

Non-Uniformity amongst Uses: Referential vs. Impersonal

1. Impersonally interpreted pronouns

1.1 Impersonal pronouns

- Many languages provide impersonal pronouns that are used to express statements about “people in general”: e.g. English *one* and German *man*¹

- (1) a. *One does not use a sword to kill a snail.*
b. *Man verwendet kein Schwert um eine Schnecke zu töten.*
one uses no sword in-order a snail to kill

⇒ such statements express rules, norms, or other kinds of generalizations

⇒ they behave like generic sentences:

- (i) they allow for (legitimate) exceptions; e.g. for (1), as for (2), people who happen to carry a sword when the need arises to kill a snail might be one class of possible, legitimate exceptions²

- (2) *Rational people do not use a sword to kill a snail.*

- (ii) they support inferences to appropriate counterfactuals

- (3) Rational people do not use a sword to kill a snail. Hence, if Peter had been a rational person, he would not have used a sword to kill that snail.
(Provided, Peter would not have been an exceptional rational person.)

- Some impersonal pronouns also allow an “existential use” in episodic sentences that contrasts with the standard “impersonal use” in generic sentences, e.g. for German *man*.

- (4) *Man hat mir mein Fahrrad gestohlen.* (existential)
one has me my bike stolen
'Someone stole my bike.'

⇒ In the existential use, *man* is interpreted like an existential indefinite pronoun, e.g. *jemand* (Engl. ‘someone’)

⇒ **Note:** English *one* only has an impersonal use

- **Question:** If you speak a language other than German or English, does your language have an impersonal pronoun? If yes, which uses are available?

- Condoravdi (1989), Moltmann (2006), Malamud (2006, 2012) and others propose to model *one* and *man* as contributing free individual variables that are bound by the generic operator *Gen*.

- (5) $\text{Gen } x[\neg\text{uses-a-sword-to-kill-a-snail}(x)]$

⇒ Analyzed in parallel to: *Normally, a person does not use a sword to kill a snail.*

¹The example in (1) is in fact a Yoruba proverb, which might convey additional, implicated content. For the sake of illustrating the properties of generic sentences with and without impersonal pronouns, I assume that (1) and all related examples are interpreted literally.

²A more intuitive example would be the class of penguins as legitimate exceptions to ‘*Birds fly*’.

- The interpretation of the existential use as an existential indefinite pronoun seems to support this analysis

⇒ An analysis of indefinite DPs going back to Heim (1982): indefinites contribute free variables with descriptive content; existential quantification is added by existential closure over all free individual variables in the clause (cf. Heim 1982, Diesing 1992).

⇒ Note the similarity to the interpretation of indefinite DPs in DRT!

$$(6) \quad \llbracket (4) \rrbracket^{g,c^*} = \lambda s. \exists x [x \text{ stole the bike of } c_S^* \text{ in } s]$$

- Two problems for this analysis arise!

- **Problem 1:** *man* does not show the scopal behavior found with quantifiers that is observed with *jemand* (Engl. ‘someone’; cf. Zifonun 2000)

- (7) a. *Weil man mir schon oft gesagt hat, dass...* (often > ∃)
 because one me already often told has that
 ‘Because it happened often already that someone told me that...’
 b. *Weil mir jemand schon oft gesagt hat, dass...* (∃ > often)
 because me someone already often told has that
 ‘Because for someone it is the case that he already told me often that...’

⇒ in the existential use, *man* invariably scopes below *oft* (Engl. ‘often’)

- **Problem 2:** *jemand* cannot be interpreted impersonally in generic sentences (cf. Cabredo-Hofherr 2008)

- (8) a. *Man isst nicht mit den Fingern.* (impersonal)
 one eats not with the fingers
 ‘One doesn’t eat with one’s hands.’
 b. *Jemand isst nicht mit den Fingern.*
 one eats not with the fingers
 ‘Someone usually/ at the moment doesn’t eat with his hands.’
 (Cabredo-Hofherr 2008:39)

⇒ (8-b) containing *jemand* does not state a generalization about people in general

- A better parallel with respect to the existential/generic alternation can be found between bare plurals/indefinite singular noun phrases and impersonal pronouns

- (9) a. *Ein Löwe hat vier Beine. Gestern ist ein Löwe entkommen.*
 a lion has four legs yesterday is a lion escaped
 ‘A lion has four legs.’ ‘Yesterday, a lion escaped.’
 b. *Löwen haben vier Beine. Gestern haben Löwen eine Giraffe getötet.*
 lions have four legs yesterday have lions a giraffe killed
 ‘Lions have four legs.’ ‘Yesterday, lions killed a giraffe.’

⇒ Literature on generic sentences (cf. Krifka et al. 1995): indefinite singular noun phrases and bare plurals are analysed as Heimian indefinites (cf. Heim 1982), i.e. expressions that contribute free variables together with restrictive, descriptive content

⇒ **But:** indefinite singular noun phrases seem to pattern with existential indefinite pronouns, like *jemand* (Engl. ‘someone’) regarding their scopal behavior

- (10) *Weil mir ein Kollege schon oft gesagt hat, dass...* (∃>often)
 because me a colleague already often told has that
 ‘Because for a colleague it is the case that he already told me often that...’

⇒ Bare plurals seem to pattern like impersonal pronouns in their scopal behavior

- (11) *Weil mir Kollegen schon oft gesagt haben, dass...* (often>∃)
 because me colleagues already often told have that
 ‘Because it happened already often that some colleague or other told me that...’

⇒ **Possible complication:** (11) seems to show a quantificational variability effect, where the adverb of quantification *oft* seems to quantify over a set of men rather than times (cf. Lewis 1975)^{3,4}

- Note that in the standard, impersonal use, *one* and *man* are not kind-denoting. Compare the sentences in (12) that have a kind-reading, to (13).

- (12) a. *Dodos are extinct.*
 b. *The dodo is extinct.*

- (13) a. **As a dodo, one is extinct.*
 b. **Als Dodo ist man ausgestorben.* (impersonal)
 as dodo is one extinct

- **Conclusion:** impersonal pronouns seem to pattern with bare plurals, but only in the non-kind-denoting use of bare plurals

1.2 Impersonally interpreted personal pronouns

- In many languages, 2nd person (singular) pronouns also have an impersonal use (cf. e.g. Kitagawa and Lehrer 1990, Alonso-Ovalle 2002, Egerland 2003, Malamud 2006, Gruber 2011, Zobel 2012).

- (14) *In those days, you could marry your cousin.* (Malamud 2006:84)

- (15) *Du kannst als Frau doch auch Ansprüche haben, denen nicht jeder Mann gerecht wird.*
 you can as woman PRT also standards have that not every man
gerecht wird.
 suitable becomes
 ‘As a woman you can also have standards that not every man meets.’
 (Zobel 2012:11)

- (16) *Credo che in questo lavoro [pro] ti faccia male spesso.* (Italian)
 I-believe that in this work pro yourself make bad often
 ‘I think that you hurt yourself often doing this job.’ (Gruber 2011:351)

³A clear example for quantificational variability effects: *A spider usually dies when it is dropped in the toilet.*

⁴For a situation semantic treatment of quantificational variability effects see von Stechow (2004/1995).

- (17) *En ese departamento [pro] trabajas como un esclavo.* (Spanish)
 in that department pro work.2SG like a slave
 'In that department you work like a slave.' (Alonso-Ovalle 2002:2)

⇒ **Question:** If you speak a language other than those listed here, does the 2nd person (singular) pronoun of that language have an impersonal use?

- In German also 1st person singular *ich* allows for this use (cf. Zobel 2010, 2012)

- (18) *Ich kann doch als Brautpaar nicht von meinen Gästen erwarten, dass sie mir quasi die Feier finanzieren!*
 I can PRT as bridal-couple not from my guests expect that they
 me more-or-less the party finance
 'A bridal couple can't expect their guests to more or less pay for the party!'
 (Zobel 2012:13)

⇒ **Question:** Does the 1st person (singular) pronoun of your native language have an impersonal use?

- In contrast, 3rd person singular pronouns do not seem to allow for such a use. But see Elbourne's (2005, 2013) Voldemort Phrases, e.g. (19-a)

- (19) a. *He who hesitates is lost.* (Elbourne 2013:205)
 b. *He is lost.*

⇒ **But:** the relative clause seems to be a crucial ingredient; in this the potential "impersonal use" in (19-a) crucially differs from the impersonal uses of 1st and 2nd person singular pronouns!

- **Important note:** Morphosyntactically, the impersonal uses and the referential uses of 1st and 2nd person singular pronouns behave identically, i.e. are indistinguishable. All examples of impersonal uses are in principle ambiguous.

1.3 A summary of the problem

- The discussion in this section now presents the following problem:
 1. 1st and 2nd person pronouns in their referential uses have been analyzed as either directly referential, individual-denoting expressions, or as denoting definite descriptions
 2. The impersonal use of 1st and 2nd person pronouns parallels the standard use of impersonal pronouns
 3. Impersonal pronouns seem to behave like bare plurals, i.e. indefinite expressions

⇒ **Problem:** The referential use and the impersonal use seem to require substantially different analyses; can a unified account for both uses be given nevertheless?

1.4 Note: impersonal uses are not instances of deferred reference in donkey sentences

- **Reason 1:** Nunberg (1993) argues that the choice of relation for deferred reference is constrained by the requirement that the speaker/addressee “instantiate” the interpretation
(20) *As a farmer, if you beat a donkey, you always feel bad afterwards.*

⇒ **Prediction:** (20) should be bad if a speaker says this to someone who is not a (donkey-owning) farmer since presumably the relation would involve the given *as*-phrase which intuitively restricts the generalization to farmers

- **Reason 2:** In Session 3, it was assumed that *you* contributes a definite description of the general form: $\iota x[R(i)(x)(g(\sigma_n))]$. If the sentence in (21-a) is analyzed as an ordinary donkey sentence, the assumption that *you* involves deferred reference makes the wrong predictions for the truth-conditions of the sentence.⁵

- (21) a. *If you beat a donkey, you always feel bad afterwards.*
 b. $[[\text{always} [\text{if} [\text{you}_{\sigma_7} [R_1 i_2]] \text{ beat a donkey }]] \Sigma_7 [\text{you}_{\sigma_7} [R_1 i_2]] \text{ feel bad afterwards }]$

- (22) a. $[[\text{always}]]^{g,c^*} = \lambda p_{\langle s,t \rangle} . \lambda q_{\langle s,t \rangle} \lambda s . \forall s_b [s_b \leq s \wedge \text{EX}(p)(s_b) \rightarrow \exists s_e [s_b \leq s_e \leq s \wedge q(s_e) = 1]]$
 b. $[[\text{if} [\text{you}_{\sigma_7} [R_1 i_2]] \text{ beat a donkey }]]^{g,c^*} = \lambda s . \iota x [R(c_A)(x)(g(\sigma_7))] \text{ beats a donkey in } s$
 c. $[[\Sigma_7 [\text{you}_{\sigma_7} [R_1 i_2]] \text{ feel bad afterwards }]]^{g,c^*} = \lambda s . \iota x [R(c_A)(x)(s)] \text{ feels bad afterwards in } s$

- (23) $\lambda s . \forall s_b [s_b \leq s \wedge \text{EX}(\lambda s . \iota x [R(c_A)(x)(g(\sigma_7))] \text{ beats a donkey in } s)(s_b) \rightarrow \exists s_e [s_b \leq s_e \leq s \wedge \iota x [R(c_A)(x)(s_e)] \text{ feels bad afterwards in } s_e]]$

⇒ **Prediction:** since only the situation variable in the consequent is bound, the sentence in (21-a) is predicted to be a universal statement about a unique, contextually given individual, i.e. $\iota x [R(i)(x)(g(\sigma_7))]$

⇒ Note that overt definite descriptions in the antecedent of a conditional in fact behave as predicted in (23):

- (24) *If the farmer beats a donkey, he always feels bad afterwards.*

- **Conclusion:** Since any definite description in the antecedent of a conditional is interpreted like above, *you* in (21-a) is plausibly not interpreted like a definite description.

2. Semantics and pragmatics of impersonally interpreted pronouns

2.1 Truth-conditional equivalence

- **Central observation:** impersonally used personal pronouns and impersonal pronouns in generic sentences are truth-conditionally equivalent (cf. Kitagawa and Lehrer 1990, Zobel 2012).

⁵This structure in (21-b) is a simplified version of the structure given in Elbourne (2013:124) for donkey sentences with a quantificational adverb.

- (25) *Es gibt eigentlich keine bestimmten Tricks die man als Anfänger lernen muss. Du kannst als Anfänger z.B. auch Shadow lernen.*
 it exists not-really no specific tricks that one as beginner learn
 must you can as beginner e.g. also Shadow learn
 ‘There are no specific tricks that a beginner has to learn. As a beginner, you can e.g. also learn Shadow.’⁶ (Zobel 2012: 19)

⇒ impersonally used pronouns of different forms may be substituted for each other

- **But:** different impersonally used pronouns can also be used to contrast different groups of people for which a generalization is made

Context: Songtext of German Rapper Massiv, *Alles oder Nichts* (‘All or nothing’):
 ‘I’m fed up to hear that I’m not from Berlin...’

- (26) *Denn als Nichtberliner macht man dir das Leben schwer*
 because as person-not-from-berlin makes one you the life heavy
 ‘Because one gives you a hard time if you’re not from Berlin.’

⇒ *man* ≈ (a subset of) people from Berlin

⇒ *dir* = people that are not from Berlin (given explicitly by the *als*-phrase)

2.2 Pragmatic effects

- Impersonally used 1st and 2nd person singular and impersonal pronouns in generic sentences differ from indefinite noun phrases. They are speaker-oriented in the following sense:

- (27) If the speaker has the relevant property for the generalization to apply to him (e.g. given by an *als*-phrase), he believes that it applies to him, and if he does not have the relevant property for the generalization to apply to him, he believes that it would apply to him if he had that property.

Scenario: An exhibition of Klimt paintings in Vienna, including *Judith and the Head of Holofernes*.

- (28) a. *Visitors can see the painting from the entrance.*
 b. *As a visitor, one can see the painting from the entrance.*
- (29) a. *Besucher können das Bild vom Eingang aus sehen.*
 visitors can the painting from-the entrance PRT see
 b. *Ich kann als Besucher das Bild vom Eingang aus sehen.*
 I can as visitor the painting from-the entrance PRT see
 c. *Du kannst als Besucher das Bild vom Eingang aus sehen.*
 you can as visitor the painting from-the entrance PRT see
 d. *Man kann als Besucher das Bild vom Eingang aus sehen.*
 one can as visitor the painting from-the entrance PRT see

⇒ For (28-b) and (29-b)–(29-d), the speaker intuitively conveys a personal point of view with respect to the generalization as specified above.

⇒ So, if a person knows for a fact that he or she is unable to see the painting for whatever reason, he or she cannot utter (29-b)–(29-d)

⁶The topic of this example are pen-spinning tricks.

- Impersonally used 1st and 2nd person singular differ from impersonal pronouns by showing an additional participant orientation effect

- **1st person singular:** signals distance between the speaker and others (but not necessarily other discourse participants); communicates that the speaker has grounds to believe that the regularity expressed by his utterance, which he fully supports, may not be supported, or adhered to by others.

Scenario: Forum discussion “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. Another user takes issue with this claim:

- (30) *Ich kann doch als Brautpaar nicht von meinen Gästen erwarten,*
 I can PRT as bridal-couple not from my guests expect
dass sie mir quasi die Feier finanzieren!
 that they me more-or-less the party finance
 ‘A bridal couple can’t expect their guests to more or less pay for the party!’
 (Zobel 2012:13)

- **2nd person singular:** aims to create closeness between the speaker and the addressee; invites the addressee to check whether her experiences fit with the generalization (or simulate the needed experiences, cf. Moltmann 2006 2010), and to come to the same conclusion as the speaker.

⇒ Malamud (2006): “Empathy tracking effects”; the addressee’s empathy is directed towards the group of people

- (31) a. *One could have thrown you in jail for that.* (empathy with object)
 b. *You could have thrown one in jail for that.* (empathy with subject)

- Crucially, referentially used 1st and 2nd person singular are completely neutral in this respect, i.e. they do not have any comparable pragmatic effects.

2.3 A non-unified account for impersonal and referential uses (cf. Zobel 2012)

- Semantically, impersonal and referential uses do not make the same contribution.
 - Referentially used 1st and 2nd person singular pronouns can be analyzed as Kaplanian context coordinates (Kaplan 1989), or maybe as definite descriptions (cf. Elbourne 2008); see Session 3
 - Impersonally used 1st and 2nd person singular pronouns contribute only a simple individual variable, like impersonal pronouns.

⇒ **Support:** with respect to pronominal strength, impersonally used 1st and 2nd person behave like their bound variants; only the weak pronominal forms allow for an impersonal use (cf. Gruber 2013) or a bound use

- (32) *Åis Großötan muas-e/#muas-i do di Hochzaet zâin.*
 as grand-parents must=I.WEAK/must=I.STRONG PRT the wedding pay
 ‘As grand-parents, one has to pay for the wedding.’

- (33) a. *Nua du schenkst da Kola aẽ.*
 only you pour you.WEAK coke PRT
 ‘Only you pour coke for yourself.’
Available entailment: no one else pours coke for you (referential 2nd)
Available entailment: no one else pours coke for themselves (bound 2nd)
- b. *Nua du schenkst dia Kola aẽ.*
 only you pour you.STRONG coke PRT
 ‘Only you pour coke for yourself.’
Available entailment: no one else pours coke for you (referential 2nd)
Unavailable entailment: no one else pours coke for themselves (bound 2nd)

⇒ This is in line with Déchaine & Wiltschko (2002): weak pronominal forms point towards less syntactic structure—crucially a missing DP-layer.

⇒ **Possible conclusion:** these expressions do not denote definite descriptions, but contribute individual variables.

- Impersonally used 1st and 2nd person singular and impersonal pronouns induce different pragmatic effects. This is captured by different, additionally contributed “not-at-issue content” (cf. Potts 2005, Amaral et al. 2007).

⇒ **“Not-at-issue content”:** conveyed content that is not part of the asserted, truth-conditional meaning of an utterance

(The following contents are proposed for sentences of the form: ‘as *F*, <pron> is *G*’)

- **Idea:** This speaker-oriented content captures the difference between impersonally used pronouns and indefinite noun phrases in generic sentences

- (34) Speaker-oriented content for 1st/2nd singular and impersonal pronouns:
 $\lambda w. [F(c_S)(w) \rightarrow \text{BELIEVE}_w(c_S, \lambda w. N_{F,G}(w)(c_S))] \&$
 $[\neg F(c_S)(w) \rightarrow \text{BELIEVE}_w(c_S, \lambda w. \forall w' \in \text{MaxSim}_{F(c_S),w}[N_{F,G}(w')(c_S)])]$

⇒ **Informal paraphrase:** if the speaker c_S is an F , he believes that the generalization that his utterance expresses applies to him, and if he is not an F , he believes it would apply to him if he were an F .⁷

- **Idea:** the participant-oriented content still reflects the formal (i.e. morphosyntactic) connection of the impersonal uses to the referential uses

- (35) Participant-oriented content for 1st person singular:⁸
 $\lambda w. \text{BELIEVE}_w(c_S, \text{all individuals that consider } ?p \text{ should accept that } p) \&$
 $\text{BELIEVE}_w(c_S, \text{a specific individual does not accept that } p)$

- (36) Participant-oriented content for 2nd person singular:
 $\lambda w. \text{BELIEVE}_w(c_S, \text{all individuals that consider } ?p \text{ should accept that } p) \&$
 $\lambda w. \text{INVITE}_w(c_S, c_A, \text{consider } ?p)$

⇒ this aims to capture the distancing vs. closeness effects illustrated in (30) and (31) and the speaker’s belief that the generalization that he expresses is uncontroversial

⁷ $N_{F,G}(w)$: set of non-exceptional F -individuals with respect to being G in w (part of the semantics proposed for *Gen* in Drewery 1998 adapted in Zobel 2012)

⁸? p is the question whether or not the proposition p holds

- **Interim conclusion:**

- The semantic behavior of the impersonal use and of the referential use seem to resist unification under the assumption that pronouns in all of their uses are definite descriptions.
- The analysis presented above adopts a traditional Kaplanian semantics for the referential use, and assumes that in the impersonal use, the pronouns contribute a free individual variable.
- In addition to the individual variable, impersonally used pronouns also contribute “not-at-issue content” commenting on the sentence.

3. Alternative, unificatory approaches to referentially and impersonally used personal pronouns

- Malamud (2006) and Zobel (2012:Chapter 2) propose accounts for personal pronouns that aim to capture all of their uses; the pronouns are assimilated formally to impersonal pronouns with added descriptive content that links the impersonal use to the referential use

- **Malamud (2006):** *you* is an existential indefinite quantifier restricted to personas of c_A

$$(37) \quad \llbracket you \rrbracket^{g,c} = \lambda P. \lambda s. \exists y [\text{persona}(y)(c_A)(s) \ \& \ P(y)(s)]$$

(cf. Malamud 2006)

$$(38) \quad \text{A persona } y \text{ of } c_A \text{ in } s: \text{ For } c_A \text{ and a situation } s, \text{ there is an individual } z \text{ in } s \text{ such that } y \text{ consists of } z\text{'s physical form and } c_A\text{'s point of view in } s.$$

- **Referential use:** the set of personas only contains c_A ; the situation variable is bound existentially
- **Impersonal use:** the set of personas contains various individuals, possibly including c_A ; the situation variable is bound by Gen

- **Zobel (2012):** *ich* and *du* are Heimian indefinites that denote open propositions (i.e. propositions containing free variables) for which the free variable x is related by R to c_S or c_A .⁹

$$(39) \quad \begin{array}{ll} \text{a.} & \llbracket ich \rrbracket^{g,c} = \lambda w. \mathbf{R}(c_S)(x)(w) & \text{(defined if } x \text{ is atomic)} \\ \text{b.} & \llbracket du \rrbracket^{g,c} = \lambda w. \mathbf{R}(c_A)(x)(w) & \text{(defined if } x \text{ is atomic)} \end{array}$$

(cf. Zobel 2012)

- **Referential use:** R is assigned the identity relation; x is bound existentially
- **Impersonal use:** R is assigned an identifies-with relation; x is bound by Gen

⇒ Based on a modified version of Elbourne’s (2008) formalization of Nunberg’s (1993) three-component account

⇒ Note that a DRT-like treatment is needed to accommodate this proposal in a compositional semantics

⁹See also the comment on the treatment of noun phrases in the literature on generic sentences above.

- **Both accounts:** sentences containing referential uses or impersonal uses

- (40) a. *You burned a house.* (referential)
 b. **Malamud's analysis:**
 $\lambda s_0. \exists y \exists z [\text{persona}(y)(\text{addressee}(c))(s_0) \ \& \ \text{house}(z)(s_0) \ \& \ \text{burned}(y)(z)(s_0)]$
 c. **Zobel's analysis:**
 $\lambda w. \exists x \exists y [x = c_A \text{ in } w \ \& \ \text{house}(y)(w) \ \& \ \text{burned}(y)(x)(w)]$
- (41) a. *You respect older people.* (impersonal)
 b. **Malamud's analysis:**
 $\text{Gen } s_{min} (\exists y [\text{persona}(y)(\text{addressee}(c))(s_{min})]; \exists s' [s_{min} < s' \ \& \ \text{respect-older people}(\iota y [y \text{ in } s_{min}])(s')])$
 c. **Zobel's analysis:**
 $\text{Gen } x (\text{identifies-with}(c_A)(x); \text{respect-older-people}(x))$

⇒ difference for *Gen*: quantification over individuals vs. quantification over situations¹⁰

3.1 Problems for unificatory accounts of this kind

- The following problems arise for both Malamud's account and Zobel's account above.
- Impersonally used pronouns contribute descriptive content to the truth-conditions of a sentence that captures identification/empathy by the speaker or addressee.

Problem: This content restricts the set of people that is quantified over generically.

⇒ the generalizations are stated for people that the speaker/addressee identifies with

- (42) a. *Besucher können das Bild vom Eingang aus sehen.*
 visitors can the painting from-the entrance PRT see
 b. *Ich kann als Besucher das Bild vom Eingang aus sehen.*
 I can as visitor the painting from-the entrance PRT see
 c. *Du kannst als Besucher das Bild vom Eingang aus sehen.*
 you can as visitor the painting from-the entrance PRT see

⇒ This makes the wrong predictions! Since the set of people generalized over is restricted to the people that the speaker or addressee identifies with, truth-conditional equivalence between the sentences in (42) cannot be ensured, which intuitively convey the same general statements, though

- (43) a. $\lambda x. \lambda w. \text{identifies-with}(c_S)(x)(w)$
 b. $\lambda x. \lambda w. \text{identifies-with}(c_A)(x)(w)$

- The referential uses are modelled via existential quantification over a singleton set, similar to Russellian definite descriptions (cf. Russell 1905).

⇒ the referential uses are quantificational, and not directly referential; this runs against Kaplan's observations on first and second person pronouns

¹⁰The notation $\text{Gen } x(\dots x \dots; \dots x \dots)$ is taken from Krifka et al. (1995). The expression to the left of the semicolon is the restrictor, and the expression to the right of the semicolon the scope of the generic operator. The variables in front of the parentheses are bound by *Gen*.

⇒ the proposed semantic contribution interacts in a pragmatically counter-intuitive manner with logical operators, e.g. sentential negation, see (44)

- (44) a. *Ich bin nicht groß.*
 I am not tall
 ‘I’m not tall.’
- b. $\neg\exists x[c_S = x \text{ in } w_0 \ \& \ \text{tall}(x)(w_0)] \Leftrightarrow$
 $\forall x\neg[c_S = x \text{ in } w_0 \ \& \ \text{tall}(x)(w_0)] \Leftrightarrow$
 $\forall x[c_S \neq x \text{ in } w_0 \ \vee \ \neg\text{tall}(x)(w_0)]$
 ‘Everyone is not identical to the current speaker or is not tall.’

⇒ intuitively, (44-a) is a statement about the speaker, but the paraphrase of the formalization in (44-b) is a statement about a contextually salient set of humans; from a pragmatic point of view, this is undesirable

- **Conclusion:** Neither the referential use nor the impersonal use is captured adequately.
 ⇒ A non-uniform account, as presented in Section 2.3, again seems to be more adequate to capture the respective properties of the referential and the impersonal use.

4. Concluding this course

- The following table summarizes the structure of this course:

1st step (Mo)	the classical view: 3rd person pronouns as individual variables • a non-dynamic and dynamic implementation • “e-type” uses as problematic cases
2nd step (Di and Mi)	a new proposal: 3rd person pronouns as definite descriptions • binding as situation-binding • discussing an extension to 1st and 2nd person pronouns
3rd step (Do and Fr)	non-uniformity among versions of 3rd person pronouns: personal vs. d-pronouns • a syntactic vs. semantic approach • non-uniformity among uses of 1st and 2nd person pronouns: referential vs. impersonal • non-unified vs. unified proposals

- What can be concluded for “A (Non-)Uniform Approach to Pronominal Semantics”?
 - English 3rd person pronouns can perhaps be analyzed as definite descriptions in all of their uses. Variants of 3rd person pronouns in other languages seem to require more nuanced analyses due to strong/weak/clitic distinctions.
 - Not everything that looks like a 1st and 2nd person pronoun is a strict indexical: the referential vs. bound and impersonal uses seem to require different analyses.

References

- Alonso-Ovalle, Luis. 2002. Arbitrary Pronouns Are Not That Indefinite. In *Romance Languages and Linguistic Theory 2000*, eds. Beyssade, Bok-Bennema, Drijkoningen, and Monachesi. John Benjamins.
- Amaral, Patricia Matos, Craige Roberts, and E. Allyn Smith. 2007. Review of 'The Logic of Conventional Implicature' by Chris Potts. *Linguistics and Philosophy* 30:707–749.
- Cabredo-Hofherr, Patricia. 2008. Les pronoms impersonnels humains - syntaxe et interprétation. *Modèles linguistiques tome XXIX-1* 57:35–56.
- Condoravdi, Cleo. 1989. Indefinite and generic pronouns. In *Proceedings of the Eighth West Coast Conference on Formal Linguistics*, ed. Fee and Hunt.
- Déchaine, Rose-Marie and Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33:409–442.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, Mass.: MIT Press.
- Drewery, Alice. 1998. *Generics, Laws and Context*. Doctoral Dissertation, University of Edinburgh.
- Elbourne, Paul. 2008. Demonstratives as individual concepts. *Linguistics and Philosophy* 31: 409–466.
- Elbourne, Paul. 2013. *Definite Descriptions*. Oxford: OUP.
- von Fintel, Kai. 2004/1995. A Minimal Theory of Adverbial Quantification. In *Context Dependence in the Analysis of Linguistic Meaning*, eds. Partee and Kamp, 153–193. IMS Stuttgart Working Papers.
- Gruber, Bettina. 2011. Indexical pronouns: generic uses as clues to their structure. *Poznań Studies in Contemporary Linguistics* 47:331–360.
- Gruber, Bettina. 2013. *The Spatiotemporal Dimensions of Person: A Morphosyntactic Account of Indexical Pronouns*. Doctoral Dissertation, University of Utrecht.
- Heim, Irene. 1988 [1982]. *The Semantics of Definite and Indefinite Noun Phrases*. Doctoral Dissertation, University of Massachusetts, Amherst.
- Kitagawa, Chisato, and Adrienne Lehrer. 1990. Impersonal uses of personal pronouns. *Journal of Pragmatics* 14:739–759.
- Lewis, David. 1975. Adverbs of quantification. In *Formal Semantics of Natural Language*, ed. Keenan, 3–15. Cambridge University Press.
- Malamud, Sophia A. 2006. *Semantics and pragmatics of arbitrariness*. Doctoral Dissertation, University of Pennsylvania.
- Malamud, Sophia A. 2012. Impersonal indexicals: *one, you, man, and du*. *Journal of Comparative Germanic Linguistics* 15: 1–48.
- Moltmann, Friederike. 2006. Generic one, arbitrary PRO, and the first person. *Natural Language Semantics* 14:257–281.
- Moltmann, Friederike. 2010. Relative Truth and the First Person. *Philosophical Studies* 150:187–220.
- Nunberg, Geoffrey. 1993. Indexicality and Deixis. *Linguistics and Philosophy* 16:1–43.
- Potts, Christopher. 2005. *The Logic of Conventional Implicatures*. Oxford University Press.
- Russell, Bertrand. 1905. On Denoting. *Mind* 14:479–493.
- Zifonun, Gisela. 2000. "Man lebt nur einmal." Morphosyntax und Semantik des Pronomens 'man'. *Deutsche Sprache* 3/00:232–253.
- Zobel, Sarah. 2010. Non-Standard Uses of German 1st Person Singular Pronouns. In *JSAI-isAI, LNAI 6284*, eds. Nakakoji, Murakami, and McCready, 292–311. Springer.
- Zobel, Sarah 2012. *Impersonally Interpreted Personal Pronouns*. Doctoral Dissertation, University of Göttingen.