Non-standard Uses of German 1st Person Singular Pronouns*

Sarah Zobel

Georg-August Universität Göttingen, 37073 Göttingen, Germany szobel@gwdg.de

Abstract. The purpose of this paper is to shed light on a phenomenon concerning the German first person singular pronoun *ich* which challenges the standard view on the semantics of first person singular pronouns, i.e. that they are always speaker-referential. The presented data shows a non-standard use of first person singular *ich* which I analyze to have a similar semantics to the German impersonal (generic) pronoun *man*. The analysis for non-standard *ich* is shown to be modifiable to also model the deictic use of *ich*. Finally, I bring up some related problems that merit further investigation.

1 Introduction

The purpose of this paper is to shed light on a phenomenon concerning the German first person singular pronoun ich which challenges the standard view that the semantics of first person singular pronouns is as in (1).

(1) $[pronoun_{1PSq}]^c = c_S$ where c_S is the speaker of the context c^1

The core of the standard semantics is - in short - that a first person singular pronoun expresses speaker-referentiality. Keeping this in mind, consider the colloquial German data in (2) and (3).

- (2) Wenn **ich** als Mannschaft gewinnen will, dann muss ich motiviert auf if I as team win.inf want then must I motivated on den Platz gehen.
 the field go.inf
- (3) Ich muss als Fußballnation eine solche Mannschaft dominieren können. I must as soccer-nation a such team dominate can

^{*} I thank Dirk Buschbom, Eva Csipak, Ilaria Frana, Magdalena Schwager and Arnim von Stechow for their comments on various versions of this paper. Thanks also go to Thomas Graf for discussions on the data. All mistakes are of course my own.

¹ Malamud [17] explicitly assumes the standard semantics in (1). Kratzer [10] proposes that first person singular pronouns are composed from the two meaningful features [1st] and [singular], which also amounts to saying that first person singular pronouns refer to a unique speaker of a context.

K. Nakakoji, Y. Murakami, and E. McCready (Eds.): JSAI-isAI, LNAI 6284, pp. 292–311, 2010.

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Even though both sentences² include the German first person singular pronoun *ich*, neither of them can be understood as talking about the speakers directly (obviously neither of the two speakers thinks of himself as a soccer team or soccer nation). The only sensible interpretations possible for (2) and (3) are paraphrased in (4) and (5) respectively. I will call these paraphrases the *non-standard readings* of the sentences. An occurrence of *ich* in a sentence with a non-standard reading is said to be in its *non-standard use*.

- (4) If (one as) a team wants to win, then one/they has/have to enter the field motivated.
- (5) (The national team of) a "soccer nation" (i.e. a nation known for being good at soccer) has to be able to have the upper hand over a (contextually salient) team (eine solche Mannschaft).

Interestingly, neither (4) nor (5) talks about the speaker even though (2) and (3) contain tokens of the first person singular pronoun *ich*.

This paper attempts to answer the following questions: What is the semantic contribution of *ich* in the non-standard readings? Does this new data provide enough reasons to discard the standard semantics in (1)?

The paper is organised as follows. In Sect. 2, I present a possible analysis of the data and show why it should not be pursued. Section 3 offers a detailed data discussion. In the fourth section, I give a purely semantic formalization of the non-standard use for *ich*. I show that the proposed meaning for the non-standard use can be easily modified to capture the semantics of the standard speaker-referential use of *ich*. Section 5 concludes.

2 A Counterfactual Analysis?

Before I provide an in-depth data discussion of the non-standard uses of German *ich* (cf. Sect. 3), I argue against a treatment in terms of what I will call the *counterfactual hypothesis*. The starting point of the counterfactual hypothesis is to assume that (2) and (3) are in fact hidden counterfactuals with a meaning similar to the English counterfactuals given in (6-a) and (6-b). The rationale for this assumption is that by analyzing (2) and (3) as counterfactuals one could retain the standard semantics for *ich*.

- (6) a. If I were a team and wanted to win, I would have to enter the field motivated.
 - b. If I were a soccer nation, I would have to be able to have the upper hand over a team (of a contextually salient kind).

² Both pieces of data were taken with small modifications from discussions on the internet. (2) was taken from http://www.welt.de/print-welt/article532778/Schlechte_Argumente_fuer_den_Aufnahmeantrag_an_die_G_14.html and (3) from http://www.rp-online.de/public/article/sport/fussball/nationalelf/wm/744344/Die-deutsche-Mannschaft-muss-sich-steigern.html

However, there are at least three reasons why such an analysis should not be pursued.

First, consider (3). In contrast to example (2), the sentence in (3) is not an overt conditional. One would have to stipulate a covert *if*-clause that includes parts of the matrix clause, namely the *als*-phrase. In addition to that, the *als*-phrase would have to be analysed in both sentences as expressing non-factive predication. This is at odds with Jäger's [8] argument that *als*-phrases in this use contribute a factive, presupposition-like meaning.³

Second, example (2) is an indicative anankastic conditional (cf. [4]). Indicative mood in conditionals, as Stalnaker [27] observed, implies non-counterfactuality. Therefore, the mood of the verb can not contribute counterfactuality. In fact, there is no obvious part that could.

Third, the non-standard reading is actually unavailable for overt German counterfactuals.

(7) ?Wenn ich als Mannschaft gewinnen wollen würde, dann if I as team win want would.KONJ, then müsste ich motiviert auf den Platz gehen.

must.KONJ I motivated on the field go.INF

The German counterfactual in (7), which is the explicitly counterfactual version of the indicative conditional in (2), can only be understood in the marked context where the speaker alone constitutes a team: If I as a team would want to win, then I would have to enter the field motivated. So, overt counterfactuality actually blocks the non-standard reading that the counterfactual analysis is trying to draw on.⁴

However, counterfactuals with als-phrases containing semantically plural nouns like Mannschaft (team) do not always require marked contexts, as is illustrated by the following example taken from another soccer fanpage.

(8) Wenn **ich** das als Mannschaft von PSG mitbekommen if I that as team of Paris-St-Germain noticed hätte, wäre ich, glaube ich, aus Protest nicht angetreten. had.KONJ, would.KONJ I guess I out-of protest not played

³ Apart from this fact, the *als*-phrase can not be reanalysed to contribute counterfactuality since it is optional and not required for a sentence to get a non-standard reading (see Sect. 3.4).

⁴ It was suggested to me that this is not a good argument against the *counterfactual hypothesis* if one assumes that the counterfactuality is brought in by the pronoun itself. If that is the case, an overt counterfactual would contain an embedded counterfactual element. This stacking of counterfactuality could then be seen as the reason for the unavailability of the *non-standard reading*. Putting the counterfactuality inside the first person pronoun, however, takes away the initial motivation to pursue the *counterfactual hypothesis* in the first place, i.e. to retain the standard meaning for the indexical.

'If I had been the team of Paris St. Germain and had noticed what was going on, then, I guess, I wouldn't have played out of protest.'5

An in-depth exploration of why sentence (7) seems more marked than example (8) is out of the scope of this paper. As a first idea, the reason for (7) to be less acceptable is that it is impossible for the speaker as a single individual to win a soccer game. In example (8), on the other hand, the predicate *mitbekommen* ('notice') is also compatible with the speaker as a semantically singular subject.⁶

3 Data Discussion

3.1 Putting Things into Context

In order to get a feeling for the meaning and the use of sentences with a non-standard reading, it is important to take a close look at the contexts in which such examples surface. Out of the blue, the sentences (2) and (3) are very odd. It seems that, without the appropriate context, one prefers to interpret *ich* speaker-referentially.

The following two scenarios are constructed contexts that "trigger" the non-standard readings of (2) and (3).

Scenario 1: Imagine you are a soccer expert who is often consulted to evaluate games on TV. In the match you have just seen, the team that lost played weakly from the beginning since the players were obviously not motivated. During the evaluation of the game, the interviewer asks for your opinion as to why this team lost. You consider it entirely obvious what went wrong during that match. So, you answer the interviewer's question by uttering (9) (repeats (2)).

(9) Naja, wenn ich als Mannschaft gewinnen will, dann muss ich well if I as team win.INF want then must I motiviert auf den Platz gehen. motivated on the field go.INF 'Well, if (one as) a team wants to win, then one/they has/have to enter the field motivated.'

Scenario 2: Imagine again that you are a soccer expert. This time you are asked to evaluate an international match: Germany against Faroe Islands. Embarrassingly, Germany only won by 1-0. Right before the evaluation starts, you hear an interview with the coach of the German national team, who says that he is quite content with the his team's performance. You can not believe that the coach could be content with such a weak performance in light of the expectations that are usually placed on a national team of a country known to be good at soccer. So, when the interviewer asks you during the evaluation whether you share the coach's opinion on the match, you answer with (10) (repeats (3)).

⁵ http://www.roteteufel.de/archive/index.php/t-24375.html

⁶ I thank Magdalena Schwager (p.c.) for suggesting this line of argument to me.

(10) Nein, **ich** muss als Fußballnation eine solche Mannschaft dominieren no, I must as soccer-nation a such team dominate können.

can

'No, (the national team of) a "soccer nation" has to be able to have the upper hand over a team (of a contextually salient kind; *eine solche Mannschaft*).'

The two scenarios highlight the stance the speaker takes with respect to the interviewer's questions about the matches. In both scenarios, the use of *ich* in the answer signals that the opinion expressed is something that the speaker thinks is (or should be) unobjectionable.

What further corroborates the idea that the speaker considers the expressed proposition unobjectionable is the possible co-occurrence of the discourse particle doch. In the literature, this discourse particle has been analyzed as signaling a contradiction or inconsistency between two propositions (cf. for example [5], [7] and [16]).

Gast [5] argues that doch has the following two characteristic features: First, a proposition p containing doch is taken for granted by the speaker who also expects the addressee to take it for granted. And second, the speaker assumes that the addressee takes $\neg p$ for granted. Adopting a dynamic system in the tradition of Heim [6], he proposes that a sentence containing doch is used to eliminate contradictions from an input context to give a consistent output context.

In the data sample I collected for non-standard *ich*, *doch* occurs frequently and is in principle compatible with all of the collected examples. The data in (11), (12) and (14) in the following section show the compatibility of *doch* with non-standard *ich*.

- (11) Ich find das ist ein total doofes Argument! Ich kann **doch** als I think that is a absolutely dumb argument I can DOCH 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 pay 'I think this is an absolutely dumb argument! The bridal couple can't expect their guests to more or less pay the party!'⁷
- (12) Ich kann **doch** als Schiedsrichter in so einer Situation wie vor I can DOCH as referee in such a situation like before der Halbzeit keinen Elfmeter für Siegen geben. the half-time no penalty for Siegen give 'A referee can't give a penalty to Siegen in a situation as it occurred right before the half time.'8

 $^{^{7}}$ http://www.urbia.de/archiv/forum/th-2142726/Wieviel-Geld-zur-Hochzeitschenken.html

 $^{^8~\}mathrm{http://www.sportfreunde-siegen.de/content/view/893/16/}$

The second point demonstrated by the two scenarios is the "relation" between the context and the utterance. One can distinguish between two types of contextutterance pairs.

The first type is exemplified in (10). Scenario 2 provides a context for example (10) in which the prejacent of the highest scoping modal ('muss') is not true, i.e. the national team could not dominate the other team. This observation can be generalized for all analogous examples.

Consider also example (12). This sentence was uttered after a soccer match in which the referee gave a penalty shot to Siegen right before the half time. The sentence in (12) contains a negated possibility modal which is logically equivalent to a necessity modal taking a negated argument $(\neg \lozenge \phi \Leftrightarrow \Box \neg \phi)$. To give an analogous description of the relation between context and utterance to the one given for exmaple (10), one needs to consider the equivalent formulation with the necessity modal. In this case, the prejacent of the necessity modal $(\neg \phi)$ is not true in the context. The same reasoning applies to (11).

For (9) and analogous examples the situation is even more complicated. Most of the conditionals in the collected data contain a modal in the consequent. There are, however, some examples where the consequent contains only an indicative finite verb. This means that these two cases have to be differentiated⁹. Thus for conditionals like (9) containing a modal, it has to be said that the prejacent of the modal in the consequent is false in the context, whereas for conditionals without a modal the consequent - as it is - is not true in the context. In the case of (9), the team in scenario 1 was unmotivated from the beginning which contradicts the prejacent, i.e. that the team enters the field motivated.

What has been said up until this point suggests that sentences containing non-standard *ich* express an opinion or expectation of the speaker's that has not been met in the context. The criteria for "not having been met in the context" are unfortunately hard to grasp. For the examples of the second type, it seems to suffice that the speaker thinks that someone does not share his or her opinion.

Example (13), illustrating the second type, is taken from a forum discussion about the political correctness of a funny/offensive mother's day poem that was intended as a joke (this is a sample of Austrian colloquial German). In the course of the discussion, some commenters said they know that the poem is offensive but they still find it funny, while others told their reasons for not finding it funny at all, eg. example (13).

(13) Wenn ich als Familie die Frau/Mutter so auslauge, bis sie if I as family the wife/mother so-much wear-out until she -vorzeitig- alt und schiach ist, und dann lach ich drüber, before-her-time old and ugly is and then laugh I about-that dann ist das einfach niveaulos und wäh. then is that simply dumb and disgusting

⁹ If one assumes like Kratzer [12] that all conditionals contain a modal in the consequent, i.e. that conditionals with no overt modal contain a covert modal element, the two cases collapse.

'If a family wears the wife/mother out until she is old and ugly before her time and then they laugh about that, then that's simply dumb and disgusting.'10

In the above case, the context permitting the non-standard use of *ich* is a sequence of matching and non-matching opinions given by other users in the thread. The speaker expects that there should be no one who thinks that laughing about a worn out, overworked mother is not dumb and disgusting. Since there are some people that have no problem laughing about the poem, the speaker assumes that they do not agree with her about this point. Therefore, it can be said that her expectations are not met in the context.

The characterization that the speaker voices an expectation that is not met in the context provides a clue for determining the kind of modal found in sentences with non-standard ich. In all of the examples the speaker's expectations have a normative flavour. The soccer teams talked about in example (2) and (3) are soccer teams that conform to a certain standard for soccer teams held by the speaker. In the case of example (11), the speaker holds it morally objectionable to ask for money from one's guest. Thus, her utterance expresses something she thinks is impossible behaviour for a bridal couple conforming to her moral standard. In sum I propose that the modals found with non-standard readings have (possibly among others) a stereotypical or moral flavour. Kratzer [13] defines a stereotypical conversational background for a modal as a function f which returns for a world w the set of propositions that gives the expectations concerning what w is like, i.e. "the normal course of events" for w. An analogous definition is given for morally accessible worlds from a world w.

To summarize, it was shown that the non-standard reading of *ich* requires a certain kind of context in which the speaker's expectations - the opinion expressed by the non-standard meaning which the speaker takes as unobjectionable - is not met.

3.2 Emotional Involvement

In the given examples, the use of non-standard *ich* also signals *emotional in-volvement* on the part of the speaker about the matter at hand. I suggest that the non-standard readings should be listed among those constructions that are grouped under the term *emotive language* (Potts and Schwarz to appear). Potts and Schwarz characterize *emotive language* as "words and constructions that are more or less dedicated to the task of conveying information about our attitudes and emotions" [23, 2]. The next piece of data is a clear cut example that shows *emotional involvement* on the part of the speaker.

(14) sie nimmt nie was für ihre tochter zu essen für unterwegs mit [...] in meinen augen ist das eine rabenmutter ich muss doch als mutter mit einem kleinkind dafür sorgen dass es immer zu essen bekommt egal wo es gerade ist ich muss einfach immer was dabei haben...

¹⁰ http://www.parents.at/forum/archive/index.php/t-253616.html

'She never brings something to eat for her daughter when they are out. [...] In my opinion she is a bad mother. A mother with a toddler has to see to it that the toddler gets food, no matter where the child is. A mother really has to have something to eat with her...'11

Example (14) was taken from a women-oriented forum with the central topic of in-family relationships. The author of this passage is a pregnant woman (not yet a mother). In the given passage she talks about a woman (a mother) in her family that does not take good enough care of her daughter. The post has the title "I'm pregnant and I feel screwed by my partner" ('Ich bin schwanger und fühl mich von meinem Partner verarscht'), which clearly suggests strong feelings for the topic at hand on the part of the author. Further expressivity is achieved by her use of expressive language ('Rabenmutter' - Engl. 'bad mother') and clusters of exclamation marks near the end of each paragraph.

A somewhat less explicit example that nicely shows the emotional involvement by the speaker is example (11), where the author also uses expressive language ('total doof' - Engl. 'totally dumb') and exclamation marks.

Since the non-standard use of *ich* is emotive, it is not surprising that the native speakers I consulted judge this way of giving one's opinion as decidedly unobjective. They evaluate the non-standard use of *ich* as unsuitable for serious, objective argumentation.

3.3 Genericity

Even though, as was shown in the previous section, the utterances in (9), (10) and (14) express the speaker's expectations with respect to a certain situation, the paraphrases suggest that the speaker informs the addressee about an expectation he holds in general and not only with respect to this particular utterance context, i.e. regarding all entities in the set denoted by the argument of als and not only the salient entity from the context of utterance. That the non-standard readings express genericity in the domain of individuals is shown by the possibility to extend example (10) by (15).

(15) ... egal ob **ich** Deutschland, Italien oder Brasilien bin. ... no-matter whether I Germany, Italy or Brazil am

When (15) follows the example (10) above, it has roughly the following meaning: ... and it does not matter, whether one considers Germany, Italy or Brazil (or any other team). To give such an exemplary list of teams (or nations) is a natural extension of (10). In contrast, the extension in (16), which restricts the opinion given in (10) to only the German national team, is incoherent.

(16) ?...aber nur wenn **ich** die deutsche Nationalmannschaft bin. ...but only if I the German national-team am

 $^{^{11}\} http://forum.gofeminin.de/forum/relationsfamille/__f1465_relationsfamille-Ich-bin-schwanger-und-fuhl-mich-von-meinem-partner-verarscht.html$

So one can say, that the opinion is expressed about every entity that is an element of the set denoted by the argument of *als*.

Sentences like (9) and (10) also express genericity in the spatio-temporal domain. The genericity is easier to see when the number of elements in the set denoted by the complement of *als* is restricted to just one element restraining genericity over individuals, as in example (17).

(17) Wenn **ich** als deutsche Nationalmannschaft gewinnen will, dann muss if I as german national-team win.INF want then must ich motiviert auf den Platz gehen.
I motivated on the field go.INF
'If the German national team wants to win, then the team has to enter the field motivated.'

Sentence (17) expresses that in any usual match situation involving the German national team (i.e. no matter against which opponent they are playing) it is the case that if the German national team wants to win, the team has to be motivated from the start.

Given that restricting the set denoted by the complement of *als* restricts genericity over individuals, one also expects that leaving out the *als*-phrase altogether results in total genericity in that domain. Example (18) shows that this is the case.

(18) Wenn **ich** gewinnen will, dann muss ich motiviert auf den Platz if I win.INF want then must I motivated on the field gehen.

go.INF
'If one wants to win, then one has to enter the field motivated.'12

The paraphrase using the impersonal pronoun *one* suggests that example (18) is freely exchangable with example (19), in which ich has been replaced by the German impersonal pronoun man.

(19) Wenn **man** gewinnen will, dann muss man motiviert auf den Platz if one win.INF want then must one motivated on the field gehen.

go.INF

'If one wants to win, then one has to enter the field motivated.'

The seeming interchangability of (18) and (19) is not accurate, however, since the use of *ich* suggests a subjective opinion (cf. Sect. 3.1), whereas *man* is usually used for objective arguments. Thus, the only difference between (18) and (19) lies in the respective subjectivity and objectivity on the speaker's side.

This sentence has of course also a speaker-referential reading: if I want to win, then I have to enter the field motivated.

3.4 Summary and a First Analysis

What can be concluded from the data discussion? What does the first person singular pronoun *ich* contribute meaningwise to the sentence?

There is a certain parallel between the non-standard use of *ich* and a use of demonstratives that Lakoff [15] calls *emotional deixis*. Lakoff states that *emotional deixis* covers "a host of problematic uses, generally linked to the speaker's emotional involvement in the subject-matter of his utterance" [15, p.347]. An example she provides is given in (20).

(20) I see there's going to be peace in the mideast. This Henry Kissinger really is something!
[15, p.347]

The core of the discussion is that the effect of *emotional deixis* is to achieve camaraderie between the speaker and the hearer, which makes these forms colloquial. The speaker tries to create emotional closeness and a sense of participation in the hearer by giving the utterance more vividness.

In a recent paper, Davis and Potts [1] argue that affective demonstratives (demonstratives used for emotional deixis) are semantically marked elements in competition with the unmarked definite article the. They follow Horn in assuming division of pragmatic labor - unmarked forms are used to express unmarked meanings and marked forms are used to express marked meanings - and argue that affective demonstratives "generate an exclamative profile", thus expressing a more marked meaning than the unmarked definite article.

As we have seen, the non-standard occurrences of *ich* are substitutable by the impersonal pronoun man (cf. Sect. 3.3). The substitution apparently does not change anything on the truth conditional level of the sentence, but the emotional flavour of the non-standard reading is lost. Applying the same reasoning as Davis and Potts, the impersonal pronoun man could be seen as the unmarked form the marked non-standard ich is competing against. If this is indeed the case, one would expect non-standard ich to have a similar semantic make up as man.

One question suggested by (18), where the *als*-phrase has been removed, is which elements are actually needed to obtain the non-standard reading. As far as I can tell at this point, the non-standard reading always involves a modal or generic sentential context: one finds the non-standard reading with universal and existential modals and indicatives under a generic interpretation, although universal modals seem to be prevalent. The *als*-phrase and discourse particles are optional, although the particle *doch* often improves and enforces the non-standard reading where the sentence can also be understood as the speaker talking about himself.

4 Formalization

In this section I formulate a purely semantic account that tries to unify the non-standard and the standard indexical use of *ich*. I argue that *ich* contributes a

(more or less semantically adorned) variable in the non-standard as well as the standard deictic use.

4.1 A Theory of the Structure of Indexicals

For a unifying, purely semantic account of the facts, one needs to discard the standard semantics for ich in (21) (repeats (1)) since it always forces speaker-referentiality.

(21) $[pronoun_{1PSq}]^c = c_S$ where c_S is the speaker of the context c

To discard (21) and to allow *ich* to refer to other individuals besides the speaker means that one partly departs from Kaplan's [9] direct-referentialist view that *ich* is a "pure indexical", i.e. that *ich* automatically picks out the speaker of the context.

One of the works that criticize the direct-referentialist picture is [21]. In this paper Nunberg specifically argues against the assumption that indexicals give rise to singular propositions. He presents data where indexicals do not contribute a single individual (or group) but a property. A sentence with a property contributing indexical is non-singular (as long as there are no other singular terms) and thus, Nunberg argues, the assumption that indexicals give rise to singular propositions has to be discarded. He consequently proposes, in contrast to what direct-referentialists assume, that the referent of an indexical is determined not directly, but in two stages. He suggests that indexicals are more complex than what is usually assumed and posits that an indexical has three components¹³: a deictic component, a classificatory component and a relational component.

The deictic component picks out an individual from the context. Numberg calls this individual the *index*. The index connects the final semantic value of the indexical to the context. Numberg [21, p.20] notes that this component corresponds to the standard semantics, e.g. as for *ich* in (21).

The relational component specifies the relation in which the index stands to the final semantic value.

The classificatory component consists of features that restrict the final semantic value (e.g. animacy, singularity . . .).

To summarize, an indexical denotes an individual (or individual concept), whose features match the classificatory component, and which stands in a certain relation to the contextually chosen index.

Coming back to the original puzzle of the non-standard use of ich, Nunberg's three component account sounds very promising in light of the needed flexibility required for the meaning of non-standard ich; the account provides the necessary amount of freedom in the choice of referent.

Nunberg relativizes the three-component account again by assuming that non-participant terms, i.e. demonstratives and demonstratively used third person pronouns, lack a relational component [21, p.23]. Since this paper looks only at participant terms, I will gloss over this fact.

The sentences in (22) are two of the examples Nunberg gives to motivate the three-component analysis.

- (22) a. Condemned prisoner: I am traditionally allowed to order whatever I like for my last meal.
 - b. *President*: The Founders invested me with sole responsibility for appointing Supreme Court justices.

[21, p.20f]

Numberg argues that I in (22-a) can not pick out the speaker since it is not a tradition for the speaker that he is allowed whatever he wants for his last meal. Rather, it is a tradition for anyone with the property of being a condemned prisoner. Thus Numberg concludes that I picks out the property of being a condemned prisoner. The argumentation for example (22-b) runs analogously. Since the Founders did not actually invest the sole responsibility for appointing Supreme Court justices in the current president himself, I in (22-b) picks out the property of being the president of the United States.

Elbourne [3] formalizes Nunberg's account. He straightforwardly implements the idea of the three components by explicitly putting the deictic component and the relational component into the syntax. The requirements posed by the classificatory component are added as presuppositions to the meaning of the indexical. Thus syntactically, an indexical has the complex structure in (23).

(23)
$$[indexical [R_1 i_2]]$$
 [3, p.421]

The two variables R_1 and i_2 constitute the relational and the deictic component, respectively. i_2 is a variable of type e and R_1 is a variable of type $\langle e, \langle se, st \rangle \rangle$, i.e. a variable for intensional relations between individuals and individual concepts. The values for both variables are determined from the context. On a technical note, this means that they are left unbound and are determined by the variable assignment, which constitutes a parameter of the interpretation function.

Regarding the meaning of the overt lexical item of the complex indexical, Elbourne generalizes Nunberg's observation that, in certain contexts, indexicals can contribute properties. He proposes that the meaning of an indexical is in fact always a definite description 14 formed from R and i. Example (24) is Elbourne's proposed meaning for English third person singular it (he does not explicitly formalize the $classificatory\ component$).

(24)
$$[it] = \lambda f_{\langle se, st \rangle} . \lambda s. \iota x (f(\lambda s'.x)(s) = 1)$$
 [3, p.421]

The first argument of it, $f_{\langle se,st\rangle}$, is the result of applying the contextually supplied relation R to the given index i. The informal paraphrase of the final

¹⁴ Even though Nunberg talks about properties, Elbourne [3, p. 420] argues that the properties in Nunberg's examples always denote singleton sets in the relevant minimal situations. He takes this observation as the starting point of his analysis and implements them as definite descriptions.

meaning of the complex pronoun [it $[R_1 \ i_2]$] in the situation of evaluation is: the unique individual x such that x stands in relation R to i.

4.2 Emotional Involvement and Speaker Empathy

It is usually assumed in the literature that *emotional involvement* signalled by *emotive language* needs to be modelled on a different level than the truth conditional meaning of a sentences (cf. for example [22] and [24]). As has been alluded to in Sect. 3.1, the speaker expresses certain expectations with the use of non-standard *ich*, which seem to constrain the set of individuals to those that conform to a certain normative standard held by the speaker. Since one usually considers one's normative standards to be applicable to oneself, one tries to conform to them and one will tend to identify with the group of people conforming to them. This identification can be observed in example (25), which contains both an occurrence of non-standard *ich* and the objective impersonal *man*.

(25) **Ich** kann **als Kunde** wohl erwarten, dass für den Preis das Paket oder der Brief auch korrekt zugestellt wird. Und wenn **man** das eben für einen so niedrigen Preis nicht kann, dann darf man so einen niedrigen Preis auch nicht anbieten.

'A **client** should be allowed to expect that a package or letter will be delivered correctly for the price that is charged. And if **one** can't do that for such a low price, then one just shouldn't offer such a low price.'

The speaker of (25) clearly sympathizes with the clients rather than the mail service providers. This kind of perspective-taking of the speaker (*speaker empathy*) is observable also with other impersonal pronouns.

I consider two previous proposals for modelling empathy. Malamud [17,18] looks at the impersonal use of the English second person singular pronoun you and proposes that you involves hearer empathy. Moltmann [19,20] looks at English generic one and suggests that one involves a special kind of speaker empathy.

Both proposals share that empathy is modelled by means of a special relation that is required to hold between the speaker/hearer and the values of a variable that is contributed by the impersonal pronoun.¹⁵ Example (26) is the meaning Malamud proposes for impersonal *you*.

(26)
$$[you]^c = \lambda s. \lambda P. \exists y [persona(y, addressee(c), s) \& P(y, s)]$$
[17. p.25]

Hearer empathy is modelled by the persona-relation, $\lambda y.\lambda x.\lambda s.persona(y, x, s)$, that relates the later existenially quantified variable y to the addressee of the context.

¹⁵ I will not get into details here, since the exact characterisation of the relations is secondary to formalizing the meaning of non-standard *ich*. For the details, please see [17] and [19].

Moltmann [19, p.24] proposes that generic *one* ranges only over such individuals that the speaker identifies with. She models this semantic restriction by letting *one* introduce a qua-predicate that takes two arguments, an individual variable and the property $\lambda y[Izy]$ (I is the identification relation), that holds for any y that z identifies with. The notion of identification relation is conceptually further specified as a notion of pretence: the speaker applies a predicate to a value of generic *one* on the basis of "projecting himself" onto that value.

Technically, both of the above accounts are very well combinable with the account for pronouns presented in the previous section. Both Malamud's persona relation and Moltmann's identification relation could be fitted into the relational component.

Thus I follow Malamud and Moltmann in modelling speaker empathy by assuming an *identification relation* (different from Malamud's and Moltmann's) that restricts the set of entities to those that the speaker identifies with. A precise technical account for the *identification relation* is still to be proposed. A possible starting point is to restrict the individuals to those that conform to the stereotypical, moral or otherwise normative standards held by the speaker, parallel to the various possible flavours found with the modals contained in non-standard readings.

4.3 Adding Up the Parts

In this section, I bring together Malamud's [17,18] and Moltmann's [19,20] work on "empathy pronouns" with Elbourne's [3] formalization of Nunberg's [21] three-component account of "ordinary indexicals". I also reconsider the speculations made at the end of Sect. 3.4 that - given division of pragmatic labor - the semantic make up of non-standard ich is similar to the semantic make up of impersonal pronoun man.

With Nunberg's three-component analysis laid out, only the values for the three components need to be determined. Nunberg himself has a short section on the English first person singular pronoun I. There he briefly states that, like other indexicals, I has all three components of meaning and he specifies the values of the three components. For the index the deictic component always picks the speaker of the utterance, the relational component requires the index to instantiate¹⁷ the final interpretation and the classificatory component restricts the interpretations to an animate syntactically singular individual (or individual property).

Moltmann [20] proposes that *one* introduces a complex variable that contains an individual variable and the property, $\lambda y.Izy$, that should hold of any value assigned to the individual variable.

¹⁷ Nunberg (1993:20) talks about instantiation of the interpretation since he allows for properties as final interpretations. Concretely this means, that when the interpretation is an entity, the index has to be identical to the interpretation, and when the interpretation is a property, the index as to be a member of the set denoted by the property.

Following Nunberg, I assume for non-standard *ich* that the deictic component picks out the speaker. Even though *ich* in the non-standard reading does not refer to the speaker, the speaker is crucial for modelling speaker empathy since the individuals that are ultimately considered vary with respect to the speaker. Thus, the index is the common core of the non-standard and the standard use.

The classificatory component I will also adopt without change because a sentence is plainly ungrammatical if *als* takes a plural and/or inanimate entity as its complement, (27).

- (27) a. *Ich muss als Mütter meinen Kindern etwas zu essen I have-to as mothers.pl for-my children something to eat mitnehmen.
 take-along
 - b. *Wenn ich als Schraubenzieher eine Schraube festschraube...
 if I as screwdriver a screw fix...
 (the sentence is fine if the screwdriver is humanized)

For the relational component, however, I use the identification relation specified in Sect. 4.2.

As for the syntactic structure of the indexical, I adopt Elbourne's proposal [3]. Thus, *ich* has the complex structure in (28).

(28) $[ich [R_1 i]]$

Regarding the interpretation, I assume that $[R_1]^g \in D_{\langle e, \langle e, st \rangle \rangle}$ and $[i]^g \in D_e$. Semantically, I depart from Elbourne in that I do not assume that the *ich* forms a definite description from R and i. As was shown in Sect. 3.3 the data under discussion expresses a maximally general subjective opinion of the speaker (maximally with respect to the *als*-phrase). In particular this means that *ich* can not be analysed to refer to one unique individual. Therefore, an analysis as definite description can not capture this basic characteristic. I propose that non-standard *ich* is an indefinite, as it shows indefinite like behaviour with respect to quantificational variablity and binding through a generic operator (see [14]).

At least three possibilities to model indefinites are discussed in the literature. The first is to analyze indefinites as properties that are existentially closed at a higher point in the structure, see [6]. The second possibility is to model them in a dynamic system, eg. [2], or thirdly, to use choice functions [25], [26]. I choose the third option since overt existential quantification leads to technical complications when I consider the standard indexical use of *ich* later on.

The definition of intensional choice function, which I adopt, is taken from Romero [26, p.7] who attributes this definition to Irene Heim.

(29) Intensional Choice Function: A function $f_{\langle \langle e,st \rangle, \langle se \rangle \rangle}$ is an intensional choice function (ICH(f)) iff for all P in the domain of f and for all w in the domain of f(P): P(f(P)(w))(w) = 1

An intensional choice function f in (30) is existentially bound at the highest level in the structure and constrained by the predicate ICH which ensures that f is a choice function.

Putting it all together, the meaning in (30) formalizes the semantic contribution of *ich* to the non-standard readings.

(30)
$$[\![ich]\!]^{w,c,g} = \lambda Q_{\langle e,st \rangle}.\lambda P_{\langle e,st \rangle}.\lambda s.[P(f(Q)(s))(s)]$$

Like in Elbourne's proposed meaning for it in (24), the first argument, $Q_{(e,st)}$, is filled by the result of applying $[R_1]^g$ to $[i]^g$. Q, a property, is the argument of an intensional choice function f that returns an individual concept whose value in the situation of evaluation is an element of the set denoted by Q in the situation of evaluation. Specifically for non-standard *ich*, the variable assignment returns $\lambda x.\lambda y.\lambda s.$ identifies-with (y)(x)(s) (the identification relation modelling speaker empathy) for R_1 . Since the deictic component always picks out c_S (the speaker of context c), one can fix i to be c_S . Consequently, $Q = \lambda y.\lambda s.$ identifies-with $(y)(c_S)(s)$.

The interpretation of the complex structure underlying the pronoun is given in (31).

(31)
$$[[ich [R_1 c_S]]]^{w,c,g} = \lambda P.\lambda s. [P(f(\lambda y.\lambda s'.identifies-with(y)(c_S))(s))(s)]$$

The proposed semantics in (31) formalizes speaker empathy and gives ich an indefinite semantics that is compatible with genericity. It also creates the desired parallel to the meaning of impersonal man. Malamud [17,18] proposes (32) for the meaning of man, partially based on Kratzer's work [11]. She assumes that man has the complex syntactic structure in (32-a) which consists of a determiner Det and an element SE. The semantics of the two lexical items is given in (32-b) and (32-c).

- (32)Slightly adapted from Malamud [18]
 - man = [Det SE]
 - $\llbracket Det \rrbracket^{c,w} = \lambda x. \lambda P. \exists y [y \in \text{HUMANS \& } P(y,w)] \\ \llbracket SE \rrbracket^c = c_S$

In sum, man is a generalized quantifier with existential force, which is parallel to the meaning proposed in (30). The only difference is that for non-standard ich I make use of choice functions.

To give an exemplary truth condition for example (33), I provide the meanings for the other parts of the sentence.

- (33)Ich muss als Nationalspieler motiviert spielen.
 - I must as national-team-player motivated play.
 - 'A player of the national team has to play with motivation.'

The semantics of the modal $m\ddot{u}ssen$ is the same as for English must, for which I adopt the meaning proposed by Kratzer [12] in (34). A modal in this proposal has two parameters, f and g which are assigned a conversational background and an ordering source respectively. The functions f and g together pick out the optimal worlds accessible from w, O(w, f, g). Concretely, g induces an ordering on the worlds picked by f for which a set of optimal worlds can be determined.

(34)
$$[\text{müssen}]^{w,c,g} = \lambda \phi. \lambda s. \forall w' \in O(w, f, g)[w' \in \phi]$$

Drawing on Jäger [8], I let the als-phrase contribute a presupposition for the individual picked out by the choice function. Jäger analyses English as-phrases in the framework of Discourse Representation Theory (DRT) as inducing a presupposition that has to be resolved (i.e. successfully added to the discourse representation structure) either by simple resolution or via accommodation. Both variants amount to identifying the argument of the presupposed predicate with the argument of the predicate the as-phrase attaches to. For a Montague-style system, as I am using, I propose the following semantics for als which modifies a predicate by adding a presupposition to its argument.

(35)
$$[als]^{w,c,g} = \lambda P_{\langle e,st \rangle}.\lambda Q_{\langle e,st \rangle}.\lambda x.\lambda s : P(x)(s) = 1.Q(x)(s)$$

Consequently, (33) has the truth condition in (36).

(36) $[(33)]^{w,c,g}$ is defined if national-team-player $(f(\lambda y.identifies-with(y)(c_S))(s))(w) = 1$ and if defined $[(33)]^{c,g} = 1$ iff $\exists f \forall w' \in O(w, f, g)[ICH(f)$ & play-with-motivation $(f(\lambda y.identifies-with(c_S)(y)))(w')]$

4.4 Standard Deictic ich

In this section, I show that the proposed meaning for the non-standard use of *ich* can be modified to model also the speaker-referential use of *ich*.

As was already suggested in the last section, the value of R essentially determines the set from which the final semantic value is picked. For deictic ich according to Nunberg, one needs a relation that the speaker instantiates. To capture speaker-referentiality it suffices to assign the identity relation $(\lambda x.\lambda y.\lambda s.x=y$ $in\ s)$ to R. Since for ich Elbourne's i component has the fixed value c_S , a sentence containing deictic ich is only true if the choice function f picks out the speaker.

```
(37) a. Ich bin müde. I am tired b. \llbracket \text{Ich bin müde} \rrbracket^{w,c,g} = \lambda s. \text{tired} (f(\lambda y. \lambda s'. c_S = y \text{ in } s')(s))(s)
```

This shows that the proposed meaning in (30) in fact covers the non-standard and the deictic use of ich.¹⁸ The strong point of this unified treatment is that it

¹⁸ In Sect. 4.3 I mentioned that I use choice functions to model indefiniteness since using an existential quantifier leads to technical problems for standard deictic *ich*. Consider (i).

accounts for the fact that the non-standard use of ich shares a semantic core of speaker-relatedness with the deictic use.

As was already noted in Fn. 12, some of the data with a non-standard use of *ich* also have a sensible speaker-referential interpretation, as in (38-b).

- (38) Wenn ich als Spieler gewinnen will, dann muss ich motiviert auf den if I as player win want, then must I motivated on the Platz gehen.

 court go.
 - a. If (one as) a player wants to win, then he/she has to enter the field motivated.
 - b. If I being (in my role as) a player want to win, then I have to enter the field motivated.

Regarding the two interpretations (38-a) and (38-b), the unified treatment says the difference in the interpretation lies only in the difference of the value assigned to the relational component.

5 Conclusion and Outlook

In this paper, I have shown that *ich* has an unexpected non-standard use that challenges the standard view that first person singular pronouns are always speaker referential.

The data discussion has demonstrated that the non-standard use of *ich* signals that the speaker informs the hearer about a rule he believes to hold in the actual world, but which is violated in the context of utterance. It was also shown that the non-standard reading signals emotional involvement on the part of the speaker. One aspect of the speaker's involvement I identified as speaker empathy.

I discussed and adopted the theory of indexicals given in Nunberg [21] and parts of its formalization by Elbourne [3]. To model speaker empathy I looked at the analyses of English impersonal you [17,18] and generic one [19,20] which, as the authors argue, also involve forms of empathy. For the meaning proposed in the end for non-standard ich, I parted from Elbourne's technical proposal that pronouns are definite descriptions and reanalysed non-standard ich to form an indefinite parallel to the meaning proposed for german impersonal man [17]. I showed that the meaning given for the non-standard use could be modified to model (albeit unconventionally) the normal deictic use of ich.

One possible point for criticism is the complete freedom regarding the relational component. As the proposal stands right now, there are no restrictions that would block any two-place relation to be picked for the relational component. This problem is already present in Nunberg's proposal [21] where the only

$$\overline{(\mathrm{i})} \quad \overline{[\![\mathrm{i}\mathrm{ch}]\!]^{w,c,g}} = \lambda Q.\lambda P.\lambda s. \exists y [Q(y)(s) \land P(y)(s)]$$

Given this semantics the sentence in (37-a) would have the meaning $\exists y[c_S = y \land \text{tired}(y)(s)]$, which can be paraphrased as 'I exist and am tired' which is not the desired result. I thank an anonymous reviewer for pointing this out to me.

restriction on the relation is that the speaker *instantiates* it, i.e. that the speaker stands in this relation to himself (see Fn. 17).

An alternative that might be preferable to the unifying account I presented is to see the non-standard and the standard use of ich as an instance of true polysemy rather than context dependence. If one pursues a formalization based on this assumption, the analysis and the technical parts up to Sect. 4.3 could be adapted without change, since unifying the non-standard and the standard deictic use has not been the core motivation for the analysis I proposed. The application to standard deictic ich shown in Sect. 4.4 has been an automatic result of adapting Elbourne's account [3]. Thus, if the proposed semantics for ich in (30) is restricted to the non-standard use, the relational component can be fixed to the identification relation. This would eliminate the problem of the unrestricted relational component. The only context dependence would be brought in by the choice function and c_S , which would remain the common core of the non-standard and the standard deictic use. Therefore, if one does not object to the assumption of two distinct lexical items ich_1 and ich_2 , the new data does not force one to discard the standard semantics for deictic German ich.

As always, there are still open issues that need to be looked at.

The first question is how to capture the second occurrence of ich in the consequent of the conditional in data such as (2). This second occurrence of ich seems to be donkey-bound by the ich in the if-clause. In sentences such as (2), the other occurrences of first person singular pronouns can be analyzed as fake in-dexicals as proposed in [10]. Fake indexicals is the term for bound occurrences of first and second person pronouns that are not independently speaker- or hearer-referential, eg. my in $'Only\ I\ did\ my\ homework'$, which implies that nobody else did their homework rather than that nobody else did the speaker's homework. As far as I know, nobody has proposed a treatment for fake donkey indexicals, yet.

Second, one would wish for a comparison with German impersonal second person singular du and a cross-linguistic search for first person singular pronouns in other languages with similar non-standard readings as ich.

Last but not least, also the speaker's *emotional involvement* has not yet been treated satisfactorily.

However, even though there are still remaining open questions, I have offered a first analysis for non-standard *ich* which can be taken as basis for further investigation on this topic.

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