

IMPERSONAL INDEXICALS: *MAN*, *SI*, AND *YOU*.*

Sophia A. Malamud
University of Pennsylvania
smalamud@ling.upenn.edu

1 The problem

- The existence of indexicals that can shift their reference under influence of linguistic context has been the subject of much debate (Kaplan 1989, Schlenker 2003, inter alia).
 - In particular, Kaplan (1989) argues that operators that can quantify over or shift contexts do not exist in natural language; he terms such operators *monsters*.
 - Schlenker (2003), on the other hand, argues that such operators are pervasive in natural languages, and brings data from Amharic and Russian to bear on the issue. In Amharic and Russian, indexical elements shift in attitude reports, suggesting that verbs of attitude are monsters.
 - Some recent proposals also argue for existence of both monsters and shifting indexicals, but limit the types of such phenomena that exist in natural languages (Adesola 2004, Anand and Nevins 2004, Sharvit 2004).
- Impersonal pronouns that have a reading inclusive of the speaker or hearer present a challenge in this debate:
 - how to reconcile their susceptibility to quantification with their indexical nature?
 - Some previous work suggests that one way to do so is to analyse these items as shifting indexicals and the contexts that cause impersonal readings as monsters (Malamud 2005).
- I explore the semantics of three such items:
 - German impersonal pronoun *man*,
 - Italian impersonal *si* construction,
 - and the impersonal use of *you* in English (1).

(1) German

- a. Man wäscht die Hände vor dem Essen
MAN washes the hands before the meal
'People wash hands before meals'

Italian (Chierchia 1995: 107)

- b. In Italia, si beve molto vino
In Italy *si* drinks lots wine
'In Italy, people drink a lot of wine'

* I want to thank my advisor, Maribel Romero, for constant support in developing this material, and my committee members, Ellen Prince, Robin Clark, and Gennaro Chierchia, for insightful discussion of portions of this presentation. I am also continually grateful to my native-speaker informants, too numerous to name here. Special thanks to the participants of UMass semantics seminar for vigorous critique and discussion of this material. This presentation is supported by a travel grant from Graduate Student Associations Council of Upenn.

- c. You don't get this kind of undeveloped countryside anymore.
- All three show seemingly contradictory behaviour:
 - sometimes, they get an impersonal interpretation and can shift their reference.
 - At other times, the same items have indexical reference, the most "personal" and stable type.
- I will argue that this contradiction in behaviour is only apparent, because distinct elements in the semantics of the items are responsible for the impersonal and the indexical aspects of the pattern.
 - This derives the full range of data without positing the existence of monsters outside the domain of attitudes.

The structure of this talk is as follows:

In the next section, I will discuss the impersonal behaviour of these three items.

In Section 3, I address their indexical behaviour.

In Section 4, I discuss some important differences between *man*, *si*, and *you*.

I then proceed to discuss the analyses of impersonal *you*, and propose a semantics for this item.

Section 6 discusses a semantics for *man* and *si*.

Section 7 is the Conclusion.

2 Impersonal behaviour

- In sentences with adverbial quantification, *man*, *si*, and *you* acquire the quantificational force of the adverb: quantificational variability effect (QVE), as in (2) as well as in donkey-sentences (3).

(2) German

- a. Damals lebte man normalerweise/selten bis 60 Jahre
Then lives MAN usually /rarely till 60 years
'In those days, one usually/rarely lived till 60'
(QVE available: *most/few people in those days lived to 60*)

Italian

- b. Qui si è di solito/raramente tifosi dell'Angels
Here SI is usually/rarely fans of.the.Angels
'Here one is usually.rarely a fan of the Angels'
(QVE available: *most/few people here are fans of the Angels*)

- c. Then, you usually/rarely lived to be 60
(QVE available: *most/few people in those days lived to 60*)

(3) QVE with arbs in conditionals

German

- a. Wenn man mit der Mafia verhandelt, wird man normalerweise ermordet
If MAN with the Mafia deals will MAN usually get.killed
'If one deals with the Mafia, one will usually get killed'
(QVE available: *some/most people dealing with Mafia get killed*)

Italian

- b. Se *si* é intelligenti, *si* é di solito fieri
If *si* is intelligent, *si* is usually proud
'If a person is intelligent, he/she is usually proud'
(QVE available: *Most smart people are proud*)
- c. If you deal with the Mafia, you sometimes/usually get killed
(QVE available: *some/most people dealing with Mafia get killed*)
- This is trademark behaviour of indefinites (4), which provide a variable that is then bound by the adverb.
- (4) a. A linguistics student is usually smart
b. If a *si* deals with the Mafia he sometimes/usually gets killed

3 Indexical behaviour

- *Man*, *si*, and *you* can also receive an indexical semantics, referring to the speaker or hearer of the sentence (5).
 - The deictic nature of such reference provides an apparent contradiction with their impersonal interpretation and indefinite behaviour in QVE contexts.

(5) German (Kratzer 1997: 4)

- a. Als ich klein war, wurde man nur am Freitag gebadet
When I little was got MAN only on Friday bathed
'When I was little, we¹ only bathed on Fridays'

b. Italian (D'Alessandro 2004: 39)

Ieri *si* è arrivati tardi
Yesterday *si* is arrived late
'Yesterday, we¹ arrived late'

c. Yesterday you burned a house

- Moreover, *man* and *you* are ungrammatical in existential *there*-sentences (6a,b), unlike indefinite NPs (compare 6c,d).

(6) German

- a. *Es war man gekommen
There was MAN come

b. *There are/is you in the garden

German

- c. Es war wer/jemand gekommen
There was someone come
'Someone came'

¹ My native speaker informants agree that there is a subtle difference between the inclusive *man/si* and corresponding first-person plural pronouns *wir/noi*. I will not address this difference in this talk.

d. There is a student in the garden

4 *Man/si* ≠ *you*

- In sentences lacking overt Q-adverbs or silent generic quantification, indefinite NPs as well as *man* and *si* are interpreted as existentially quantified (7).
- In contrast, impersonal *you* is impossible in such contexts, and only the deictic interpretation is available (5c, repeated below).

(7) German

- a. Gestern, hat man ein Haus abgebrannt
Yesterday has_{MAN} a house burned
'Yesterday, someone has burned a house'

Italian

- b. Oggi si è ucciso un innocente
Today si is killed an innocent
'Today, someone killed an innocent person'

(5c) Yesterday you burned a house

- Another difference between *you* and *man/si* is that, even on its impersonal use, *you*, but not *man/si*, always requires that the addressee empathise with the agent denoted by *you*
 - compare with *one*, and with implicit agent in the passive in (8)².

(8) You vs. one/passive

- a. In those days in England, one had to show you some respect
b. ?In those days in England, you had to show one some respect
c. In those days in England, you had to be given some respect

- I conclude that while appearing similar, *man* and *si* on the one hand and *you* on the other hand actually have different semantics.

5 Proposal for *you*

- To reiterate, the challenge presented by *you*:
how to reconcile its indefinite-like susceptibility to quantification with its indexical nature?
 - As we saw just now, in sentences with quantificational adverbs, *you* acquires the quantificational force of the adverb. This is characteristic of indefinites.
 - However, *you* is a second-person pronoun – an indexical pointing to the addressee.
- So: I am going to entertain three possible ways of resolving this challenge, in turn.

² All impersonals (to varying degrees) require that **the speaker** empathise with the individual denoted by the impersonal pronoun; this is not the contrast I'm after.

- **Take one: ambiguous *you*** – I will entertain and reject the hypothesis that deictic and impersonal *you* are different lexical items. Deictic *you* is a normal indexical. Impersonal *you* is a regular indefinite.
- **Take two: *you* as a shifting indexical** – I will next consider the idea that *you* is a shifting indexical. On the deictic use, no context-shift has occurred, and so *you* refers to the addressee. On the impersonal use, a particular kind of context-shift has been induced by the Q-adverb. I will ultimately reject this hypothesis as well.
- **Take three and final: quantification over personas** – I will finally propose that *you* is a composite of two parts: one part strictly indexical and the other a variable.

5.1 Take one: ambiguous *you* – and why not

First hypothesis (wrong): should we say that there are really two lexical items: the deictic *you*, and the impersonal *you*, and that the impersonal *you* is simply an indefinite?

There are several strong arguments against this approach.

Argument 1:

- The chief argument against the ambiguity hypothesis is that impersonal *you* (singular, wherever such distinction exists for the 2nd-person) appears with astounding systematicity in language after language. The impersonal use of singular 2nd-person pronoun is attested in Slavic, Romance, Germanic, and Dravidian languages, among many others. The explanatory power of our theory would be lost if we were to ignore this ubiquitous connection.
 - The ambiguity hypothesis is equivalent to the claim that *you* is like the word *bark* in English, with the senses “the sound of a dog” and “a small boat” being entirely unrelated.
 - Thus, we would expect the frequency of co-occurrence of deictic and impersonal *you* in the same language to be similar to frequency of co-occurrence of “the sound of a dog” and “a small boat” with the same sound.

Argument 2:

- In fact, even on its impersonal use, *you* has an intimate connection to the addressee. In particular, every use of impersonal *you* involves an appeal for addressee’s empathy, so that the addressees are asked to put themselves into someone else’s shoes (8, repeated below)

(8) Empathy-tracking with *you*

- a. In those days in England, one had to show you some respect
- b. ?In those days in England, you had to show one some respect
- c. In those days in England, you had to be given some respect

Argument 3:

- In multiple-pronoun contexts (9), *you* does not have all logically possible readings – if the two uses of *you* were unrelated, absence of reading (c) is unexplainable.

(9) In those days, you could marry your sister.

- a. Addressee could marry addressee's sister
- b. One could marry one's sister
- c. *Addressee could marry one's sister
- d. One could marry addressee's sister

Argument 4:

- Even if we accept the ambiguity hypothesis, impersonal *you* is not a regular indefinite. As Alonso-Ovalle (2002) notes for the Spanish counterpart of *you*, in sentences lacking overt Q-adverbs or silent generic quantification, regular indefinites are interpreted as existentially quantified (10a).
- In contrast, impersonal *you* is impossible in such sentences, and only the deictic interpretation of *you* is available there (5c, repeated in 10b).

- (10) *You* is not a regular indefinite
- a. A linguist/linguists just burned a house.
 - b. You just burned a house (*arbitrary *you*).

5.2 Take two: *you* as a shifting indexical

- A similar challenge was addressed by Schlenker (2003, 2004) in proposing a semantics for the 1st-person pronoun (usually treated as deixis to the speaker) in Amharic and for the present tense (a deictic to the utterance time) in Russian.

- In Russian, the meaning of present tense shifts in attitude reports:
 - present tense is taken to be an indexical referring to the utterance time
 - In (11a) below it refers to the reported time

- (11) a. Scenario: Two days ago, John said “It is raining.”
Pozavchera Vanja skazal, chto idjot dozhd’.
Before-yesterday John said that goes.PRES rain
‘Two days ago John said that it was raining.’
(lit.: ‘Two days ago John said that it is raining.’)

- In Amharic, the meaning of the first person (agreement) shifts in attitude reports: first person, which is usually taken to be deictic to the speaker, refers to the reported speaker below:

- b. Scenario: John said “I am a hero.” (example from Schlenker (2003), p.25)

ǰon ǰegna nə -ññ yil -all
John hero be.PRF-1SO 3M.say-AUX.3M
‘John says that he is a hero’ (literally: ‘John says that I am a hero’)

- Schlenker reanalyses attitude verbs (previously treated as quantifiers over worlds or situations) as quantifiers over contexts.
 - A context is a tuple <author of attitude, recipient of attitude, time, world>; an indexical then refers to one of the coordinates of this tuple.
 - This analysis for (11b) would be as indicated in (12), where <John, x2, t1, w1> is the context of the reported speech act.

(12) SAY_{<John,x2,t1,w1>}ci be.hero(AUTH(ci), time(ci), world(ci))

Second hypothesis (also wrong): *You* is a shifting indexical, like Amharic *I*, and Q-adverbs are monsters. Q-adverbs quantify over contexts, shifting the meaning of *you*.

- We can treat *you*, both on its arbitrary and deictic use, as an indexical, always referring to the addressee coordinate of the context.
- Extending Schlenker (2003), we could reanalyse quantificational adverbs (previously treated as quantifiers over situations, cf. Lewis 1975, Kratzer 1989, von Stechow 1994) as quantifiers over contexts.
- The new contexts introduced (and the worlds or situations in them) are imaginary ones, in which the speaker and, via recognition of speaker's intent, the addressee pretend to place themselves into the situation described in the restrictor phrase, such as *in those days*.
- This restriction is part of the presupposition associated with *you*: the hearers are asked to place themselves (and attend to) the context introduced in the sentence.
- In sentences that involve no quantification over contexts, *you* will be forced to pick the addressee of the speech context, resulting in the obligatory deictic interpretation as in (5c,10b). *You* picks out the addressee coordinate of the context c_0 , while the verb refers to the situation s_0 , which is one of the coordinates of the context c_0 (13).
- The presupposition is then filtered out, since the addressee is already in the context of speech, and presumably attending to it.

(13) a. You burned a house.
b. $\lambda c_0. \exists x. \text{house}(x) \ \& \ \text{burn}(\text{you}(c_0), x, s_0)$

- When quantification over contexts is introduced, *you* will additionally have the option of referring to the addressee coordinate of the quantified context, leading to QVE as in (2,3). *You* then co-varies with the context, acquiring the quantificational force of the Q-adverb; the variable s is one of the coordinates of the context c .
- The empathy effect results from the nature of the context: new addressee is simply the addressee of the speech context in the shoes of some person in the newly introduced situation.

(14) a. [In those days] You usually/rarely loved the queen.
b. $\lambda c_0. \text{Most } c / \text{Few } c. \text{love}(\text{you}(c), \iota x[\text{queen}(x,s)], s)$
c. Paraphrase: Imagine a context of a speech act in those days in which I am the speaker and you identify with the hearer. For most such speech acts, the hearer loves the queen.

- One consequence of this proposal is that languages will differ along two dimensions:
 - which items can quantify over contexts in them (verbs of attitude or Q-adverbs),
 - and which indexicals can use this quantification to shift.
- This is because in Amharic, where verbs of attitude quantify over contexts, Q-adverbs don't, since first-person pronoun doesn't show impersonal-like QVE (15).

- (15) ənɛ kə niw yɔrk sləhɒnnku, bəzʊgizɛ yɛyanɛkinn budnn ədɛɡfaləhu
I from New York that.I.am, usually the.Yankees team I.am.supporter
'If I am from New York, I am usually a supporter of the Yankees'
(No QVE reading, just temporal 'sometimes I support them, sometimes not')

5.3 Why *always* is not a monster: against second hypothesis

Argument 1:

- It is not clear what kind of contexts Q-adverbs introduce: these are not contexts of speech or thought, like with attitude verbs, since there may be no speech or thought going on in them. So, what are they contexts of?³

Argument 2:

- More importantly, it is not clear how we can count those contexts: in (2c), repeated below, it really seems like we are counting people who live in those days, not “contexts”

(2c) In those days, you rarely lived to be 60

In principle, we could have dozens of imaginary speech acts per person “in those days” – but the only thing we’re counting are persons, not imaginary speech acts. This is similar to the proportion problem in situation semantics, but without an intuitive solution.

Arguments 3:

- Notice that quantification over contexts alone is not sufficient – we must restrict ourselves to the worlds in which the hearer imagines himself in someone else’s shoes. This is an additional assumption not motivated independently.

5.4 The proposal for *you*

- Like Alonso-Ovalle (2002) and Malamud (2005), I propose a unified analysis for the impersonal and deictic use of *you*.
- I do so by, first, separating addressee’s *self* and addressee’s *persona* in the reference of *you*.
 - This separation is independently made in accounting for individuals in counterfactuals like (16).
 - In (16), *you/I* refer to addressee/speaker themselves (their souls/minds/selves), describing a (counterfactual) situation where they are in Mary’s shoes/persona/role.

- (16) a. If you/I were Mary, you/I wouldn’t be dating this horrid guy she’s with! =
b. If your/my *self* had Mary’s *persona*/role, this self (in Mary’s role) wouldn’t be dating this guy

³ This argument was first pointed out by Anand (2005).

- In his seminal proposal, Lewis (1973) analyses counterfactuals using possible world semantics. There, he defines the notion of a counterpart:

“Something has for *counterparts* at a given world those things existing there that resemble it closely enough in important respects of intrinsic quality and extrinsic relations, and that resemble it no less closely than do other things existing there.”
 (p.39)
- *Self of x*, defined in this framework, is then the bundle(conjunction) of properties P, such that $\Box P(x)$ - i.e., in every world *w* accessible from the actual world, counterparts of *x* have the properties P.
- *Persona of x from y*, then, is a subset of properties Q of *y* that in some accessible worlds is true of a counterpart of *x*. *Persona* thus is a two-place predicate, relating two individuals in a world:
 - the actor *x* (providing your self or my self in (16)) and the role-provider *y* (Mary in (16)).
- As sentences with counterfactuals show, the particular subset Q picked out by the *persona* relation varies widely depending on the sentence (17)⁴.

(17) a. If I were President Bush, I would not have started the war in Iraq.
 b. If I were President Bush, I would be a raving war-monger.
- I propose that in addition to the reference to addressee’s self, *you* contains a variable over personas/potential role-providers (an indefinite) (18a). Again, simplifying formulas to abstract away from situations, we have (18)

(18) a. $\llbracket \text{you} \rrbracket^{c,w} = \lambda w. \lambda P. \exists x. \text{persona}(x, \text{addressee}(c), w) \& P(x, w)$
 b. $\llbracket I \rrbracket^{c,w} = \text{speaker}(c)$
- In a context without any adverbial quantification in (5c, 19), the reading would be ‘There is an individual, such that the addressee, inhabiting this individual’s persona, burned a house’ as shown in (19).
 - The individual whose persona/guise/body the addressee’s *self* occupied when burning the house would normally be taken to be the addressee him/herself (unless prior context provides a belief that the addressee is a witch and can possess other people’s bodies, and so could burn a house while in someone else’s shoes).

(19) You burned a house
 $\rightarrow \lambda w \exists x. \exists z. \text{House}(z, w) \& \text{Persona}(x, \text{addressee}(c), w) \& \text{Burned}(x, z, w)$
- In QVE contexts, the variable over personas is bound by the Q-adverb (again, depending on the framework, by situational-semantic or other means)⁵. Thus, (2c) would read ‘For most people living then, you’re in the shoes of that person, that person lives to be 60’ as shown in (20).

⁴ These types of examples were brought to my attention by audiences at Carnegie Mellon University philosophy department talk, and at UMass-Amherst semantics seminar on pronouns.

⁵ The more complicated cases of donkey sentences like (3) are also easily derivable via, e.g. dynamic binding proposal in Chierchia 1995, or using situation semantics. For clarity of exposition, I omit these derivations now.

(20) You usually lived to be 60
 $\rightarrow \lambda w. \text{Most } x. \text{Persona}(x, \text{addressee}(c), w) \rightarrow \text{Live.to.60}(x, w)$

- The presence of indexical rules out *you* in existential there-sentences (6c).
- In contrast to *you*, *I* is not specified for persona (18b), allowing counterfactuals (16,17), but not the impersonal use.

6 Proposal for *man/si*

- In her 1997 presentation, Kratzer suggests that *man* syntactically is a combination of two elements:
 - one encoding indexicality (similar to a 1st-person pronoun),
 - and the other (a silent determiner) specifying whether the combination will include or exclude this first element (21).

(21) Kratzer's (1997) denotation for *man*

- man/si=[Det MAN/SI]
- $\llbracket \text{Det}_{\text{IN}} \rrbracket^{c,w} = \lambda x. \text{the group of } x \text{ in } w$
- $\llbracket \text{Det}_{\text{EX}} \rrbracket^{c,w} = \lambda x. \text{the anti-group of } x \text{ in } w$
- $\llbracket \text{MAN/SI} \rrbracket^{c,w} \approx \text{the speaker of context } c$

- “The group” in Kratzer’s analysis is intended to be something like a team denotation, which in some sense can be susceptible to QVE (22)

(22) When the Berlin Philharmonic comes here, they are usually polite.

- This analysis naturally accounts for the unacceptability of *man* in existential there-sentences.
- Note, however, that the nature of the variability in (22) is quite different from that in (2) and (3): the membership of Berlin Philharmonic may change with every visit but not during a visit, so that “usually” really counts visits, and not current members of the Philharmonic. In contrast, in (3a), for instance (repeated below), the membership of “man” changes with every situation, so that “usually” counts persons, and not “teams of the speaker.”

(3a) German

Wenn man mit der Mafia verhandelt, wird man normalerweise ermordet
 If MAN with the Mafia deals will MAN usually get.killed
 ‘If one deals with the Mafia, one will usually get killed’

- My analysis of *man* and *si* follows Kratzer with the following changes:
 - the silent determiner has a dual function of introducing a plural **indefinite** (an existentially quantified variable), and of specifying whether this variable includes or excludes as its subpart the referent of its sister node (the item similar to 1st-person pronoun) (23).

(23) Denotation for *man/si*

- man/si=[Det MAN/SI]

- b. $\llbracket \text{Det}_{\text{EX}} \rrbracket^{c,w} = \lambda x. \lambda P. \exists y. x \not\leq y \ \& \ P(y,w)$
- c. $\llbracket \text{Det}_{\text{IN}} \rrbracket^{c,w} = \lambda x. \lambda P. \exists y. x \leq y \ \& \ P(y,w)$
- d. $\llbracket \text{MAN/SI} \rrbracket^{c,w} \approx$ the speaker of context *c*

This has a dual result:

- First, *man/si* provides the variable/indefinite that can
 - result in existential reading, deriving (7) (exclusive reading shown in 24a),
 - or undergo QVE (e.g. by using existential disclosure and subsequent binding (Chierchia 1995), or via situation semantics (von Stechow 1994)), deriving (2,3) (exclusive reading shown in 24b).
 - If Det_{IN} replaces Det_{EX} , inclusive readings result.

For the sake of readability, I do not use situation semantics in the formulas here.

- (24) a. $\text{Det}_{\text{EX}} \text{MAN/SI}$ burned a house
 $\rightarrow \lambda w. \exists y \exists z. \text{house}(z,w) \ \& \ \text{speaker}(c) \not\leq y \ \& \ \text{burned}(y,z,w)$
- b. $\text{Det}_{\text{EX}} \text{MAN/SI}$ usually lived to be 60
 $\rightarrow \lambda w. \text{Most } y. \text{speaker}(c) \not\leq y \rightarrow \text{live.to.60}(y,w)$

- Second, as in Kratzer, the presence of the indexical makes *man/si* bad in *there*-sentences
 - compare with other indexical-containing NPs in (25)⁶.

- (25) a. *There're these professors and a student in the garden
 b. *There's your team in the garden

- There is another, discourse-functional reason for unacceptability of *man* in existential *there*-sentences.
- In contrast to non-arbitrary NPs, it has been noted by many researchers that *man* and *si*-impersonals cannot provide antecedents for discourse pronouns of any kind (Chierchia 1995, Kratzer 1997, inter alia) (26, compare with 27).

- (26) German
- a. In Deutschland trinkt man viel Bier. *Sie sind glückliche Leute
 In Germany drinks MAN much beer. *They are happy people
- b. Gestern, hat man ein Haus abgebrannt. *Er wurde verhaftet
 Yesterday has MAN a house burned. *He was arrested

Italian

- c. In Italia, si beve molto vino. *Loro sono gente felice
 In Italy, si drinks much wine. *They are happy people
- d. Ieri, si è telefonato a Maria. *Lui ha chiesto scusa
 Yesterday, si is called to Maria. *He has asked forgiveness

- (27) German
- a. In Deutschland trinken Studenten viel Bier. Sie sind glückliche Leute

⁶ These sentences are ok on the locative reading, of course. The existential reading for these sentences is ruled out entirely.

In Germany drink students much beer. They are happy people
'In Germany, students drink a lot of beer. They are happy people'

- b. Gestern, hat ein Mann ein Haus abgebrannt. Er wurde verhaftet
Yesterday, has a man a house burned. He was arrested
'Yesterday, a man burned a house. He was arrested'

Italian

- c. In Italia, studenti bevono molto vino. Loro sono gente felice
In Italy students drink much wine. They are happy people
'In Italy, students drink a lot of wine. They are happy people'

- d. Ieri, un uomo ha telefonato a Maria. Lui ha chiesto scusa
Yesterday, a man has called to Maria. He has asked forgiveness
'Yesterday, a man called Maria. He apologised'

- Prince (*to appear*) reports on a Centering study of a Yiddish corpus containing *me(n)*, the Yiddish correlate of German *man*.
The patterns of pro-drop and pronominalisation force a conclusion that
 - *me(n)* fails to place an antecedent for consideration for future anaphora;
 - that is, the agent denotation in sentences with *me(n)* is never considered to be a potential topic for subsequent discourse, or a potential antecedent for intersentential anaphora.
- I conducted a small-scale replication of Prince's study for German and Italian.
In each case, evidence from pronominalisation and pro-drop shows that an
 - *man* and *si* fail to place a discourse entity into the competition for future discourse anaphora.
 - Since the NP in the subject position is (normally) exactly the preferred antecedent for future discourse anaphora, we can conclude that removing the subject from competition is exactly the discourse-function of *man* and *si*.
- At the same time, the discourse function of the existential there-construction is introducing a hearer-new entity into the discourse (Ward and Birner 1995), placing it on top of the competition for future discourse anaphora.
The functions of there-construction and the impersonal construction clash, resulting in unacceptable sentences (5)

I will not address the exact nature of the indexical element in the denotation of *man* and *si* (glossed above as "speaker(c)") in this talk.

7 Conclusion

- The analysis presented above derives the QVE data, unlike Alonso-Ovalle (2002).
- My treatment of quantificational variability and indexicality in *man/si* and *you* also avoids analysing them as shifting indexicals (Kaplan 1989) and adverbs as monsters, unlike the account of *you* presented in Malamud (2005), since in the present analysis only non-indexical elements shift in QVE contexts, while indexical elements stay free.

- None of the “shiftings” associated with the impersonal *you*, *man*, and *si* are instances of monster-induced indexical shifting, since even in attitude reports, *man/si* behave as *de se* pronouns rather than true shifting indexicals.

REFERENCES

- Adesola, Olusheye. 2004. A-bar dependencies in logophoric contexts. Harvard-MIT-UConn Indexicality Workshop. November 2004. Harvard University, Cambridge, MA
- Alonso-Ovalle, Luis. 2002. 'Arbitrary pronouns are not that indefinite.' In *Proceedings of Going Romance 2000*, C. Beyssade, R. Bok-Bennema, F. Drijkoningen and P. Monachesi (eds), 1-14. Amsterdam. John Benjamins.
- Anand, Pranav and Andrew Nevins. 2004. Shifty Operators in Changing Contexts: Indexicals in Zazaki and Slave. In *Proceedings of SALT 14*
- Anand, Pranav. 2005. Response to Malamud (2005). Presented at *LSA Workshop "Context and Content - Topics in Formal Pragmatics."* July 2005. Harvard University, Cambridge, MA
- Castañeda, Hector-Neri. 1968. 'On the logic of attributions of self-knowledge to others.' *The Journal of Philosophy* 65 (15).
- Chierchia, Gennaro. 1989. 'Anaphora and attitudes *de se*.' In *Language in Context*. R. Bartsch, J. van Benthem and P. van Emde Boas (eds). Dordrecht: Foris.
- Chierchia, Gennaro. 1995a. 'The Variability of Impersonal Subjects.' In *Quantification in Natural Languages*, E. Bach, E. Jelinek, A. Kratzer and B.H. Partee (eds), 107-143. Kluwer, Boston.
- Chierchia, Gennaro. 1995b. *Dynamics of Meaning: Anaphora, Presupposition, and the Theory of Grammar*. University of Chicago Press.
- Cinque, Guglielmo. 1988. "On *Si* Constructions and the Theory of Arb". *Linguistic Inquiry*, 19:521–582.
- Clemens, George N. 1975. 'The logophoric pronoun in Ewe: its role in discourse.' *Journal of West African Languages* 10: 141-177.
- D'Alessandro, Roberta. 2004. *Impersonal Si constructions: agreement and interpretation*. Ph.D. thesis, Stuttgart.
- Endriss, Cornelia and Stefan Hinterwimmer. 2003. 'The role of tense in adverbial quantification.' Presented at *First Student Workshop of the Graduate Schools of Humboldt University Berlin, University of Potsdam and University of Leipzig*. Berlin, May 2003. <http://www.ling.uni-potsdam.de/~endriss>
- von Fintel, Kai. 1994. *Restrictions on quantifier domains*. Ph.D. thesis, University of Massachusetts, Amherst.
- von Fintel, Kai. 2001. 'Counterfactuals in a Dynamic Context.' In *Ken Hale: A Life in Language*. M. Kenstowicz (ed). MIT Press.
- Kaplan, David. 1989. 'Demonstratives.' In *Themes from Kaplan*. J. Almog, J. Perry, and H. Wettstein (eds), 481-563. Oxford University Press.
- Kratzer, Angelika. 1989. 'An investigation of the lumps of thought.' *Linguistics and Philosophy* 12:607-653.
- Kratzer, Angelika. 1991. 'Modality.' In *Semantik/Semantics: An international handbook of contemporary research*. A. von Stechow and D. Wunderlich (eds), 639-650. Berlin: de Gruyter.
- Kratzer, Angelika. 1997. 'German impersonal pronouns and logophoricity.' *Sinn und Bedeutung II*. Berlin, Germany.
- Leslau, Wolf. 1995. *A reference grammar of Amharic*. Harrassowitz.
- Lewis, David. 1973. *Counterfactuals*. Cambridge, MA: Harvard University Press.
- Lewis, David. 1975. 'Adverbs of Quantification.' In *Formal Semantics of Natural Language*. E. L. Keenan (ed.), 3–15, Cambridge University Press, Cambridge.
- Lewis, David. 1979. 'Attitudes *de dicto* and *de se*.' *The Philosophical Review* 88: 513-543.
- Malamud, Sophia (2005) *Arbitrary monsters: you and one*. Presented at *LSA Workshop "Context and Content - Topics in Formal Pragmatics."* July 2005. Harvard University, Cambridge, MA.
- Nakanishi, Kimiko and Maribel Romero. 2003. 'Two constructions with *Most* and their semantic properties.' *NELS 34*. SUNY Stony Brook.
- Nunberg, Geoffrey. 1993. 'Indexicality and Deixis.' *Linguistics and Philosophy* 16: 1-43.
- Partee, Barbara. 1989. 'Binding Implicit Variables in Quantified Contexts.' *CLS* 25: 342-365.
- Perry, John. 1977. 'Frege on Demonstratives.' *Philosophical Review* 86: 474-97.
- Prince, Ellen F. 2003. 'The Yiddish impersonal pronoun *me(n)* 'one': a Centering analysis.' Presented at the *Annual Meeting of the LSA*. Atlanta.
- Prince, Ellen F. *To appear*. Impersonal pronouns in French and Yiddish: semantic reference vs. discourse reference. In *Drawing the Boundaries of Meaning: Neo-Gricean Studies in Pragmatics and Semantics in Honor of Laurence R. Horn*. Birner, B. and Ward, G. (eds.) Philadelphia/Amsterdam: John Benjamins.

Impersonal indexicals: *man*, *si*, and *you*
Sophia A. Malamud

Rooth, Mats. 1987. 'Noun phrase interpretation in Montague grammar, file change semantics, and situation semantics' In *Generalized Quantifiers. Linguistic and Logical Approaches*, P. Gärdenfors (ed), 237-268. Dordrecht: Reidel.

Schlenker, Philippe. 2003. 'A plea for monsters.' *Linguistics and Philosophy* 26:29-120.

Sharvit, Yael. 2004. 'Free Indirect Discourse and De Re Pronouns.' In *Proceedings of SALT 14*.