adds a further hedge such as epistemic *must* (*One must feel exhausted after running a marathon*). Instead, one could say *People feel exhausted after running a marathon*. So although simulation may in some cases provide grounds for a generic statement involving an impersonal pronoun, it seems that it does not do so in every case. While this clearly poses an analytical challenge – we would like to understand what differentiates the two classes of case and how they can be accommodated within a unified semantics for impersonals – it has nonetheless has the following advantage: by constructing cases involving experiential predicates where the simulation strategy is unavailable, we make it possible to isolate the first-person experience requirement.

3. Attitude reports

A second way that the perspectival nature of impersonal pronouns is manifested is by its behaviour in attitude reports – that is, in sentences that report the beliefs, desires, speech acts etc of some individual (the ‘attitude holder’). There is a class of pronominal and anaphoric expressions whose interpretation shifts in such sentences, such that they are anaphoric on the attitude holder. Shifted indexicals (Schlenker 1999, 2017; Park 2018; Podobryaev 2014; Deal 2020; Sudo 2016; Anand and Nevins 2004; Anand 2006) and logophoric pronouns (Clements 1975; Kusumoto 1998; Bimpeh 2019, 2021; Haida 2009; Pearson 2015) are well known examples; it appears that at least some impersonals belong to this class too.

Two questions need to be distinguished here. The first concerns impersonal pronouns like generic *one*, which can only have a generic construal, and are not licensed in episodic contexts. Given that these pronouns exhibit what Moltmann calls ‘first-person oriented genericity’, does the first-person orientation shift from the speaker to the attitude holder? Secondly, we can

consider impersonal pronouns like German *man*, Italian *si* and French *on*, which have a broader distribution. These pronouns let us probe what happens in attitude reports that have an episodic flavour: are they anaphoric on the attitude holder? I will consider each of these questions in turn.

Moltmann (2010a) argues that the behaviour of generic *one* under epistemic predicates provides evidence that it is shiftable. Consider (20).

20. John found out that one can see the picture from the entrance.

[Moltmann (2010a): 448, ex (19a)]

Moltmann argues that for this sentence to be true, it is sufficient for John to have gone to the entrance and seen the picture for himself. The same seems to hold for impersonal *you*:

21. John found out that you can see the picture from the entrance.

By contrast, Moltmann claims that (22) can only be true if John has used other ways to establish that others can see the picture from the entrance.

22. John found out that people can see the picture from the entrance.

[Moltmann (2010a): 488, ex (20a)]

I disagree with Moltmann's judgment here. Suppose that we are preparing for an exhibition opening and have decided that we don't want visitors to be able to see the picture from the entrance - perhaps because if they can, then they will pause to admire it, blocking the doorway. John stands in the entrance and finds that he can see the picture. Assuming that John is not relevantly different from the typical visitor (he has reasonably good eyesight, is of average height, etc), it seems that he can say to us, 'Oh no! The picture is visible from the entrance.' Moreover, we can report to others, 'We have a problem. John's found out that people can see the picture from the entrance.'

We are again on tricky territory involving modals, as well as bumping up against the notoriously difficult question of how much, and what kind of evidence is required to verify a generic claim (see eg Carlson 1995; Cimpian et al. 2010). Let's see if it helps to return to our marathon cases:

23a. John found out that one feels/you feel exhausted after running a marathon.

23b. John found out that people feel exhausted after running a marathon.

Building on the conclusions of the last section, we can ask whether (23a) suggest that John ran a marathon, and whether (23b) suggests that John's information is obtained by some route other than running a marathon himself. I am uncertain of my intuitions here; I suspect that (23a) naturally call to mind a scenario where John runs a marathon, but that this may not be the *only* scenario where the sentences are felicitous. Matters become clearer, however, if we modify the embedding predicate with *first-hand*:

24a. John found out first-hand that one feels/you feel exhausted after running a marathon.

24b. John found out first-hand that people feel exhausted after running a marathon.

Like *in my experience*, *first-hand* contributes information about how a piece of information was obtained: the epistemic basis must be some form of first-hand experience. As with *in my*

experience, however, it is left underspecified what exactly this experience might involve. Again, the choice between impersonal pronoun and *people* bridges this gap: in (24a), the source of John's information must be his own experience of running a marathon. In (24b), it could be that John witnessed others' exhaustion while observing from the finish line. Thus we again have evidence for impersonals imposing an anchoring to first-person experience of a particular kind. Crucially, in the case at hand the relevant experience is the attitude holder's rather than the speaker's. I take this as evidence in favour of Moltmann's conclusion that generic *one* (and impersonally used *you*) support a shift in perspective from speaker to attitude holder.

Turning to the second question, cross-linguistic data provide some evidence for shifting behaviour by impersonals in cases where the content of the reported attitude is episodic rather than generic. Consider the following example from Kratzer (1997).

25. Man erzählte uns, dass einem Unrecht geschehen war
 MAN told us that MAN(dat.) injustice happened had

'They told us that they had been treated unfairly.'

[Kratzer (1997): 12, ex (3)]

The embedded clause in (25) concerns an episodic rather than a generic claim. This makes it easier to test whether the embedded impersonal is anchored to the perspective of the attitude holder: since a different meaning altogether would be generated by replacing the impersonal with *people*, the question of how to detect a difference in meaning between the sentence and a counterpart with *people* does not arise. Instead, the embedded pronoun is anaphoric on the attitude holder. I take it then that German *man* also shows a connection to the first-person. Similar observations hold for *si* in Italian (Malamud 2006). There seems to be a dialect split here however: Malamud notes that *man* and *si* are only shiftable in certain dialects of German and Italian. Moreover, the French impersonal *on* does not undergo shift:

26. Les professeurs se sont dit qu'on a passé ce
 The professors REFL have said that.ON have passed this
 Noël entièrement a la maison
 Christmas entirely at the house

'The professors said to themselves that we/people spent this Christmas entirely at home.'

[Malamud (2006): 104, ex 188a]

This is an area of cross-linguistic variation: in some dialects of some languages, impersonal pronouns are anaphoric on the attitude holder in reports of attitudes whose content is episodic rather than generic. In other dialects and languages they are not. I refer the reader to Malamud's work (Malamud 2006, 2012) for a more in depth look at the typology of this domain.

Note that the claims discussed in this section are relatively weak: I have considered only whether embedded impersonal pronouns *can* depend on the the attitude holder's perspective, not whether they *must*. Indeed, an example based on Moltmann (2006) provides evidence that this shift is not obligatory in attitude reports with generic *one*:

27. After the holidays, every friend one meets notices that one has gained a lot of weight.

[Based on Moltmann 2006: ex 44b]

The same goes for impersonal *you* in this environment:

28. After the holidays, every friend you meet notices that you have gained a lot of weight.

It seems then that in attitude reports some impersonals support, but do not require, a shift to the attitude holder's perspective.

4. De se interpretation

Given the possibility of anchoring the interpretation of (some) impersonals to the perspective of an attitude holder, it is natural to ask whether such an interpretation obligatorily requires *de se* construal of the pronoun. As a reminder of what *de se* construal is, consider (29).

29. John found out that he felt exhausted after running the London marathon in 1956.

Suppose that in his old age and with a failing memory, John comes across a diary that he wrote when he was a much younger man. His name appears nowhere on the volume, and he no longer recognises his handwriting as his own, nor the experiences reported as events that he participated in. He comes to an entry recording his experience of running a marathon, and how he felt afterwards. From this John learns that the author of the diary felt exhausted afterwards. Is (29) a true report of what happened? Yes and no. On the one hand, he did not acquire a piece of information that he could relate by saying, 'I felt exhausted after running the London marathon in 1956'. One might consider this grounds to judge the sentence false. On the other hand, he did find out that the author of the diary felt exhausted after running the marathon, and the author of the diary was John himself. Perhaps these two pieces of information are jointly sufficient grounds to judge the sentence true.

I take it that (29) is ambiguous: call the reading on which it is false in the scenario described the *de se* reading; the reading on which it is true is the *de re* reading. On the former reading, *he* is read *de se*, while on the latter reading, it is construed *de re*.

Ordinary pronouns, then, are ambiguous between *de se* and *de re* readings. In addition, some forms only allow *de se* readings. These include obligatorily controlled PRO (Chierchia 1990) and (at least some) shifted indexicals (eg Deal 2020). We can think of *de se* construal as encoding the perspective of the attitude holder in a way that is peculiarly first-personal. Recall that for (29) to be true on its *de se* reading, John would have needed to acquire a piece of information that he could express with the first-person pronoun. In the scenario in question, he instead thinks of himself in a *third*-personal way. *De se* attitudes are those attitudes that are about the attitude holder, where the attitude holder thinks about herself in a distinctively first-personal mode.

Let's then consider whether impersonals are *obligatorily* read *de se* in attitude reports. I will consider data from Moltmann's and Malamud's work that bear on this question.

First, Moltmann considers the interpretation of generic *one* below the verb *remember*, comparing it to that of PRO in this environment. Consider (30).

30a. Only Churchill remembers PRO giving the Blood, Sweat and Tears speech.

30b. Only Churchill remembers his giving the Blood, Sweat and Tears speech.

[Fodor (1975)]

Assume that (i) Churchill was the person who gave the Blood, Sweat and Tears speech and (ii) he remembers doing so. No further information is needed to establish that (30a) is true: for any action A, the only person who can remember A-ing is the agent of A. But this is not so for (30a)'s counterpart where PRO is replaced with an ordinary pronoun: in a scenario where (i) and (ii) hold and furthermore Attlee remembers Churchill's giving the speech, (30b) is false. Thus when *remember* takes a gerundive complement with PRO as the subject, it obligatorily reports remembering 'from the inside' (Vendler 1979; Recanati 2007).

Moltmann investigates whether generic *one* behaves like PRO in this respect.

31a. If one gives a speech, no one but oneself can remember PRO giving that speech.

31b. If one gives a speech, no one but oneself can remember one's giving that speech.

[Moltmann (2006): 273, ex 46]

She notes that (31a) is a tautology, but (31b) is contingent. Let me add also that impersonally used *you* patterns with *one* in this regard.

32. If you give a speech, no one but yourself can remember your giving that speech.

This is evidence that when *remember* takes a gerundive complement with generic *one* or impersonal *you* as subject, it needn't report a remembering from the inside. Moltmann takes the behaviour of PRO revealed by (30a) and (31a) to follow from the de se nature of PRO, and concludes that generic *one* is not obligatorily de se. (Malamud 2012 reaches the same conclusion, based on similar data.)

While the contrast between (31a) vs. (31b) and (32) is worth trying to understand better, it does not seem to me to constitute conclusive evidence that generic *one* (or impersonal *you*) lack de se readings. Let's add the following sentence to our data set.

33. Churchill remembers that he gave the Blood, Sweat and Tears speech.

Suppose that in old age, Churchill forgets his own name (and the things he did when younger). He does however remember (based on his reading of history books) that the Blood, Sweat and Tears speech was given by someone by the name of Churchill. Then there seems to be a sense in which (33) is true, and a sense in which it is false: *he* shows the familiar de se/de re ambiguity. Now suppose that Churchill learns that he is the figure 'Churchill' who figures in the history books that he read. This piece of information may fail to help Churchill recall the *experience* of giving the Blood, Sweat and Tears speech, and yet there would no longer be a reading of (33) on which it is false. Indeed, in this scenario, (34) is true.

34. Churchill remembers that he gave the Blood, Sweat and Tears speech, but he does not remember PRO giving it.

In (34) *his* is read de se, but its interpretation is not equivalent to that of PRO; if it were, (34) would be contradictory. This shows that there are de se readings that do not require remembering from the inside. Do impersonals obligatorily receive such readings?

It seems that they do not. To see this, let's again revert to a scenario where Churchill has forgotten his own name, along with the earlier experiences of his life. Now imagine that one of the pieces of information that he acquires from books is that Churchill was a great orator. Not knowing that he is the person who the historians describe, this knowledge does not produce a feeling of pride. I will also stipulate that if someone believes de se that they are a great orator, this is inevitably accompanied with a feeling of pride. (It doesn't matter if this is a realistic assumption or not; I merely ask the reader to assume it for now, in order to isolate the de re reading in what follows.) In this situation, we might say:

35. The Churchill story shows that it is possible for someone to think that they are a great orator without experiencing any pride.

What renders (35) true is the possibility of someone having a de re belief that he or she is a great orator. Thus *they* is construed de re. We can use this set up to check whether generic *one* and impersonal *you* have de re readings too:

36. The Churchill story shows that it is possible to think that one is/you are a great orator without experiencing any pride.

These sentences have a true reading too. So I conclude that generic *one* and impersonal *you* allow de re readings.

As in the last section, we can distinguish the behaviour of impersonals in attitude reports involving *generic* contents from that in *episodic* contexts. Regarding the latter case, Malamud (2006) claims that German *man* lacks a de re reading:

37. Scenario:

A certain class has no T.A., so Hans must do both the lecturer's and the assistant's work, like grading homeworks. Hans goes to a happy hour one evening, where all the professors and T.A.s are gathering. He gets drunk, forgets that he himself is the grader, and asks someone, who is the grader for my course? His interlocutor, being tongue-in-cheek, points to Hans's reflection in the bar mirror, and says, that guy. Hans is very drunk, and he doesn't realize that his interlocutor pointed to a reflection. He says "The comments on all of the homeworks are very good and detailed this term – this guy, my course assistant, works very hard!"

[Malamud (2006): 105, ex 191a]

Malamud reports that the following sentence is judged false in this scenario.

38.	Hans	sagte,	dass	man	als	Assistent	für	den	Kurs	sehr
	Hans	said	that	MAN	as	assistant	for	the	course	very
	viel	arbeiten		muss.						
	hard	work		must						

'Hans said that as a course assistant he must work very hard.'

[Malamud (2006): 105, ex 189a (my translation)]

This seems to suggest that when *man* is obligatorily de se, at least when embedded in an episodic context in an attitude report. Malamud takes up the question of de re construal of *man* again in

Malamud (2012), this time with more caution: she mentions that she was unable to elicit reliable judgments on this question from speakers (Malamud 2012: 31, fn. 48). This is an area where further empirical investigation is needed.

Let's summarize the findings of this section. We have seen that generic *one* and impersonal *you* differ from the paradigmatically de se element PRO in two respects. Firstly, we presented evidence from Moltmann (2006) that when embedded below *remember*, *one* does not require that the sentence reports a remembering 'from the inside'; we also showed that this goes for impersonally used *you*. Second, by looking at a scenario involving 'mistaken identity' about the self, we argued that generic *one* and impersonally used *you* are not obligatorily read de se. We also saw some preliminary evidence from Malamud's work that de re readings may be unavailable with German *man*. This may be an area of cross-linguistic variation in the interpretation of impersonals, although further work is needed to investigate this thoroughly.

5. Impersonally used first- and second-person pronouns

In this section, I consider another way that impersonals introduce speaker perspective, focusing particularly on impersonal uses of first and second person pronouns. Recall that it is cross-linguistically relatively common for second-person pronouns to have impersonal uses (Alonso-Ovalle 2002, Malamud 2006). Additionally, Zobel (2014) calls attention to impersonal uses of first-person pronouns. Each of these cases introduces additional information about the speaker's perspective on the content of the sentence.

I will start off with the more familiar case of impersonally used second-person pronouns. We saw in section 2 that *you* in English behaves like generic *one* with respect to 'inference from the first person'. We also saw that like *one*, it can shift to the perspective of the attitude holder in attitude reports, but that this is not obligatory, and nor does it force a de se reading. Next, I will consider evidence that impersonally used *you* introduces a further role for speaker perspective, that goes beyond what we find with dedicated impersonal pronouns.

Previous authors have argued that second-person impersonal pronouns are typically used in contexts where the speaker expects ready agreement from the addressee regarding the content of her assertion (Kitagawa and Lehrer 1990; Malamud 2006; Zobel 2014). I illustrate this with the following example, involving an impersonal use of the German second-person pronoun *du*.

39. Context: During an interview, the coach of the German ice hockey national team talks about the frequent and regular occurrence of situations in which weaker teams beat stronger teams in professional sports. He argues that these situations will continue happening, and cannot be prevented. He says that in a match, being the stronger team never guarantees a victory, and continues with:

Du	musst	als	Mannschaft	einfach	mehr	gewinnen	wollen	als	der
You	must	as	team	simply	more	win	want	than	the

Gegner.
Opponent

'As a team your wish to win simply has to be greater than your opponent's.'

[Zobel (2014): 51, 97 (naturally occurring example)]

Zobel notes that the speaker takes it that there is ample evidence that being the stronger sports team is not on its own enough to guarantee success, and that in the context given, the speaker does not expect the interviewer or any other party to question the content of her assertion. However, she also observes that while this presumption of agreement is a common feature of the contexts where impersonal *du* is used, it is not a necessary one, as shown by (40).

40. Context:

Discussion about a news item: a 10-year-old Belgian girl is pregnant. The father is her 13-year-old friend. B thinks the parents did not observe their duty of supervision.

A: Ich meine - du kannst dein Kind ja nicht auf Schritt und
 I mean you can your child PART not wherever-he/she-
 Tritt verfolgen.
 Goes follow

‘I mean, one can’t always follow one’s child around.’

[Zobel (2014): 52, ex 98]

Here, use of *du* is felicitous even though it is already common ground that B blames the parents for what has happened. Zobel argues that here, A tries to change B’s mind by appealing for empathy with the girl’s parents. That empathy or putting oneself in others’ shoes is involved in the interpretation of impersonally used personal pronouns is a recurring theme in the literature on this topic (Malamud 2006, 2012; Zobel 2014). My intuition is that in English, the speaker’s goal in using *you* impersonally seems to be to create solidarity or a kind of conspiracy between speaker and addressee; in line with Zobel’s discussion, this might serve to either presume or invite agreement on the part of the addressee.

Now let’s turn to impersonally used *ich* – the German first-person pronoun. Zobel shows that this use is licensed only in contexts where the content of the sentence conflicts with the views or actions of some salient individual. Here is another example, taken from a discussion on an online forum.

41. How much money does one give as a present at a wedding?" - The initial question is whether 100 euros is enough. One user argues that it is customary to adjust the amount of money to the size and cost of the wedding party held by the bridal couple. With the following utterance, another user takes issue with this claim:

Ich find das ist ein total doofes Argument! Ich kann doch als
 I think this is a totally stupid argument I can PRT as
 Brautpaar nicht von meinen Gästen erwarten, dass sie mir
 Bridal-couple not from my guests expect that they me
 quasi die Feier finanzieren!
 More-or-less the party finance

‘I think this is an absolutely stupid argument! The bridal couple can’t expect their guests to more-or-less pay for the party!’

[Zobel (2014): 49, ex 93]

As indicated by the first sentence, the author of the comment strongly disagrees with the person she is responding to. Unlike with impersonal *du*, Zobel observes that with *ich* the requirement that the speaker have certain presumptions about the views of her interlocutors is a hard and fast one. Thus she notes that impersonal *ich* would be infelicitous in the example below.

42. Context: Reporting the rules of football/soccer as established by the International Football Association Board to an interested public.

#Ich	kann	als	Spieler,	der	vor	Spielbeginn	des	Feldes	verwiesen
I	can	as	player	who	before	match-start	the	field	expelled
wird,	nur	durch	einen	gemeldeten	Auswechselfpieler	ersetzt	werden.		
am	only	by	a	registered	substitute	replaced	get		

‘A player who is expelled from the field before the start of the match can only be replaced by a registered substitute.’

[Zobel (2014): 50-1, ex 96]

A goal for future work is to build on Zobel’s detailed investigation of German to establish (i) which other languages have an impersonal use for the first person pronoun and (ii) whether such uses conform to the generalizations discovered by Zobel. For now, I take it that in addition to inducing the perspectival effects discussed in previous sections, impersonal first- and second-person pronouns generate inferences concerning the speaker’s point of view on the topic under discussion. In doing so, they serve to enable the speaker to adopt a particular standpoint of either closeness or distance with respect to other stakeholders in the discussion.

6. Formal analyses

So far I have been concerned purely with description: I have said very little about the formal analysis of impersonals. In this section, I will highlight what I take to be four major themes in previous semantic approaches to this topic.

First is the question of whether impersonal pronouns are definites (Kratzer 1997; Alonso-Ovalle 2002; Safir 2004) or indefinites (Chierchia 1995; Malamud 2006¹; Zobel 2014). On the latter view, they are variables that do not carry quantificational force of their own, but rather are bound by operators elsewhere in the clause (Chierchia 1990). In generic sentences, the binder is the generic operator GEN. Some impersonals, such as generic *one*, are obligatorily bound by this operator, and consequently cannot occur in episodic contexts (Malamud 2006, Moltmann 2006). Others, such as Italian *si*, carry no such restriction; they can occur in episodic contexts, in which case they are existentially bound. A simplified analysis of a generic *one* sentence might then be:

43a. One can see the picture from the entrance.

43b. GEN_x [x is at the entrance] [x can see the picture]

¹ Malamud proposes that some of the elements that she calls ‘arbs’ (arbitrarily interpreted pronouns) are definite, while others are indefinite. She locates the dedicated impersonal pronouns and impersonally used personal pronouns discussed in this article in the latter category.

Many of the treatments of impersonals and perspective that have been proposed in the literature have been couched within this type of approach. For instance, it serves as the theoretical backdrop for the second theme: the notion of *empathy* or putting oneself in the shoes of others. This is relevant to observations concerning ‘inference from the first person’: Moltmann analyses this as involving generalization over individuals who the speaker (or attitude holder) takes herself to be similar to in relevant ways. This enables generic *one* (and possibly other impersonals) to be used to articulate generalizations based on first person experience. For Moltmann, this is modelled in terms of a relation *I* between individuals, defined as follows.

44. $I(x, y)$ iff x identifies with y

If impersonals are Heimian indefinites, then we can think of this relation as part of the descriptive content associated with the indefinite. This restriction introduces two individual variables: the first is abstracted over by a lambda binder at the left periphery of the clause, while the second gets bound by GEN. We thus enrich the representation in (43b) above as follows.

45a. One can see the picture from the entrance.

45b. $\lambda x. \text{GEN}_y [I(x,y) \ \& \ y \text{ is at the entrance}] [y \text{ can see the picture}]$

On this view, impersonal *one* sentences are properties rather than propositions, and self-ascribed by the speaker. So in (45a), the speaker self-ascribes the property of being an x such that for every situation s and individual y such that x identifies with y and y is at the entrance in s , y can see the picture in s .

We find echoes of the *I* relation in Malamud’s (2006) notion of *persona*. She makes use of this for the analysis of second person pronouns, which we saw in section 5 are another case where empathy plays a role. Similarly, in chapter 2 of Zobel’s dissertation, she builds on Nunberg’s (1993) work on indexicality to propose that all personal pronouns involve a relation *R*, whose value is supplied by the context; impersonal uses arise when *R* takes Moltmann’s *identify with* relation as its value. (Zobel ultimately rejects this analysis in subsequent chapters, however.)

The third theme is the encoding of de se ascription. According to an influential view, de se attitude attributions report self-ascription of a property by the attitude holder; if Churchill believes de se that he gave the Blood, Sweat and Tears speech, then he self-ascribes the property of having given that speech (Lewis 1979). This can be implemented by positing a lambda abstractor in the left periphery of the embedded clause that binds the pronoun (Chierchia 1990). This comports well with Moltmann’s account, where the subject of the *identify with* relation is a lambda abstracted variable. In (45b) the binder of this variable is a root left operator. In attitude reports, it is an operator at the left periphery of the embedded clause:

46a. Ela thinks that one can see the picture from the entrance.

46b. Ela thinks $[\lambda x_1 [one_1 \text{ can see the picture from the entrance}]]$.

46c. Ela self-ascribes the property: $\lambda x. \text{GEN}_y [I(x,y) \ \& \ y \text{ is at the entrance}] [y \text{ can see the picture}]$

This analysis derives the shift in perspective from speaker to attitude holder discussed in section 3. However, it also appears to predict that the dependency between pronoun and attitude holder is necessarily de se – an undesirable outcome in light of the discussion in section 4. Here the *identify with* relation may come to the rescue: on Moltmann’s analysis, the subject of the *identify with* relation is the attitude holder’s de se counterpart x , but x is not (necessarily) the agent of the event described by the embedded clause. This is instead those individuals y who x identifies with. Assuming that this relation is reflexive, this set will include, but not be limited to x herself.

Conceivably, the set could also include the attitude holder, without the attitude holder being aware of this fact. I leave it to future research to determine whether this is sufficient to account for de re readings of impersonals.

Turning to the de se/de re distinction in episodic cases, Kratzer (1997) proposes that German *man* has an indexical core that undergoes de se binding in attitude reports. This yields the shift to the attitude holder observed in (25), repeated below.

47. Man erzählte uns, dass einem Unrecht geschehen war
 MAN told us that MAN(dat.) injustice happened had

‘They told us that they had been treated unfairly.’

[Kratzer (1997): 12, ex (3)]

48. [MAN told us [λx_1 [injustice had happened EINEM₁]]]

If binding is taken to be necessary for *man* to be anaphoric on the attitude holder, then the analysis seems to predict that it must be read de se in episodic reports; we saw in section 4 that Malamud (2006) provides preliminary evidence that this prediction is borne out.

Finally, previous researchers have taken up the question of the division of labour between semantics and pragmatics in the analysis of impersonals. Is first-person perspective encoded at the level of semantics or pragmatics? On the Moltmann-style analysis sketched in (45b), the anchoring to the first person is provided by the *identify with* relation. This relation is part of the restriction of the generic operator, thereby contributing to the semantics of the sentence. But (45b) glosses over a further aspect of Moltmann’s analysis: the appeal to so-called ‘qua-objects’. These are objects that have been invoked for the analysis of *as*-phrases, as in the following:

49. As a student, Ela is excellent.

Arguably, the *as*-phrase does not contribute to the truth conditions of this sentence, but merely indicates the particular aspect of Ela that the speaker is considering – that is, that Ela *qua* student is excellent. Moltmann takes this to be the level of meaning at which the *identify with* relation plays a role.

Zobel (2014) also considers semantics/pragmatics boundary issues. She argues that dedicated impersonal pronouns contribute both at-issue and not-at-issue meaning. On the at-issue level, they are Heimian indefinites, and are bound by GEN in generic statements. Thus the at-issue content of (43a) is roughly as in (43b). Zobel assumes that this is also the at-issue content of generic statements formulated with *man* and impersonally used *ich* and *du*. Additionally, she proposes that each of these contribute not-at-issue meaning that she paraphrases as ‘the speaker’s actual or simulated beliefs are such that he does not, or would not exclude himself from the set of people to which the generalization applies.’ Moreover, given her observations on the additional implications introduced by impersonally used *ich* and *du*, she proposes that (i) *ich* also carries the not-at-issue meaning ‘the speaker...has grounds to believe that the validity of the regularity expressed by his utterance, which he fully supports, may not be supported, or adhered to by others; and (ii) *du* signals that ‘the speaker invites the addressee to simulate the necessary experiences, and to come to the same conclusion as the speaker with respect to the validity of the regularity expressed by the sentence’ (Zobel 2014: 274). Her analysis adopts the approach to genericity proposed in Drewery (1998); I refer the reader to Zobel’s work for details.

7. Conclusion

I have examined recent findings concerning the role of first-person perspective in the interpretation of impersonal pronouns. This aspect of the meaning of these expressions makes its present felt with respect to (i) first-person experience inferences ('inference from the first person'), (ii) shift to the perspective of the attitude holder in attitude reports, (iii) the *de se/de re* distinction, and (iv) speaker-oriented meanings of impersonally used personal pronouns. We have also seen that previous work on the semantics and pragmatics of impersonals attempts to capture these observations by appealing to (i) notions of empathy, personas or identification, (ii) a mechanism of *de se* binding, and (iii) a division of labour between semantics and pragmatics. I close by highlighting two outstanding issues for future research.

First, inference from the first person needs to be better understood. In Moltmann's pioneering work in this area, we saw that this is regarded as only *one* class of case in which use of an impersonal pronoun is appropriate. If in addition there are cases involving simulation rather than actual first-person experience, it becomes difficult to identify regularities or constraints governing the use of pronouns like generic *one*, or to distinguish their use from other generic noun phrases such as *people*. This difficulty is exacerbated by the fact that genericity involves quasi-universal quantification: the task is then to show that the inferences in question (i) are associated with the first-person but not the third-person, and (ii) arise with impersonals but not with other generic NPs. The peculiar behaviour of impersonals when combined with experiential predicates seems a promising tool for establishing robust generalizations in this area.

Second, we would like to understand better whether some impersonals are obligatorily read *de se*. In light of the discussion of English and German data in section 4, a related question is whether this is an area of cross-linguistic variation, and if so, how to account for it. These questions appear to be particularly difficult given that testing for *de se/de re* ambiguities is notoriously difficult (see author in preparation for some methodological considerations and suggestions). Moreover, any cross-linguistic variation in the availability of *de re* readings poses an acquisition puzzle: given that the scenarios where *de se* and *de re* readings can be pulled apart are highly unusual, it is unlikely that input to acquisition includes reliable evidence regarding the (un)availability of *de re* readings (cf. Pearson 2015). We should then ask what other grammatical properties are correlated with the (un)availability of *de re* readings of impersonal pronouns. Such correlations might serve as indirect evidence to the acquirer, perhaps enabling setting of something like a semantic parameter. Given the outcome of our discussion of English and German, a tentative hypothesis is that impersonals are obligatorily *de se* if and only if they are licensed in episodic contexts. Considerably more descriptive and analytical work is required before firm conclusions can be drawn, however.

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