'You do it Like This!': Impersonal Pronouns, Habituality, and Default Reasoning

This paper explores the puzzling interpretations of some sentences containing impersonal pronouns: in certain cases, these sentences seem to express a mixture of prescriptive and statistical generalisations. For example, sentences like "You make coffee like this" or "At a Jewish funeral, one wears a kippah" seem to make both a statistical claim, saying that certain behaviour is frequent or common, and a prescriptive claim, saying that certain behaviour is good or correct.

However, the distribution of mixed interpretations is quite complex: various sentences with impersonal pronouns do not show this mix of statistical and prescriptive. For example, some sentences with modals ("You can see the Eiffel Tower from here"), adverbial quantifiers ("When falling in a vacuum, you usually accelerate at 32 ft/sec/sec"), or in which the impersonal pronoun is co-indexed with PRO ("It is very difficult PRO to dance gracefully while holding one's dog") do not receive a prescriptive meaning. Conversely, sentences like "Now *that's* how you write a novel" does not make a statistical claim. The distribution puzzle deepens further when considering other kinds of sentences with modals that do permit a mixed reading, such as "In Oxford, you might wear gowns at high table (although I am no expert)".

Our aim is to explore the use of impersonal pronouns in sentences that communicate both statistical and prescriptive information, a phenomenon that we believe touches on deep questions about human cognition. This is because the characteristic blend of prescriptive and descriptive information that we find in our target cases has also been found in judgments about generics, modality, and normality. We will suggest that our target phenomenon may form a natural class with these other ones, in that they all represent something like a default mode of reasoning: while certain generics express people's default way of making generalizations about categories (Leslie 2008), certain modals express people's default way of thinking about possibilities (Phillips 2018), and certain normality claims express default reasoning about something like scales (Bear & Knobe 2017), we will suggest that certain uses of impersonal pronouns can express people's default way of reasoning about actions. Moreover, we will offer an account that explains the distribution and absences of mixed readings.

In our first experiment, we looked at the intuitions of German-speakers (N = 794) regarding sentences using the German impersonal pronoun *man*. All participants were asked to imagine a place called 'Daxland' and an activity called 'tralling.' Participants were then given five statements that a speaker might make about tralling in Daxland. Two of the statements made straightforwardly statistical claims about the proportion of people who trall in Daxland, two made straightforwardly prescriptive claims about whether or not one should trall in Daxland, and one made a claim using an impersonal pronoun: 'In Daxland, one [*man*] does not trall.'

Each participant was randomly assigned to receive one of six questions about the statement. Three of the questions asked about the degree to which the statement was statistical, while three asked about the degree to which the statement was prescriptive. We used the mean of the three statistical questions as a measure of the overall degree to which a statement was statistical and the mean of the three prescriptive questions as a measure of the overall degree to which a statement was prescriptive. Figure 1 shows the five statements plotted in the resulting two-dimensional space. Analyses revealed that the statement with the impersonal pronoun was rated as significantly more statistical than any of the straightforwardly prescriptive statements and also as significantly more prescriptive than any of the straightforwardly statistical statements. In other words, the statement with the impersonal pronoun was rated as both statistical and prescriptive.

In a second study (N = 620), we compared sentences with impersonal pronouns to sentences with generics. Some participants received a bare plural generic ('In Daxland, people don't trall'), some received an indefinite singular generic ('In Daxland, a person does not trall'), and some received a sentence with an impersonal pronoun, as in the previous study. Figure 2 displays the results. Analyses revealed that the bare plural generic was rated as significantly more statistical and significantly less prescriptive than the sentence with an impersonal

pronoun. By contrast, there were no significant differences on any measure between the indefinite singular generic and the sentence with an impersonal pronoun.
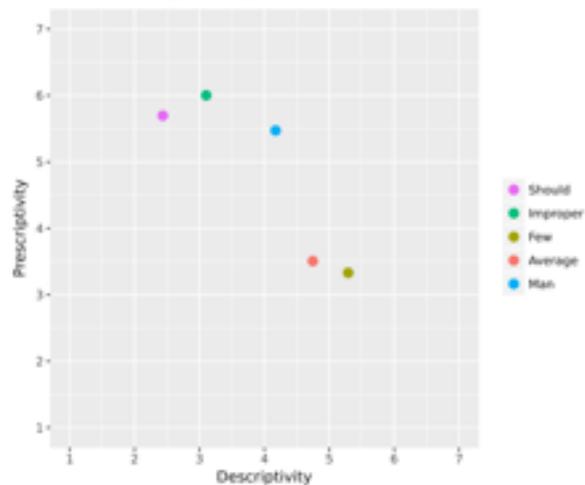
Figure 1
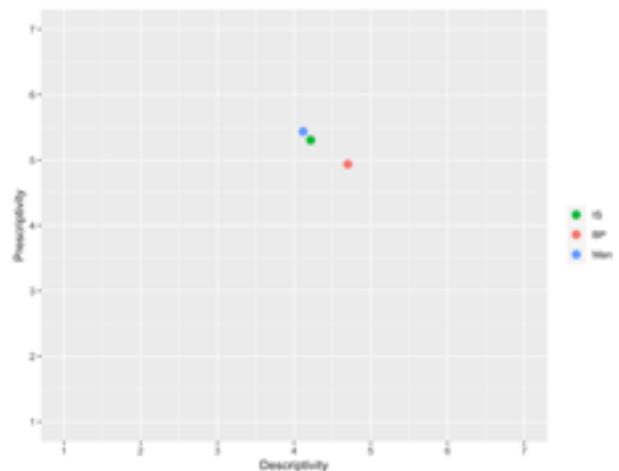
Figure 2

The upshot of these experiments is that our target uses of sentences involving impersonal pronouns combine statistical and prescriptive information and that they do so in a way that is strikingly similar to 'a person' generics. This suggests that our target uses of sentences with impersonal pronouns may likewise express a kind of default reasoning, in particular, about *actions*. Three observations support this kind of connection. First, the distribution of impersonal pronouns suggests a connection with action: impersonal pronouns sound fine in sentences about action (e.g., "This is how you make coffee", "In England, you drive on the left"), whereas sentences with impersonal pronouns involving emotions, knowledge, or bodily states sound strange (e.g., '#You have a nose', '#In Russia, you have a lot of knowledge of poetry'). Second, the fact that sentences with impersonal pronouns are not closed under logical entailment is explained by the close connection: that 'In England, you drive on the left' does not entail 'In England, you have a car', even though driving on the left requires having a car is explained by if the non-actionality of the latter sentence rules it as unacceptable. Third, subtle but important contrasts between 'a person' generics and 'man' sentences (e.g., "#You have a nose" and "A person has a nose") is well-explained by maintaining that, while indefinite singular generics call on a default way of reasoning about categories, our target uses of sentences with impersonal pronouns call on a default way of reasoning about actions.

A full account of the phenomenon in question would connect the present discussion about impersonal pronouns together with the larger topic about defaults that also applies to modals and generics. Furthermore, it should explain why certain interpretations of expressions, such as modals, block these mixed readings, while others do not. As a promissory note, we sketch out an account of these facts according to which the main factor responsible for these patterns is structural. More specifically, our proposal is that sentences involving impersonal pronouns receive a mixed reading as default, when they also involve the imperfective/habitual aspect. We propose that the positions in which modals can appear pattern with the acceptability of impersonal sentences: epistemic interpretations, where the modal appears right above Tense, receive a mixed reading, whereas root interpretations, where the modal appears right above the VP, do not. We believe that the strategy that we deploy here, namely, that of identifying structural features of the sentences and locating points of conflict for a mixed interpretation, can be generalised to other sentences in (5) and (6) that do not receive a mixed reading.

References

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