The impersonal gets personal: a new pronoun in Multicultural London English

David Hall

DRAFT Dec 2018

Abstract

Multicultural London English (MLE) has developed a new pronoun, *man*, with a number of interesting properties. It can be interpreted as any person and number combination (1SG, 1PL, 2SG, 2PL, 3SG, 3PL), and at first blush appears the allow a generic impersonal reading. One central strand of analyses of the 'generic' or 'quasi-universal' interpretation of impersonal pronouns involves treating them as featurally impoverished pronouns which act as variables bound by a generic operator either high in the clause (Moltmann 2006; Sigurðsson and Egerland 2009; a.o.) or at the top of the DP (Ackema and Neeleman, 2018). What is interesting about MLE *man* is that it seems to allow a generic reading while being generally resistant to binding: the pronoun never behaves as a bound variable, and so it could not reasonably be assumed that a generic operator can bind it. I show, however, that a closer look at the facts reveals that the quasi-generic interpretation, and all other possible interpretations of the pronoun, can be explained instead by assuming that it has featureless person head, which introduces the full lattice of possible referents including speaker and addressee (following Harbour 2016), and then allowing contextually determined subsets of that full lattice to be picked out by a choice function, modelled on the epsilon operator of von Heusinger (2004). This novel data from MLE suggests that generic-like interpretations can arise even where generic binding is not possible, but that the traditional strategy of generating these interpretations are still needed to capture the full typology of impersonal pronouns.

Keywords Pronouns, Impersonal Pronouns, Multicultural London English, Definiteness, Person

1 Introduction

Innovations in languages are not only interesting from a historical and a sociolinguistic perspective, where questions of social meaning, networks, indexicality, contact and acquisition are all central and important, but also from a formal syntactic and semantic perspective. New grammatical forms often provide a gold mine of data which can reveal the limits of variation in feature inventories, constraints on the computational system of

syntax, and on the mapping from syntax to semantics and phonology. Analyses of innovations can also occasionally help to tighten up existing theories, or adjudicate between competing theories.

In this paper I consider one innovation, the pronominal form *man* in Multicultural London English (MLE), which I believe is important for all of the above reasons. I show how its distribution and range of interpretations gives us an insight into the nature of pronouns in general, and more specifically how at first glance it suggests a rethink to existing approaches to impersonal pronouns, but ultimately fits quite naturally into current theories of grammar.

There is a rich literature on a variety of impersonal pronominal forms across languages, the most widely studied of these being Germanic and Romance impersonal forms. Many existing analyses of the generic interpretation of impersonal pronouns have in common that they treat the pronouns as featurally deficient or underspecified in the syntax (Sigurðsson and Egerland 2009; Hoekstra 2010; Fenger 2015; Holmberg and Phimsawat 2016; Ackema and Neeleman 2016), and that this deficiency means that their interpretation is not constrained by phi-features, but instead is imposed externally, be it through agreement with some head in the clause (e.g., D'Alessandro and Alexiadou 2002), or binding by a quantificational operator (e.g., Moltmann 2006; Malamud 2012). I focus in this paper mainly on the latter kind of analysis involving binding, which I briefly introduce here.

An early proposal along those lines was put forward in Chierchia (1995).[1] Putting aside the specifics of the analysis, Chierchia argues that generic readings of Italian *si* are the result of a variable being bound by a generic operator at the edge of VP, in a way analogous to that of indefinite generics. This means that *si canta*, 'one sings', in a generic context, has the (very simplified) logical form of (1).

(1) Gn x sings(x)

Here Gn is "a null universal adverb with a special modal quality (which enables it to tolerate exceptions)" (p111). More recent treatments of impersonal pronouns across languages have followed in this tradition, and suggested that impersonal pronouns are themselves underspecified pronouns, which act simply as variables bound by a generic operator. Moltmann (2006); Sigurðsson and Egerland (2009); Malamud (2012); Roberts (2015); Fenger (2015); Holmberg and Phimsawat (2016); and Ackema and Neeleman (2018) all feature a version of this story, although Ackema and Neeleman have the generic operator merged inside the DP, while the others all feature a generic operator high in the clause.[2]

In this paper I show that a "feature deficient" approach to a newly innovated pronominal *man* in MLE is appropriate, but argue that a generic binding analysis for the imper-

[1] A reviewer points out that Condoravdi (1989) was the first to propose such an analysis. Before that, Cinque (1988) argued that the generic interpretation of impersonal pronouns involves a quasi-universal reading which is imposed on the pronoun by the tense/aspect of the clause, but does not explicitly propose that this is the result of a generic operator binding *si* as a variable. Chierchia himself points out that before his paper, "no truth conditionally explicit logical forms for constructions involving *si* have been proposed" (p107). See also Burzio (1986) for an early discussion of *si*.

[2] Ackema and Neeleman do note that their Gn-operator is not a true quantifier, but the LF that they propose for generic pronouns still treats the pronouns as variables which are bound by an operator.

sonal reading associated with the pronoun is not. Although MLE *man* exhibits some of the characteristics of an impersonal pronoun, in that it can have what looks like a generic reading, I show that it cannot act as a bound variable in a number of environments. Thus I conclude that it cannot get its generic interpretation through binding, although ultimately I argue that this "generic" interpretation is not quite the same as that associated with other impersonal pronouns. I also show that MLE *man* has the peculiar property of being able to contextually pick out referents in a almost unconstrained way: it can act as a personal pronoun of any person and feature combination, given the appropriate context. I propose that these two characteristics of MLE *man*, its resistance to binding and its ability to either get a pseudo-generic interpretation, or a definite personal interpretation of any person and number, can be captured if we assume (following most of the literature) that the pronoun lacks person features, but that its interpretation is determined through the obligatory projection of a definiteness head, which picks out a salient individual from the set of potential referents, in the spirit of von Heusinger's 2004 treatment of definiteness.[3]

The paper is structured as follows: in section 2, I introduce the properties of MLE *man*, and elaborate on the different interpretations that the pronoun can have; in section 3 I use agreement facts across two different groups of speakers of MLE *man* to show that the pronoun carries no person features, although it may have number features; in section 4, I show that MLE *man* cannot be bound; in section 5 I propose an analysis of the properties of MLE *man* which eschews a generic operator approach, and instead treats MLE *man* as a pronominal form with no ϕ-features that obligatorily projects a D head.

2 A new (im)personal pronoun in MLE

Cheshire (2013) documents the grammaticalisation of a new pronominal form, *man*, in what is termed 'Multicultural London English': that is, the English spoken by young, typically working-class Londoners who have grown up in and live in a multicultural and multilingual environment.[4,5] Cheshire suggests that *man* is a general pronominal form, which developed from plural use of a bare noun, and that it is currently in the process of becoming grammaticalized as a first person singular personal pronoun. The suggestion is that an original bare (number neutral) form *man* ultimately developed into the pronominal form, and that this bare form was likely adopted from Jamaican Creole *man*, which

[3]There are other analyses of impersonal pronouns which do not posit any binding relation between a generic operator and a variable, or which are not explicit in their treatment of generic interpretations. D'Alessandro and Alexiadou (2002), for example, state that they follow Chierchia in assuming that "imperfective aspect introduces a generic operator" (p40), but then suggest that the relationship between the operator and the pronoun is one of Agree and feature valuation, such that there is not explicitly a binding relation (the 'generic' feature is copied from the operator to the pronoun, and this feature is interpreted). See also Hoekstra (2010) for an approach tied to the notion of specificity. I put aside a detailed discussion of these alternatives here for reasons of space.

[4]See Cheshire et al. (2011); Cheshire et al. (2013); Kerswill et al. (2008); Fox (2012) and Kerswill (2013) for discussion of a variety of other features of MLE.

[5]Cheshire (2013) suggests that *man* as a pronoun is a new form which is in the early stages of grammaticalisation, but the fact that there are recorded instances of its use as early as 2001, and the fact that it is now widespread and commonly used suggest that it has already become a robust feature of MLE. The two earliest unambiguous recorded examples that I know of are from songs:

can also take on something like an impersonal use in certain contexts, at least insofar as it has a kind of generic force (examples from Cheshire 2013):

(3) a. *Man kaan fuul mi, man.* (Jamaican Creole)
'People can't fool me, man.'

b. *Ai no riili fiil se day ai am set above man.*
'I don't really think I'm [set up] above other people'

c. *Man kyaan bai bred.*
'People/one can't buy bread'

The bare noun form *man* which can be used simply to mean 'people'/'men' also still exists in MLE. It can be modified by quantificational elements such as *many*, *bare* ('a lot (of)'), or *couple*, by numerals, and by adjectives, and cannot give rise to 3SG agreement as a subject. Some examples are given in (4).[6]

(4) a. *[I] blocked too many* ***man****.* (MLE corpus; Barry)

b. *They call up their guys yeah, bare* ***man*** *outside school blud.*
(MLE corpus; Robert)

c. *In my ends, I mean 'area', it's just younger lots. Like my age and younger. There's the odd couple of* ***man****.* (MLE corpus; Roshan)

d. *Yes and they had about three* ***man*** *each.* (MLE corpus; Roshan)

---

(2) a. *Now I know why you really wanna hate man.* [=1SG/PL]
(Oxide and Neutrino, 'Rap Dis' , 2001)

b. *Must've seen that Lethal B boy the other day, he must've tried to screw man.* [=1SG]
'I saw that Lethal B boy the other day, he tried to give me dirty looks.'
(More Fire Crew, 'Oi', 2001)

[6]MLE example sentences in the paper are taken from a variety of sources. I present naturalistic data from the Multicultural London English corpus which consists of approximately 27,000 words, formed of a subset of recordings from two projects, the *Linguistic Innovators Project*, and the *Multicultural London English* project (see footnotes 10 and 11). Examples from these corpuses are tagged, and the pseudonym of the speaker is also given. I further make use of naturalistic data taken from interviews with Grime artists, lyrics from Grime songs, and other utterances recorded by the author. I use this kind of data to give evidence of the various uses of the pronoun "in the wild", and to attempt to show that the properties elicited from consultations with speakers are not simply an artefact of the elicitation process. These data are all tagged with their specific origin. Of course corpus data is limited, in that no information on grammaticality can be gleaned from real world examples, and so I also collected judgments from speakers in two ways. First, I ran a set of informal acceptability judgment tasks using Ibex (developed by Alex Drummond) to establish the empirical lay of the land with respect to the possibility of bound variable interpretations in various contexts (see section 4). These tasks involved MLE speakers giving judgments on a 1-7 Likert scale on sentences presented visually, with contexts forcing bound variable interpretations. Further to this, I also engaged in consultations with MLE speakers, to get more detailed judgments on agreement paradigms (section 3) and bound variable interpretations (section 4). Data from the judgment tasks and consultations are marked throughout as DH. I will note that I myself am a member of the speech community, and use the form in my own speech, so my personal intuitions have also been included (as is standard).

e. *My mum goes out with Jamaican* ***man*** *most of the times.*
(MLE corpus; Chris)

In its pronominal use, no modification is allowed, 3SG agreement is possible,[7] and a wide range of interpretations are available according to context, including speaker reference.[8]

(6) *Before I got arrested* ***man*** *paid for my own ticket you know.*
'I paid for my own ticket'; (*'people/men paid for my own ticket')
(MLE corpus; Dexter)

The pronominal form is particularly interesting because of the wide range of interpretations that it can have. In the next subsection, I lay out some examples of those different interpretations, and clarify some syntactic properties of the pronoun.[9]

2.1 Interpreting *man*

Cheshire provides a summary of some of the properties of *man*, derived from 11 tokens of the pronominal form extracted from a set of recordings from two projects on working-class London English, the *Linguistic Innovators Project*,[10] and the *Multicultural London English Project*,[11] alongside another set of 83 tokens (total) from two documentaries (*One*

[7]See section 3 for extensive discussion of the agreement facts.

[8]There are, furthermore, ambiguous cases where *man* could potentially be a pronominal form or the bare number neutral nominal form *man*, such as the following:

(5) a. *Even if it's someone younger than me I don't mind shotting* [=selling] *them weed yeah let them get a little buzz cos all they can do is feel sick and* <makes pretend vomiting noises> *vomit then go home and sleep but ecstasy you got* ***man*** *shaking up on their death bed like.*
(MLE corpus; Alex)

b. *He's rapping for the people, he's rapping for* ***man****.*
(Giggs Biography)

c. *That's racism! Calling* ***man*** *wholemeal bread.* (DH)

Throughout I only make use of examples where they are unambiguously pronominal in use.

[9]Beyond the bare nominal use of *man*, and the pronominal use under discussion in this paper, there exists a homonym *man* which acts as a pragmatic marker and form of address:

(7) a. *Aah man that's long that's kind of long.* (MLE corpus; Roshan)

b. *I got raped in the toilet once. Seriously man no yeah I got raped three times there man.*
(MLE corpus; Tao)

This pragmatic marker is multifunctional: it can express surprise, solidarity, and other emotions, and can add emphasis. The meaning and use of this pragmatic marker is far beyond the scope of this paper, and so I simply direct the reader to Cheshire (2013), especially section 7, for some discussion.

[10]*Linguistic innovators: The English of adolescents in London*, 2004–7, funded by the Economic and Social Research Council; Principal Investigator Paul Kerswill, Coinvestigator Jenny Cheshire, Research Associates Susan Fox and Eivind Torgersen (ref. RES 000-23-0680).

[11]*Multicultural London English: The emergence, acquisition and diffusion of a new variety*, 2007–10, funded by the Economic and Social Research Council; Principal Investigator Paul Kerswill, Co-investigator Jenny Cheshire, Research Associates Susan Fox, Arfaan Khan and Eivind Torgersen (ref. RES-062- 23-0814).

Mile Away and *Giggs Biography*) and a film (*Anuvahood*). The focus is on the grammatical role of *man* (subject, object, possessive), and the interpretation of the pronoun in terms of person and number (1SG, 2SG, 3SG, 1PL, impersonal/generic). Grammatical role is summarised in the following table (adapted from Cheshire 2013):[12]

(8) **Grammatical role**

Data Set	Subject	Object/Oblique	Possessive	Total
MLE Corpus	11	4	0	15
Giggs Biography	9	1	1	11
One Mile Away	11	2	0	13
Anuvahood	46	6	7	59
Total	73	13	8	94

Man can appear in subject, object, and possessive position (as *man's*), but appears to be favoured as a subject in each data-set.

Interpretation is summarised in the following table (also adapted from Cheshire 2013; see footnote 12):

(9) **Interpretation**

Data Set	1SG	2SG	3SG	1PL	Impersonal	Total
MLE Corpus	11	0	1	1	2	15
Giggs Biography	4	0	0	3	4	11
One Mile Away	2	1	0	8	2	13
Anuvahood	51	3	3	1	1	59
Total	66	4	3	13	8	94

Here we see that the pronoun can have a 1st, 2nd and 3rd person interpretation, as well as an impersonal interpretation, but 1st person singular interpretation appears to be favoured (although this effect is mainly due to the massive preference for *man* being used in the first person in Anuvahood). Cheshire suggests that the high frequency of use with a first person singular meaning is an indication that the form is in the process of being grammaticalized as a 1SG pronoun.[13]

[12]I found a further 4 examples of *man* as a pronoun in the Multicultural London English corpus that Cheshire did not include in her original tables: two 3SG uses, one 1SG use, and one impersonal use, all in subject position. I have included these in the tables presented here.

[13]Speakers of this variety have all fully acquired the standard set of English pronouns, so the question arises as to what kind of different meaning we get from the usage of *man* instead of, e.g., a 1SG pronoun. Since my primary interest here is the syntactic distribution and the semantic features of the pronoun itself, I leave aside discussion of its pragmatic and discourse related function, and its associated social meaning. I direct the reader to Cheshire (2013), where it is argued that use of *man* in place of a normal pronoun "allows speakers to present themselves as a member of a contextually defined group; and it adds to the communicative force of what they are saying" (p621). It is further suggested that use of *man* involves connotations of mutual solidarity and friendship, and might also index a certain streetwise urban persona.

What is not gleaned from the corpus, but is clear from further examples, is that in fact *man* can have an even broader range of interpretations associated with it: in fact, all person and number combinations, along with an impersonal reading, are possible, given the right context. The fact that 2PL and 3PL uses do not show up in the data set from Cheshire (2013) does not mean that they are categorically excluded. In the following sections, I give the details of the different readings available, and expand on the syntactico-semantic properties of each. I begin with a discussion of impersonal readings, and then move on to the definite personal readings. I follow up with a discussion of verb agreement, and then expand on the final property of *man* which is central to my argument, the fact that it cannot act as a bound variable.

2.2 Impersonal readings

Before describing the nature of the impersonal use of MLE *man*, it is necessary to clarify some facts about impersonal pronouns in general. First, I want to clarify that by "impersonal pronoun" I mean the set of "dedicated impersonal pronouns" (Fenger, 2015), otherwise called "man-constructions" (Siewierska, 2011) that have been described in the literature, which are dedicated pronouns etymologically related to a noun meaning 'man' or 'person' or 'one'. I also include the kind of interpretation available with impersonal uses of otherwise personal pronouns (such as the impersonal use of 2SG *you* in English). I will throughout refer to dedicated impersonal pronouns simply as "impersonals". There is quite a rich literature on the topic, and unfortunately the terminology employed therein is not uniform, and neither is the focus of inquiry. What is clear in the literature, however, is that there are a number of different interpretations that impersonal pronouns can take on, and that different pronouns' interpretative properties are constrained by what look like crosslinguistically quite stable tendencies which are good targets for generalizations. Putting aside terminological differences, the literature has identified the following different interpretations, each of which are associated with at least some subset of impersonal pronouns:

- Obligatorily inclusive generic reading: refers "quasi-universally"[14] to a group that must include the speaker (and potentially the addressee).
- Optionally inclusive generic reading: refers "quasi-universally" to a group that need not include the speaker, but can.
- Definite personal reading:[15] refers to a specific (atomic or plural) individual, in the way that a personal pronoun normally does.
- Arbitrary reading: refers "quasi-existentially" to some group/individual (which typically excludes the speaker).

Impersonal pronouns across languages allow for a generic interpretation, where the pronoun refers to a "quasi-universal" set of relevant humans. Take the following Swedish example (Egerland, 2003):

[14] I adopt this term from Cinque (1988).

[15] Sometimes termed "specific" (Sigurðsson and Egerland, 2009), or simply "personal" (Fenger, 2015).

(10) *Man måste arbeta för att förthäna uppehället.*
MAN must work to earn a.living
'One must work to earn a living.'

It holds generally of all people that they have to work if they want to earn a living,[16] although the generic use of the impersonal here of course allows for certain exceptions in the way that generic DPs normally do.[17] It is this generic reading of impersonal pronouns that has previously been analysed as resulting from the binding of a variable by a generic operator, and thus it is this reading that is of interest to us here.

Research on impersonal pronouns, especially in Germanic and Romance languages, has revealed that different impersonals in different languages can be categorized into two main groups: those pronouns that allow 'optionally inclusive' generic interpretations, and those pronouns that take an 'obligatorily inclusive' generic interpretation (Hoekstra, 2010). To illustrate the two, I take examples of impersonal pronouns from Frisian and German (from Hoekstra 2010, slightly modified).

(11) a. *At men bûtenút wennet, kin men net sûnder auto.*
when MAN remote lives can MAN not without car
'When one lives in the countryside, one needs a car.' (Frisian)

b. *Wann man auf dem Land wohnt, braucht man ein Auto.*
when MAN in the country lives needs MAN a car
'When one lives in the countryside, one needs a car.' (German)

(12) a. * *Men seit dat smoken net sûn is.*
MAN says that smoking not healthy is
Intended: 'They say that smoking is unhealthy.' (Frisian)

b. *Man sagt, dass Rauchen ungesund sei.*
MAN says that smoking unhealthy is
'They say that smoking is unhealthy.' (German)

The examples in (11) show that both Frisian and German impersonal pronouns can have a reading where the speaker is potentially included in the set of referents: the fact that one needs a car to live in the countryside extends to the speaker too. The examples in (12), on the other hand, show that in Frisian, the impersonal pronoun **obligatorily** includes the speaker: reference to some generic group of others is impossible, unlike German *man*. Frisian impersonal *men* is therefore said to be **obligatorily inclusive**, while German *man* is said to be **optionally inclusive**.[18] Impersonals across Germanic and Romance

[16] Cinque (1988) points out, and Egerland (2003) develops the claim, that this is true only with the relevant tense/aspect, just as with other forms of generic DPs. With perfective aspect (or specific time reference for Cinque), a generic reading of impersonals does not arise.

[17] There is a vast literature on the nature of genericity, and exceptions in generic contexts, that I do not intend to go into here. See, e.g., Krifka et al. (1995) for an overview and discussion.

[18] I adopt this terminology from Hoekstra (2010), and warn the reader to not confuse the term with the traditional 'inclusive' of '1PL inclusive'. The terminology is confusing, but I am following the existing literature on impersonal pronouns here, so as to avoid introducing even more confusing terminology.

can generally be placed in one of these two categories:[19]

(13) a. Obligatorily inclusive: Frisian *men*, Icelandic *maður*, English *one*, Afrikaans (*'n*) *mens*

b. Optionally inclusive: Dutch *men*, Swedish *man*, Danish *man*, Flemish *men*, German *man*, Norwegian *man*, French *on*

Beyond the quasi-universal generic reading, Germanic impersonals also exhibit an existential arbitrary reading. Take German *man*, for example. Malamud (2012) gives the contrasting examples in (14) to show the various interpretations available.

(14) a. *Damals wurde man normalerweise/selten 60 Jahre alt.*
then was MAN usually/rarely 60 years old
'In those days, one usually/rarely lived till 60.'
Generic (speaker included)

b. *Man hat ein Haus abgebrannt, um das Versicherungsgeld zu kassieren.*
MAN has a house burned in.order the insurance to cash
'Someone burned a house PRO to get the insurance.'
Existential (speaker excluded)

The kind of episodic existential interpretation exhibited in (14b) is not available for all impersonals, however, as similar examples involving English *one* show (my judgment, see also discussion in Malamud 2012, pp5-6):

(15) **One has burned down a house to get the insurance.*

The argument in Moltmann (2006) and Malamud (2012) is that *one* must be quantified over by a sentential operator of some kind, and this is because of a generic feature on the pronoun, which needs to be checked. The lack of such a checking relation in the existential case rules out the kind of reading exhibited in (14b) with *one*.

MLE *man* exhibits a similar variety of impersonal properties to *one*, although there are crucial differences which will feed into my ultimate analysis of MLE *man*. First, it seems that it can have a generic impersonal interpretation (16a,b,c), seems to be able to have both a speaker inclusive and exclusive interpretation (16d), and resists an episodic arbitrary interpretation (16e).

(16) a. *Man's gotta work hard to do well these days.*
(Generic, speaker inclusive. DH)

b. *Man needs to wear a tie to go to that restaurant.*
(Generic, speaker inclusive. DH)

c. [Speaking about a tall friend]
Man's got to have to jump up to hit him.
Paraphrase: '... one has to jump up to hit him'

[19]See Fenger (2015) for a typological study that backs up these facts.

(Generic, speaker inclusive. MLE corpus; Alex)

d. *I heard that **man** eats insects in Korea.*

(Generic, speaker exclusive. DH)

e.# *Man burned down a house to get the insurance.*

(Only definite personal interpretation, e.g., 1SG. DH)

Examples (16a,b,c) describe general restrictions that apply to any individual, including the speaker if relevant. (16a) means any person who wants to do well has to work hard, and (16b) means that any person who wants to go to that restaurant has to wear a tie, and (16c) mean that any person who wants to hit the tall friend has to jump. (16d) means that all (relevant) Korean people eat insects.[20] However, (16e) cannot mean that some individual burned down a house: instead it can only be interpreted as meaning that *I*, *you*, or some other specific individual burned down a house, and thus gets a definite personal interpretation.[21]

Although something like a generic interpretation appears possible, such an interpretation is not possible with Q-adverbs in out-of-the-blue contexts. This is unusual, since quantificational binding effects with Q-adverbs is one standard test for genericity (Krifka et al., 1995).

(17) a. *One usually lives until at least 70.*

b.# *Man usually lives until at least 70.*

(*most people live until at least 70. DH)

For the time being I put aside this fact, but come back to discuss it in detail in section 4.6.

2.3 Definite personal readings

Alongside the impersonal generic reading, MLE *man* can also have a definite personal interpretation, where a specific referent is picked out, identified through contextual cues. The interpretation can be 1st, 2nd or 3rd person, and either singular or plural. Examples

[20] A reviewer points out that (16d) could involve a vague interpretation (in the sense of Kitagawa and Lehrer 1990), with a meaning akin to *they eat insects in Korea*, and this is indeed possible, since 3PL is a possible interpretation for MLE *man*. This is not the case for (16a,b), which have a generic flavour, and where *man* could be replaced with *one* with the same interpretation.

[21] Another potential example of a generic reading is given here:

(i) [Speaking generally]
*If **man**'s hard I'll bang your music, innit.*
'If you're good I'll play your music' (Giggs Documentary)

A reviewer points out though that in the context of impersonal uses of personal pronouns, Zobel (2014) advises against testing for impersonal/generic uses in conditionals, since the conditional already introduces the rule-like connection that we usually aim to detect with generic interpretations, and so I have excluded this example from the main discussion.

of different types of definite use are given in (18), including some examples from outside of the MLE corpus:[22,23]

(18) a. *Before I got arrested **man** paid for my own ticket you know.*
(1SG. MLE corpus; Dexter)

b. *No they're not us no they're not on what **man**'s on.*
'No they're not us, they don't like/do what we like/do'
(1PL. MLE corpus; Roshan)

c. *What's **man** on?*
'What are you up to?'
(2SG. Interview with Krept and Konan, Not For The Radio)

d. *You lot go like, **man** go like "don't do it".*
(2PL. MLE corpus; Aimee)

e. [After speaking about a man that his ex-girlfriend had been seeing]
*And she doesn't know that I still know that **man** put a gun on her.*[24]
(3SG. MLE corpus; Chris)

f. [Speaking of a group of musical collaborators]
***Man** wouldn't be talking to me now.*
(3PL. Interview with Lethal Bizzle; Not For The Radio)

This characteristic of MLE *man* is particularly striking. The intended referent is understood from context alone, and no morphological or phonological change takes place when *man* refers to different persons. No c-commanding linguistic antecedent is required, as shown by (18c,d,e). So long as there is a readily identifiable salient individual, interpretation is possible. (18c) is particularly interesting in this regard, as there isn't a discourse antecedent at all: it is a reporting of a telephone conversation, where this is the first utterance of the speaker. *Man* in this case picks out the addressee because it

[22]Not For The Radio interviews can be found on YouTube at the following address: https://www.youtube.com/channel/UCFh2cWOjQ5naDiZTY3JvXhQ/videos.

[23]A note on gender: the referent of the pronoun in its definite personal use seems to be restricted for most speakers to male individuals, but the pronoun is used by female speakers, as example (18d) and the following example from Cheshire (2013) show:

(i) [Female addressing her errant boyfriend]
Man's trying to take me for some kind of idiot. (Anuvahood)

In the generic impersonal use, female individuals are not excluded from the potential reference of the pronoun. I do not have examples of female speakers using the pronoun in the first person, or in the third person referring to other females, but have been told anecdotally that colleagues have heard such use in London. It's possible that there is an ongoing change in use of the pronoun among younger speakers such that it is being bleached of its gender completely, but since I do not have any data on this I cannot say anything interesting about it here, and I note that for speakers of my generation it is ill-formed with a female referent in its definite personal use. Note that a restriction to male referents would not affect my analysis in section 5, because the crucial point there is that there are no person features on the pronoun.

[24]A reviewer asks whether this could be a demonstrative together with the Standard English noun *man* giving [$_{DP}$ *that man*], with a null complementizer. It is clear in the recording that *that* here is a complementizer, as it has a reduced vowel (schwa).

could only reasonably be referring to the addressee, given that there is no other salient individual apart from the speaker, and asking the question of oneself (the speaker) would be pragmatically odd in the situation.

Some other impersonal pronouns across Germanic and Romance also have definite readings, but this is usually restricted to the first person, and occasionally the 3rd person. French *on* can have 1PL interpretation (Cinque, 1988), Icelandic *maður*, can have a 1SG interpretation, and less clearly a 1PL interpretation (Sigurðsson and Egerland, 2009), Swedish *man* can have a 1SG, 1PL and in some cases a 3SG interpretation, and Frisian *men* can have a 1SG interpretation (Hoekstra, 2010). The ability of MLE *man* to take on any person and number combination will be central to my analysis, and I return to an in depth discussion of the pronoun's flexibility in interpretation in section 5.

2.4 Switching reference

An interesting effect of the context dependence of MLE *man*'s interpretation is that the referent of each use of *man* can be different within a single sentence, as long as context allows. (19a,b) are two such examples of reference shifting dependent on context. It is also possible for *man* to pick out a referent which is then later referred back to with a normal personal pronoun: (19c) is an example of this.

(19) a. *He$_i$ tried to spud* ***man*** [=1SG] *and I left* ***man***$_i$ [=3SG] *hanging.*
'He$_i$ tried to fist-bump me and I left him hanging'
(Newham Generals, 'Bang Boy', 2015)

b. *Zayn's saying* ***man*** [=1PL] *can have this jet, fam, what's* **man** [=2SG] *on?*
(Interview with Krept and Konan, Not For The Radio)

c. ***Man***$_i$*'s* [=3SG] *tryin'a say he$_i$'s better than me. Tell my man "shut up".*
(Stormzy, 'Shut up', 2015)

This shows how central contextual salience is to the interpretation of MLE *man*. There are of course some constraints on when (and in which configurations) it can pick out a particular referent. As we will see in more detail in section 4.2, *man* cannot act as a local domain form (in the sense of Déchaine and Wiltschko 2010), and thus cannot be coreferential with an antecedent in its binding domain. Take for example (19a): the first instance of *man* cannot be coreferential with *he*, and the second occurrence cannot be coreferential with *I*, which limits the set of available interpretations. Furthermore, the introduction of a discourse referent by *he* means that it is the most salient individual available as a referent for the second occurrence of *man*. Thus we arrive at the appropriate reading where *he* and the second instance of *man* are coreferential.

3 Agreement and person features

Now that we have seen that definite personal readings range across all combinations of person and number, the question immediately arises whether this is the result of a lack of specification for ϕ-features, or a different specification for each interpretation with no overt morphological reflex. To tease apart the difference, we can look to subject

agreement paradigms with the verb across speakers. This can be a little difficult to do, since English lacks rich agreement morphology, and it is especially difficult since there is a general dialectal levelling phenomenon which turns past tense *be* into either *was* or *were* across the board for MLE speakers (Cheshire et al., 2011). Present tense *be*, however, does still have an agreement paradigm identical to Standard British English.

As most of the examples of the use of MLE *man* as a subject above show, 3SG agreement on the verb is standard, but non-3SG agreement also seems possible for some speakers (21).

(20) 3SG agreement

a. *No they're not us no they're not on what man's on.*
'No they're not us, they don't like/do what we like/do'
(1PL meaning, 3SG Agr. MLE corpus; Roshan)

b. *What's* ***man*** *on?*
'What are you up to?'
(2SG meaning, 3SG Agr. Interview with Krept and Konan, NFTR)

(21) Non-3SG agreement

a. *Man are from East.*
(1PL meaning, non-3SG Agr. Shizz McNaughty, Wickedest Sound, 2016)

b. *You lot go like, man go like "don't do it".*
(2PL meaning, non-3SG Agr. MLE corpus; Aimee)

I suggest here that the difference can be put down to there being two different dialects, and that agreement possibilities absent from both dialects give us an insight into the internal make-up of the pronoun. Dialect 1 has 3SG agreement across the board, regardless of interpretation, and Dialect 2 has 3SG agreement for singular interpretation, and what appears to be 3PL agreement for plural interpretations. Taking both dialects together, in the present tense BE paradigm, *is* and *are* are the the only possible forms, but *am* is never possible in either dialect, even with 1SG interpretation. *Are* is not possible in either dialect with 2SG interpretation, showing that it really is number that is doing the work in forms that surface as *are*. In summary, collapsing both dialects, we have the following possibilities:

(22) a. *Man is...*

b. *Man are...* (plural context only; *2SG, DH)

c. **Man am...* (DH)

These facts show that person is never relevant for agreement, and this can be put down to the lack of person features in the pronoun. I adopt the position here that morphological 3SG agreement represents default agreement (Malamud, 2012), and that a [+atomic,−participant] specification is not required to give rise to 3SG agreement on the verb. Some support for this comes from the behaviour of expletive subjects. Ackema and

Neeleman (2018), in their discussion of 3SG agreement on impersonal pronouns, point out that 3SG agreement occurs in English with expletive *it* subjects, and that this must constitute some kind of default agreement:

(23) a. *It **seems** that you were right all along.*

b. *It **is** raining.*

It could not be the case that *it* here includes a [−participant] person specification: if it did, then it would have to pick out some actual individual other than the speaker or addressee from the domain of discourse, although it does not. This means that even in the absence of any person information, 3sg agreement appears to be the default.[25]

Since agreement is sensitive to number in Dialect 2, then it must be the case that a number head projects for those speakers, with a [−atomic] feature giving rise to plural agreement on the verb. The following insertion rules for present tense BE capture the full agreement paradigm across the two dialects:[26]

(24) a. [+author, +atomic] ↔ *am*

b. [−atomic] ↔ *are*

c. [−author] ↔ *are*

d. elsewhere ↔ *is*

A piece of evidence that Dialect 1 has no number features comes from its availability with reciprocals, even with apparent 3SG agreement on the verb. Malamud (2012) uses reciprocals to show that 3SG agreement morphology with German *man* involves default agreement, and not a singular feature specification, and her test here shows that MLE *man* has the same property (German example originally from Cabredo Hofherr (2004), p6):[27]

(25) a. *Man grüßte einander wieder.*
MAN greeted each.other again.
'People greeted each other again.'

b. *Man's not seen each other for time.* (DH)

Hoekstra (2010, p43) and Ackema and Neeleman (2018) take this fact (or, at least, related facts from Frisian and Dutch) to be evidence that impersonal pronouns are "semantically plural". They mean by this that regardless of the morphosyntactic properties of the pronouns (such as giving rise to singular agreement), the semantic content does not preclude a plural interpretation. My contention here is that this is evidence instead of number neutrality, and being able to appear with a reciprocal does not mean that these pronouns are featurally plural rather than number neutral, and that a plural interpretation is possible because pluralities are not excluded from the set of possible referents.

[25]See (Nevins, 2007) for an argument against the view that 3SG agreement is default.

[26]This rests on the assumption that [±author] is only ever present on elements that also have a [±participant] specification, an assumption that is also adopted in e.g., Adger (2006).

[27]The MLE example in (25b) does not have an arbitrary existential reading here; it has to be interpreted as definite personal, akin to *we* or *they*.

Some evidence for this comes from Mandarin Chinese, where bare NPs, which are number neutral (in that they can refer to atomic entities or pluralities) can also felicitously appear with reciprocals in the appropriate context. Imagine a world in which all men are not very generous, but women are, and during a gift giving season this vice of men and virtue of women becomes very apparent. In that case, one could utter the following:[28]

(26) *Nüren hui huxiang zengsong liwu danshi nanren bu hui.*
woman will each.other give gift but man not will
'Women give each other gifts, but men do not.'

A bare noun *nüren*, which is number neutral, is used, but it is free to combine with *huxiang*, 'each other'. Number neutrality appears to be straightforwardly compatible with the diagnostic for semantic plurality that Hoekstra and Ackema and Neeleman employ.

Second, Malamud (2012) shows that German *man* can also combine with a reciprocal, but is morphosyntactically constrained to the singular, resisting plural nominal and adjectival agreement:

(27) a. *Man grüsste einander wieder.*
MAN greeted each.other again
'People greeted each other again.'

b. *In diesem Institut ist man gewöhnlich ein schlauer Mensch/*schlaue Leute.*
In this insitute is MAN usually a smart person/*smart people
Intended: 'In this insitute, a person is usually smart.'

The conclusion is similar to mine here: being able to combine with a reciprocal is the result of number neutrality, and not evidence of syntactically present feature specifications. I take the singular only agreement to be a default, following Malamud.

We can summarise the facts in the following way:

(28) a. Dialect 1: no person features, no number features, agreement is default (3SG)

b. Dialect 2: no person features, number head which can host [±atomic], agreement is SG or PL depending on number feature.

So MLE *man* for speakers of dialect 1 has no number or person features, meaning that we only ever see *man is*. For speakers of dialect 2, *man are* is only possible as a reflex of [−atomic], but not person. Since MLE *man* never has person features across dialects, there is no dialect in which *man am* is possible. *Man are* is blocked in a 2SG environment because there is never a person feature present.

The complete lack of person features will become relevant to the analysis in section 5, but for now I turn to another property of MLE *man*, namely its resistance to binding.

[28]Example and judgment given by three native Mandarin speaking informants.

4 Binding *man*

In this section I introduce the focus of the paper: MLE *man*'s behaviour with respect to binding. My main claim is that MLE *man*'s resistance to binding in a variety of situations means that its generic impersonal interpretation cannot arise from binding by a generic operator.

Overall the picture that arises from speaker judgments is clear: MLE *man* does not behave like a bound variable. The following subsections present the specific findings in detail.[29]

4.1 Simple Quantificational Binding

First, judgments suggest that MLE *man* cannot be bound by a universal quantifier: *man* in (29) cannot be bound by *every guy* or *everyone*, and hence *man* here can only refer to some specific individual(s). This is true in local configurations and across clause boundaries, although with embedding the bound reading is not as strikingly degraded as in local contexts.

(29) a. $[\textit{Every guy}]_{\text{i}}$/$[\textit{Everyone}]_{\text{i}}$ *loves* $\textit{man}_{*\text{i}/\checkmark\text{j}}$*'s mum.*

b. *Everyone*$_{\text{i}}$ *who came to the party brought* $\textit{man}_{*\text{i}/\checkmark\text{j}}$*'s girl.*

c. *Everyone*$_{\text{i}}$ *who signed up to that talent event thinks* $\textit{man}_{*\text{i}/\checkmark\text{j}}$*'s special.*

It's important to note here that impersonal *one* also seems to be resistant to binding by a universal quantifier. A Google search finds some examples which suggest that *one* can be bound by a universal quantifier. Some examples are given in (30).

(30) a. *Everyone loves one's mother tongue, and every language is indeed unique.*[30]

b. *Everybody loves one's mother tongue, and uses it most of the time.*[31]

c. *Everybody loves one's country and I am no exception.*[32]

d. *Everybody loves one's own life more than anything else in the world.*[33]

An interesting fact about these examples is that the first three all come from Indian or Pakistani English web pages, and the last comes from an English translation of a Hindi text. It's possible that this is a feature particular to Indian English. A reviewer points out that there are examples of online discussions about the use of *one* in this kind of environment that suggest that it cannot be bound there. A quote from one such discussion: "Everyone loves one's mother. You're kidding, right? One doesn't say this

[29]Unless stated otherwise, all MLE judgments presented in this section are from the Ibex judgment task and the follow-up consultation sessions.

[30]https://pakobserver.net/mother-language-day-2/; accessed 07/11/2018

[31]http://www.millenniumpost.in/tmc-hits-out-at-mulayam-for-ban-on-english-barb-189062; accessed 07/11/2018

[32]https://www.tribuneindia.com/1999/99apr17/saturday/head4.htm; accessed 07/11/2018

[33]Sharma (2016), p10

even in England."[34] Another comment was the following: "Even British English speakers avoid constructions like [Everyone loves one's mother]".[35] Some native British English speakers that I have consulted find such cases borderline acceptable, but it seems that for at least some speakers, binding with a universal quantifier is completely out for *one*.[36]

4.2 Anaphoric Binding

By 'anaphoric binding' here I mean binding by a coreferential DP (pronoun or r-expression). This is the domain in which the judgments at first do not appear to be so clear cut, but upon closer inspection the pattern that appears is the one that is expected if *man* does not act as a variable, and thus cannot be bound. First, it appears that *man* is very strongly judged to be unacceptable as a local domain form, where we would expect a reflexive anaphor.[37]

(32) a. *Of course* I_{i} *rate man*$_{*\mathrm{i}/\checkmark\mathrm{j}}$.

b. *Of course* I_{i} *rate myself*$_{\checkmark\mathrm{i}/*\mathrm{j}}$.

In this example *man* has to pick out some contextually salient individual other than the speaker, resulting in an interpretation along the lines of 'of course I like him/her/you/them'. When the antecedent also takes the form of *man*, ratings improve slightly, but it is still strongly degraded for most speakers.

(33)?? *Of course man*$_i$ *rates man*$_i$.

Déchaine and Wiltschko (2010) point out that Reinhart's (1983) generalization that locally bound pronouns "are only interpretable as bound variables" allows us to use local domain forms as a diagnostic for bound variable anaphora. We see here that *man* is not a local domain form. This does not provide evidence that *man* cannot ever be a bound variable, but the fact that it is unacceptable in a local environment is explained if it is true that it cannot be bound.

Note that coreference between a fully phi-specified pronominal antecedent and *man* is, however, possible across a clause boundary.

[34]http://www.english.illinois.edu/-people-/faculty/debaron/essays/Whats_your_pronoun_2017.pdf; accessed 07/11/2018

[35]https://www.english.illinois.edu/-people-/faculty/debaron/essays/epicene.htm; accessed 07/11/2018

[36]A reviewer also points out that binding by a universally quantified phrase that contains some other noun is certainly bad with *one*:

(31) * *Every boy*$_{\mathrm{i}}$ *loves one*$_{\mathrm{i}}$*'s mother.*

Unfortunately, it's difficult to get judgments on *one* in these kinds of binding configurations, because the pronoun has largely fallen out of use except in very formal register. It seems like the facts related to the binding of *one* are quite complicated, and so it's not so straightforward to say that MLE *man*' behaves completely differently in this case.

[37]The verb *rate* is used widely in MLE to mean 'like', 'respect', or more directly 'rate highly'.

(34) *Of course* I_{i} *think* man_{i}*'s one of the best.*

I claim here, though, that this example does not involve binding: rather, the possibility of coreference is simply the result of *man* being able to pick out any contextually relevant individual, which can include the speaker (i.e., this is a case of 'coreference' rather than 'binding', in the sense laid out in, e.g., Grodzinsky and Reinhart 1993).

An unusual fact that arose from speaker judgments is the following: when *man* is possessive, and takes a local antecedent, there is a strong preference for reference to be disjoint.

(35) *John*$_{\text{i}}$ *loves* $man_{??\text{i}/\checkmark\text{j}}$*'s mum.*

Again, the most readily available reading here involves John loving either the speaker's mother, or some other salient individual's mother, so long as it is not John's own. The question arises of why judgments should be so strong in the case of coreference between *John* and *man* in (35). If *man* can pick out any contextually salient individual, as I will argue in section 5, then why can it not just pick out John in this case, in the absence of binding? I suggest that in fact coreference can be forced, but generally this is overridden because binding is the preferred method of achieving coreference in such local cases, and thus the sentence is judged to be bad even though it is well formed. This condition can be thought of as something akin to Grodzinsky and Reinhart's (1993) Rule I. One piece of evidence that coreference is actually possible in such cases is that judgments improve when John is replaced by *man*, as in (36).

(36) *Man*$_{\text{i}}$ *loves* man_{i}*'s mum.*

4.3 Bound *Only*

Another environment in which *man* resists a bound variable interpretation is that exemplified in (37) using *only*, based on an example from Grodzinsky and Reinhart (1993).

(37) a. *Only John thinks that he's a great cook.*

b. *Only John thinks that man's a great cook.*

(37a) is ambiguous between two different readings: one where John is alone in thinking John is a great cook, and the other bound variable reading where John is alone in considering himself a good cook (i.e., no others consider themselves good cooks). These two readings are summarized in pseudo-logical form in (38).

(38) a. *Only John* (λx(x *thinks* x *is a great cook*))

b. *Only John*$_{\text{i}}$ (λx(x *thinks he*$_{\text{i}}$ *is a great cook*))

Again, the bound reading represented by (38a) is not available where *man* replaces *he*, (37b). It can only be interpreted (on the relevant reading) as meaning that John alone thinks that John is a good cook (or again, that John thinks some other relevant individual is a good cook).

4.4 Binding in strictly generic impersonal environments

Many of the examples above show that *man* cannot have a bound variable interpretation in many environments, but I further want to show that bound readings are also blocked in the kind of environments where they are possible for English *one*.

Moltmann (2006) and Cabredo Hofherr (2010) note that *one* can be bound in a possessive in local and non-local configurations, as long as the antecedent is identical, i.e., also *one*. The examples in (39) from Moltmann (2006) illustrate a binding environment with a Q-adverb.

(39) a. *One often loses one's belongings on the train.*

b. *One often thinks that one's mother is nice.*

Example (a) has the bound reading which can be paraphrased as "for many relevant persons x, x loses x's belongings on the train". MLE *man* interestingly does allow coreference between two instances of *man* in the kind of configuration exemplified in (39a), but does not allow the bound variable generic reading.[38,39]

(40) *Man always loses man's tings on the train.*

This example can only have the interpretation where *man* refers to some specific individual, and that individual often loses their belongings. The generic reading is not available. This suggests that whatever mechanism that gives rise to the generic reading with *one* in these contexts is either not available or is somehow blocked when *man* is used.

4.5 Sloppy readings under VP-Ellipsis

I further tested the possibility of sloppy readings under VP-ellipsis. The first example sentence was judged to be strongly unacceptable with a sloppy reading for *man*.

(41) *I did man's homework, and so did Andrew.* (*Sloppy reading)

In this example, the interpretation in which Andrew also did his own homework was judged not available. This again suggests that *man* is not acting like a variable, and cannot be bound.

There is a potential problem with this specific example. As stated above in (35), the possessive *man's* is generally judged to fail to be coreferential with a local antecedent anyway, so this is likely responsible for the strong unacceptability of the sloppy reading. Embedding *man* so that there is no effect of locality helps clear up this problem. Consider example (42).

[38]Cabredo Hofherr suggests that one approach to the identity condition on the antecedent and the anaphor is to take there to be a lexical Gn operator present in the antecedent where coreference is possible. She points out that this position is untenable because of certain facts about French and German impersonals. I agree that this position would not make sense for MLE *man*, because the generic reading is not available with coreference. I discuss this in more detail in section 5

[39]Note that *tings* is not a typo here: the example uses the TH-stopped version of 'things', which is common in MLE.

(42) *Simon knows that man's gonna get fired, and so does Andrew.*
(*Sloppy reading)

Judgments on this example showed that a sloppy reading with *man* was degraded, even though speakers fully accepted a sloppy reading with a normal 3SG pronoun in the same context. For transparency's sake, I report that one speaker that I consulted (out of five) did in fact accept the sloppy reading with *man*, but only with strong stress on *man*. I think that what is happening here is the following. Stressing *man* makes it more readily interpretable as a plural definite personal form with the meaning of *us/them*. This means that it picks out a plurality including both of the referents in the sentence, and thus the full sentence is interpreted as something like the following:

(43) *Simon knows that we/they're gonna get fired, and so does Andrew ~~know that we/they're gonna get fired~~.*

In this case, the interpretation of the elided constituent along the lines of 'Andrew knows that Andrew is going to get fired' becomes acceptable, because Andrew is a member of *we* or *they*. This explanation gains support from the comments of another speaker, who judged that a sloppy reading was available for *us man*, but not *man* alone. *Us man* is a form (existing as part of a paradigm with *you man* and *them man*) which is used to refer to a plurality in all cases (it functions as a normal 1PL pronoun), and is analogous to *us lot* (and *you lot* and *them lot*) in more traditional varieties of English in London. The example would then be equivalent to the following:

(44) *Simon knows that us man are gonna get fired, and so does Andrew ~~know that us man are gonna get fired~~.*

Again, as with the example above, the 'sloppy reading' is in fact not a sloppy reading at all: when asked whether the second conjunct could mean that Andrew knows that Andrew is going to get fired, the speakers who were reinterpreting it in this way of course think it is possible: *and so does Andrew* can be interpreted in a way such that it means to the hearer that Andrew knows that Andrew is going to get fired (because he's one of 'us man').

The data on VP-ellipsis is in line with the other variable binding cases, and adds further evidence that MLE *man* does not behave as a bound variable.

4.6 Quantificational Variability Effects with Adverbs

Hoekstra (2010) points out that, unlike definite descriptions, but similar to indefinites, the Frisian impersonal pronoun *men* can give rise to Quantificational Variability Effects with some temporal quantification adverbs.[40]

[40]See Hinterwimmer (2005) and Malamud (2012) for extensive discussion of QVE with impersonal pronouns.

(45) a. *At de studint tûk is, is er ornaris grutsk.*
if the student smart is, is he usually proud
'If the student is smart, he is usually proud.' (*QVE)

b. *At in studint tûk is, is er ornaris grutsk.*
if a student smart is, is he usually proud
'If a student is smart, he is usually proud.' (✓QVE)

c. *At men tûk is, is men ornaris grutsk.*
If MAN smart is, is MAN usually proud
'If one is smart, one is usually proud.' (✓QVE)

In (45b), the adverb quantifies over a variable introduced by the indefinite, so that the interpretation is that most smart students are proud. This kind of effect is not present for definite descriptions as shown in (45a), which only has the unusual interpretation that a particular student's intelligence and pride pattern together. QVE is present for the impersonal pronoun *men* in (45c), suggesting that the impersonal can exhibit bound variable behaviour.

Interestingly, MLE *man* does not give rise to QVE.

(46) *If man's smart, then man's usually proud.* (*QVE)

Similar to the definite description example above (*if the student is smart, he is usually proud*), the only interpretation available in (46) in an out-of-the-blue context is the awkward one noted above. This suggests that another kind of variable binding behaviour is absent for MLE *man*.

However, things are not quite as straightforward as this. Chierchia (1995) points out that the standard blocking of QVE with definite DPs only applies in out-of-the-blue contexts, and with the appropriate context provided even a definite DPs can show QVE (example 47 is taken from Malamud 2012, where she credits it to a reviewer):[41]

(47) *In the admissions process, we interview prospective students by inviting them into the room one at a time. If the kid is tall, he is usually smart.*

Chierchia argues that definites can be involved in QVE only if a relational variable is introduced, the value of which must be something salient in the context. The introduction of this relational variable is also used to account for contextual domain restriction of the type illustrated in (48).

(48) Imagine two people are in a room with two tables, but both of them are focused on one of the tables. A utters to B "The table is dirty"

$\text{dirty}_w(\iota x[R_w(y,x) \wedge \text{table}_w(x)])$
where y = the speaker+hearer, R = is-looking-at

[41] I thank a reviewer for pointing out the importance of MLE *man*'s behaviour with respect to QVE for my analysis.

The same variable is introduced in the interview situation exemplified above, and this variable can be bound by a Q-adverb. Malamud (2012) uses this fact as a diagnostic for (in)definiteness of impersonal pronouns in English and German. She points out that in contexts that do not make available such variables over admission interviews, no QVE is predicted with definite DPs, and thus that "susceptibility to QVE with Q-adverbs can serve as an empirical test for (in)definiteness in English and German" (ibid, p35).

When it comes to MLE *man*, we see the pattern we would expect from a definite description.

(49) *We interview teenagers for our new youth club project by inviting them into the room one at a time. If man's tall, he's usually smart.*

This suggests that MLE *man* does not have the QVE profile of a normal generic impersonal, and in fact has the same profile as a definite DP, only allowing a bound reading where a contextually salient relational variable can be introduced. This point will become very relevant in section 5, where I argue that MLE *man* is fundamentally a full DP with a definite D head.

4.7 Summary

MLE *man* has the following properties:

- It can have some kind of generic impersonal reading.
- It can have a definite personal reading, spanning any person (1, 2, 3), and number (SG, PL) combination;
- It does not give rise to person sensitive agreement.
- It cannot act as a bound variable across a variety of binding configurations;
- It behaves like a definite description with respect to quantificational variability effects.

What I conclude from these generalizations is that MLE *man* has no person features (but can have number features for some speakers), and it behaves something like a definite description, which allows for definite personal pronominal interpretations.

There are two ways to approach the different possible interpretations of *man*. One could suggest that impersonal *man* and definite personal *man* are two distinct, homophonous elements (which potentially share some internal parts). This would by no means necessarily be the wrong approach; remember we have already seen that there is a homophonous bare nominal form *man* which exists alongside the pronominal form(s), although with a different syntactic distribution. There is also *man* used as a form of address and pragmatic marker (see footnote 9, and Cheshire 2013). I think that attempting to provide a unified analysis of all of those items would be wrong-headed.

However, the impersonal interpretation and the definite personal interpretations are so close in their general use and distribution that it's reasonable to suggest that they arise from the same element, and that some extraneous syntactico-semantic factors determine how the pronoun should be interpreted in context. I believe that this is the

correct approach. I argue in the next section that the mechanism that gives rise to the definite personal readings of the pronoun can also capture the apparently generic impersonal reading, without appealing to binding by a generic operator. The proposed analysis therefore accounts for all of the properties of MLE *man*, and shows that there is a mechanism which can produce generic-like interpretations instantiated in example (16), in the absence of variable binding.

5 Analysis: from π to i

Before moving on to the precise analysis of the different interpretations of MLE *man*, I lay out my assumptions about the make-up of pronouns in general. For concreteness's sake, I adopt the theory of pronouns (and features thereon) from Harbour (2016). The main reason for this is that Harbour's theory of pronouns gives us a straightforward system where a lack of specification for person features means that a potential referent can be picked out of a set containing all possible human referents, and where a "bare" person head can project even if it contains no person features.[42] What is important to us from Harbour's system, is that the possible reference of a pronoun is determined by the action of a set of features on a 'person lattice', which is a power set of all combinations of the individuals which can be picked out by pronouns, i.e., me, you, and others. This means we can think of the pronoun in its barest form as introducing a lattice of possible atomic and plural referents, akin to Link's (1983) semantics for plural nouns, but in addition (and crucially) the pronoun lattice includes the speaker and the addressee.

The mental ontology of person proposed by Harbour includes the following members, with their corresponding notation:

(50) a. author (or speaker): i
b. hearer (or listener): u
c. others: o, o', o'' ...

Each element, i, u and o, symbolises an individual that can be referred to. The author and the hearer are both assumed to be unique,[43] whereas there are any number of others, each distinguished by prime marks. We can think of different persons (1st, 2nd, 3rd) in linguistic expressions as reflecting sets including different members, and combinations of members, taken from the power set of the members of the list above. For example, second person ranges over the set u_o, which is an abbreviation of the set containing u alone, plus u in combination with any number of others (o, o', o'' and so on). This means that u_o abbreviates the singleton $\{u\}$, dyads $\{u, o\}$, $\{u, o'\}$, $\{u, o''\}$, ..., triads $\{u, o, o'\}$, $\{u, o, o''\}$, $\{u, o', o''\}$, ..., and so on. This reflects the fact that 2nd person not only has to

[42]Harbour (2016) develops a theory of person that attempts to derive all attested person systems, while excluding unattested systems on a principled basis. The study that this theory is based on is a broad typological study, and it has a set of profound consequences for the way we think about the morphosemantics of person. However, I put aside the theoretical and typological reach of Harbour (2016) here, and instead focus on a particular implementation of the theory to the analysis of the characteristics of *man*, and its possible interpretations.

[43]See Harbour (2016), section 4.2.1 for arguments for the smallest ontology with a unique i and a unique u.

be able to pick out u, the unique addressee, but also others associated with the addressee, particularly in the case of 2nd person plural expressions.

The entire set of possible referents is the atomic join complete semilattice containing all combinations of the possible members discussed above, i.e., a lattice containing i, u, o, o', $\{i, o\}$, $\{i, u\}$, $\{i, u, o\}$ etc. This is the entire set of all possible individuals that could be referred to. This can be simplified with the notation in (51):[44]

(51) $\{i_o, iu_o, u_o, o_o\} = \pi$ lattice $(\mathcal{L}_\pi)$

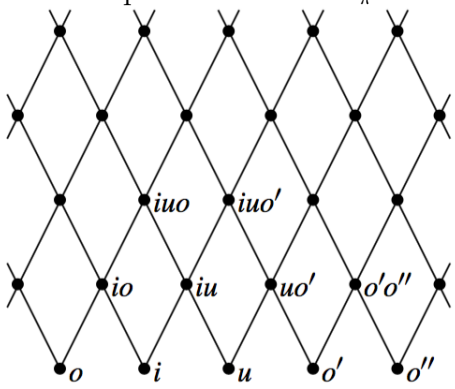
This is akin to the denotation of a bare (mass/plural) noun in Link (1983), developed in Chierchia (1998a,b) *et seq.*, but crucially it includes the speaker and addressee (and not just individuals for which a particular property holds), since 1st person and 2nd person pronouns need to be able to refer to them.

Different persons (in the sense of 1st person, 2nd person, 3rd person) are subsets of this total ontology, which are carved out by the functional application of person features on the entire person lattice. Person features are themselves lattices, and the interaction of the content of person features with the person head is expressible as the application of sets on other sets (or rather lattices on other lattices). I put aside discussion of the full technology here, because the way that specific person features work is not relevant to our discussion, since MLE *man* has no person features. What is important is that all pronouns project the person head π in the syntax. The categorial head π has as its denotation the π lattice $\mathcal{L}_\pi$.

(52) a. $[\![\pi]\!] = \mathcal{L}_\pi$

b. $\mathcal{L}_\pi = \{i_o, iu_o, u_o, o_o\}$

c. Partial representation of $\mathcal{L}_\pi$



A π head which bears no features just introduces all of the possible referents in $\mathcal{L}_\pi$.

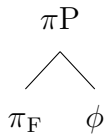
The root node ϕ does the job of introducing a variable over the set of possible referents (π), and has the following semantics:

(53) $[\![\phi]\!] = \lambda S.\lambda x_e.x \in S$

[44]The notation iu indicates the set containing i and u, $\{i, u\}$, and is used for the sake of clarity of presentation.

ϕ is the root of the functional projection that the head π belongs to. This means that we have the following syntactic representation (54a), and semantics (54b):[45]

(54) a.



b. $[\![\pi\mathrm{P}]\!]$

$= [\![\phi]\!]([\![\pi_F]\!])$

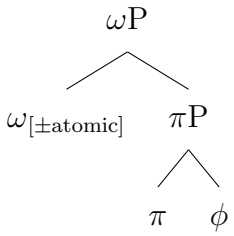
$= \lambda S.\lambda x_e.x \in \mathrm{S}([\![\mathrm{F}]\!](\mathcal{L}_\pi))$

$= \lambda x_e.x \in [\![\mathrm{F}]\!](\mathcal{L}_\pi)$

The notation π_{F} simply represents the person head π with some feature F on it. The final line in (54b) says that the meaning of the πP is the set containing x, where x is a member of the person lattice with any person features F applied to it. In our case, since there is no application of person features, this can simply be replaced by $\lambda x.x \in \mathcal{L}_\pi$.

A number head ω can be projected above the π head, carrying number features which act on the output of the person features applied to π, further whittling down the contents of the set. The only feature on the number head that is relevant to us here is [±atomic], which takes the input set and returns the set containing only those elements which are non-atomic (i.e., the pluralities) or atomic (i.e., the atoms):

(55)



The pronoun ultimately picks out a (possibly plural) individual, and not a set, so the question remains of how that individual is picked out. Harbour does not discuss how we get from the set of possible referents to an individual of type e, but I propose here that this is done by merging a D head above the number head (adopting a definite description account of pronouns; see, eg., Elbourne (2005) *et seq.*). In the next section I come back to explaining the properties of MLE *man*, and give an explicit proposal for the nature of the D head that picks out an individual from the set of possible referents.

[45]Harbour employs Mirror Theoretic tree representations (Brody, 2000) for the pronouns in his work, but I have translated these into standard trees here.

5.1 Generating *man*

In this section I will propose that definite readings of *man* are the result of the merger of a D head above π (or ω). The D head introduces an epsilon operator, in the sense of von Heusinger (2004), which picks out a contextually salient member from the π set. I argue following on from this that all of the properties of *man* discussed above can be explained if we assume that the epsilon operator always picks out a contextually salient member of the featureless π set; in short, that D obligatorily projects.[46] Therefore *man* has no person features, but can still appear to take on an interpretation associated with a particular grammatical person, and the 'generic' interpretation is not a binding relation at all, but is produced by precisely the same mechanism that gives rise to the definite readings, and that in that case the set of salient individuals that is picked out is particularly large. Since the variable introduced by the pronoun is obligatorily bound off by the operator introduced by D, there is no free variable available for binding by an operator outside of DP: it is essentially a definite description of type e, differing from normal definite descriptions in that it can directly refer to both speaker and addressee (and other plural individuals including speaker and addressee).

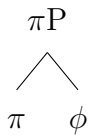
Recall that MLE *man* has the following properties:

1. It can have something like a generic impersonal reading;
2. It can have a definite personal reading, spanning any person (1, 2, 3), and number (SG, PL) combination;
3. It does not give rise to person sensitive agreement.
4. It cannot act as a bound variable across a variety of binding configurations;
5. It behaves like a definite description with respect to quantificational variability effects.

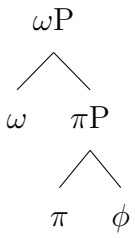
In the terms of the theory of person presented above, properties 1 and 2 taken together mean that the set of referents that *man* can pick out cannot exclude i_o, iu_o, u_o, or o_o. In its definite personal use, MLE *man* can pick out any and all possible referents that other pronouns can pick out. In its impersonal use, it can pick out a general group which includes the speaker and the hearer, and possibly others. We saw earlier that $\{i_o, iu_o, u_o, o_o\}$ is just the set introduced by π with no person features on it. Coupled with the agreement facts reported in section 3, we can say that, at a syntactic level, the π head of *man* must have no feature specification, and is minimally represented as in (56), or as (57) for those speakers that have number sensitive agreement with the pronoun:

[46] I mean project here in the sense of syntactic projection, not in the sense of presupposition projection.

(56)



(57)



Ideally an analysis of the internal structure of MLE *man* will provide us with an explanation of how the different definite personal interpretations are picked out, but also points 4 and 5 from above: the lack of bound variable readings, and the behaviour akin to that of a definite description. I introduce a mechanism which captures all of those facts in the next section.

5.2 Picking out Individuals

To account for the variety of different possible definite readings that *man* can have, there needs to be some mechanism by which some member of π is picked out. Here I suggest that mechanism is the introduction of a D head, which is interpreted through a global choice function that picks out the contextually most salient entity in the discourse. For concreteness sake, I assume that the D head introduces an epsilon operator, in the sense introduced in Egli and von Heusinger (1995), and von Heusinger (2004). I elaborate on the properties of this operator in this section, and show how it applies in definite descriptions. The following is a summary of parts of von Heusinger (2004).

The epsilon operator is a selection function that assigns to each non-empty set one element of this set. Unlike ι, it carries with it no uniqueness presupposition as a condition of interpretation; in this way, it is completely acceptable for the potential set of referents to be non-unique (as is the case with MLE *man*), but still arrive at an interpretation. The epsilon term is then interpreted relative to a global choice function, which von Heusinger calls Φ. This choice function is relativized to a specific context, so that it can pick out the appropriate member. Epsilon terms are interpreted according to the following rule (the model M is the pair $\langle$D,I$\rangle$, D the domain of discourse, and I the interpretation of constants):

(58) *the* F: ϵx $\mathrm{Fx}^{\mathrm{M,g},\Phi_c} = \Phi_c([\![F]\!]^{\mathrm{M,g}})$

Each context c has its own corresponding choice function Φ_c, which represents the salience structure of the discourse. Uniqueness is understood as "the 'unique availability' of the referent" (von Heusinger, 2004, p315) rather than as a requirement that there be a unique relevant individual that corresponds to the descriptive content of the NP.

An example from von Heusinger (2004) will help to illustrate. Imagine a situation in which we are visiting Lake Konstanz. In this situation, the property *island* holds of three entities: Mainau, Reichenau and Lindau. The definite description *the island* could pick out different entities in different situations. If a Reichenau fisherman utters it, then

it likely refers to the island of Reichenau; if a tour guide on Lindau utters it, then it will refer to Lindau; and if Earl, the owner of Mainau, utters it then it refers to Mainau. Each of these situations will have a contextually relativized choice function Φ_c assigned to it, which represents the salience structure of that particular context c.

(59) *the island*

a. $[\![\epsilon \text{x } [\text{island(x)}]]\!]^{\text{M,g,}\Phi^{\text{fisherman}}} = \text{Reichenau}$

b. $[\![\epsilon \text{x } [\text{island(x)}]]\!]^{\text{M,g,}\Phi^{\text{tour.guide}}} = \text{Lindau}$

c. $[\![\epsilon \text{x } [\text{island(x)}]]\!]^{\text{M,g,}\Phi^{\text{Earl}}} = \text{Mainau}$

This approach to definite descriptions makes sense of situations in which there is more than one potential referent, but yet where the definite description is still clearly interpretable. The difference between the interpretation of a definite description under an iota operator analysis and an epsilon operator analysis is given in (60)

(60) *the island*

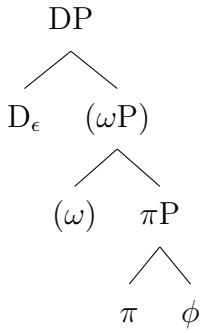
a. ιx [island(x)] the **unique** x, such that x is an island

b. ϵx [island(x)] the **selected** x, such that x is an island

The iota operator requires that there be a unique available referent, whereas the epsilon operator only requires that some referent can be selected, and then interpreted by the appropriate choice function.[47]

I propose, therefore, that this is how the appropriate interpretation of MLE *man* arises. In a definite context, *man* is represented as in (57), where a D head projects and introduces an epsilon operator, turning the pronoun into an epsilon term, which is interpreted by a global contextual choice function.

(61)



[47]I think it may be possible to account for the context dependence of *man* using a traditional iota-operator analysis if we adopt a theory along the lines of Elbourne (2013) where the introduction of situation semantics into the interpretation of definite descriptions gets around the problem of uniqueness. However, I present von Heusinger's approach to definiteness here, eschewing the iota operator, because it captures the contextual quality of MLE *man* without the need to introduce extra machinery into the semantic representations outside of the epsilon operator itself.

I assume that the nominal content of the pronoun that is interpreted is simply represented as human(x), since *man* has to pick out a human individual (and cannot refer to non-human animates or inanimates). Since there are no features on π, the set of individuals that can be picked out by the contextual choice function is unrestricted (unless the speaker is a speaker of Dialect 2, in which case the number head can restrict the potential referent to only atomic or non-atomic entities) . This means that any contextually salient (human) individual, regardless of person and number, can be picked out.

The question then arises: from where does the generic interpretation arise, and why can *man* otherwise not be bound? If we assume that a generic interpretation involves binding of a variable by a Gn operator, as is standard, then it is surprising that *man* cannot otherwise undergo binding, when a D head is not introduced. I suggest that it is the case that **D obligatorily projects**, and therefore *man* can never undergo binding, since the epsilon operator binds off the variable over the set of individuals introduced by the pronoun.

If the above is correct, then binding of the pronoun by Gn is never an option. Instead, I propose that the apparently generic interpretation of *man* does not involve binding by a Gn operator at all, and instead arises purely as a consequence of the nature of the action of the choice function. Recall that the π set is unconstrained, and therefore that the epsilon operator can potentially pick out any member of the full person lattice, including very large members, potentially members which contain all of, or the majority of, all possible referents (in an appropriate discourse context).

Harbour's theory of person is ideal for capturing these facts because a lack of feature specification in that system provides us with precisely the entire set of possible referents, without any additional stipulations or ad hoc principles. The impersonal reading and the breadth of possible interpretations available for definite readings of MLE *man* together make immediate sense in this system. The context dependence of the interpretation of *man* falls out naturally once we assume that D introduces the kind of operator that allows for contextually determined selection from a set of possibilities.

The obligatory projection of D also explains why binding is never possible for *man*: D always projects, and picks out an individual, in essence acting as a binder of the variable lower in the pronominal projection.[48] The QVE effects discussed in section 4.6

[48]MLE *man*'s properties of being resistant to binding, but being able to corefer with other R-expressions and pronouns are reminiscent of the properties of the Japanese pronouns *kare* ('he/him') and *kanozyo* ('she/her'). As discussed in quite some depth in the literature (Katada 1991, Hoji 1991, Noguchi 1997, Elbourne 2005 a.o.), these personal pronouns cannot be bound by a quantificational element locally (a) or across clause boundaries (b), cannot corefer with a local R-expression (c), but are able to corefer with an R-expression across a clause boundary (d).

(i) a. *Daremo$_i$-ga* {$^{\checkmark}$ *zibun-no$_i$*/**kare$_i$-no*} *hahaoya-o* *aisite-iru.*
everyone-NOM self-GEN/he-GEN mother-ACC love-PRES
'Everyone$_i$ loves his$_i$ mother.'

b. *Daremo$_i$-ga* {$^{\checkmark}$ *zibun$_i$-ga*/**kare$_i$-ga*} *tukut-ta* *omotya-o* *kowasi-ta.*
everyone-NOM self-NOM/he-NOM make-PST toy-ACC break-PST
'Everyone$_i$ broke the toy that he$_i$ made.'

c. * *John$_i$-wa* *kare$_i$-o* *nagusame-ta.*
John-TOP he-ACC console-PST
intended: 'John consoled himself.'

are particularly revealing in this regard, since they suggest that MLE *man* is behaving very much like a definite description, giving rise to and blocking QVE precisely where a definite description would. The fact that QVE is generally blocked in out-of-the-blue impersonal contexts also suggests that the "generic" impersonal interpretation associated with MLE *man* is not quite the same as that associated with other impersonal pronouns. This difference arises because of the different mechanisms which give rise to the "generic" interpretation.[49]

If a Gn operator were present higher in the clause, it would find no variable to bind. Other impersonal pronouns that I have discussed above, however, do not behave in this way. Some allow binding by quantifiers, or quantificational variability with certain adverbs in out-of-the-blue contexts (like indefinites), and this is expected if those pronouns are not interpreted in the same way as MLE *man*.

Take for example English *one*. To repeat the discussion in section 4.4, *one* can act as a bound variable, bound by Q-adverbs as the examples in (39) from Moltmann (2006) illustrate.

(62) a. *One often loses one's belongings on the train.*

b. *One often thinks that one's mother is nice.*

Example (a) has the bound reading which can be paraphrased as "for (almost) every relevant person x, x loses x's belongings on the train".

What about the unavailability of arbitrary existential interpretation for MLE *man*? I pointed out in section 2.2 that Moltmann (2006) and Malamud (2012) argue that the unavailability of this reading with *one* is down to a Gn feature on *one* which restricts it to contexts in which it is bound by a sentential operator or a Q-adverb. I think that this explanation does not extend to MLE *man*: unlike *one*, it doesn't allow QVE in out-of-the-blue contexts, and so behaves more like a definite description. The lack of arbitrary existential interpretation can again be explained by the obligatory projection

d. *Mary-ga kanozyo-ga tensai-da to omotte-iru.*
Mary-NOM she-NOM genius-COP COMP think-PRES
'Mary$_i$ thinks that she$_i$ is a genius.'

This makes them very similar to *man*, and suggests that a similar approach to their properties could be revealing. One such similar approach has in fact already been proposed in the literature. Elbourne (2005) suggests that the reason that *kare/kanozyo* cannot be bound is because they are definite descriptions, with the logical form ιx man/woman(x). There are no free variables in this form, and so there is nothing for a quantifier to bind (i.e., the variable x is already bound by the iota operator). This means that the resistance to binding that Japanese *kare* and MLE *man* exhibit are accounted for in the same way: they are both obligatorily capped off by a definiteness head, binding the variable introduced by the pronoun, meaning that binding from an external source is impossible.

[49]Although I have suggested that the projection of D means that the variable introduced by the pronoun cannot be bound, there are cases where definite descriptions can have a covarying reading (example from Wilson 1991; see also Elbourne 2005):

(i) *Every scientist who was fired from the observatory at Sofia was consoled by someone who knew* ***the fired scientist*** *as a youth.*

As with the QVE cases discussed in section 4.6, I adopt the position that this is the result of binding of a contextually introduced relational variable, following Chierchia (1995).

of a D head containing an epsilon operator. Fundamentally MLE *man* is behaving like a definite description.

6 Summary and Conclusion

The aims of this paper were twofold: first to provide an analysis of the unusual properties of the recently innovated pronoun *man* in MLE, and second to argue that its apparently generic impersonal interpretation could not be explained under a traditional Gn-binding approach. On the first point, I argued from agreement facts that the pronoun is devoid of person features, and proposed an analysis where the pronoun gets its interpretation from the projection of a D head hosting an epsilon operator, which can pick out any (possibly plural) individual from the lattice of all appropriate individuals (including speaker and addressee), introduced by a person head π.

On the second point, I make the claim that the generic reading of MLE *man* does not arise from the same mechanism as other impersonal pronouns, i.e., by binding of the pronoun (acting as a variable) by a generic operator. It is important to note that I am not making the stronger claim that a Gn-binding approach to generic readings should be ruled out in the case of impersonal pronouns: indeed, as we have seen, it is still be the case that such an approach suits English *one*, and other impersonal pronouns. However, I am claiming that this is not the only way to get what looks like at least one type of generic reading.

On the empirical side, I have laid out the properties of MLE *man*, a pronominal form that is (as far as I know) unique in the breadth of possible referents that it can pick out: it can be interpreted (pseudo-)generically, but can also have a definite personal interpretation across all person and number combinations. While many impersonal pronouns can pick out definite referents in the right context, this is usually restricted to first person singular or plural, and more rarely third person singular. MLE *man* seems to be somewhere in between a personal and impersonal pronoun, and its ability to have such a broad range of interpretations comes from its lack of feature specification, and the obligatory projection of D.

I have also attempted to show that a theory of person which fundamentally treats the person head in pronouns as a head that introduces a Link-like lattice containing the full set of person referents (inlcuding speaker, addressee and others) makes an explanation of the referential properties of MLE *man* straightforward. I have, for concreteness sake, adopted Harbour's theory here, but any theory where some operator can pick out individuals from an appropriately constrained set is suitable.

Finally, I have suggested that a theory of definiteness that can take into account contextual salience is best suited to accounting for the wide range of possible referents that MLE *man* can pick up in definite contexts. The reference of the pronoun really is about context, and an approach to definiteness which employs the iota operator, and therefore imposes uniqueness/maximality, would have a harder time accounting for the flexibility exhibited without the introduction of more complex semantic machinery.

Acknowledgements

I would first of all like to thank five reviewers for their comments on the paper, which made it a significantly better piece of work. I thank David Adger and Jenny Cheshire for insightful comments on all stages of the research that led to the writing of this paper. Thanks to Coppe van Urk, James Brookes and Daniel Harbour for discussion of the ideas presented herein, and very useful feedback. I would finally like to thank audiences at CGSW31, LAGB2017, and GLOW40 for comments and feedback. The research that this paper resulted from is part of the project Advancing the European Multilingual Experience (AThEME), funded by the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 613465.

References

Ackema, Peter, and Ad Neeleman. 2016. Default person versus default number in agreement. Ms. Edinburgh/University College London.

Ackema, Peter, and Ad Neeleman. 2018. *A grammar of person*. Cambridge MA: MIT Press.

Adger, David. 2006. Combinatorial variability. *Journal of Linguistics* 42 (3): 503–530.

Brody, Michael. 2000. Mirror Theory: Syntactic representation in perfect syntax. *Linguistic Inquiry* 31 (1): 29–56.

Burzio, Luigi. 1986. *Italian syntax*. Reidel, Dordrecht.

Cabredo Hofherr, Patricia. 2004. Impersonal pronouns in Somali, French and German. Paper presented at Syntax of the World's Languages (SWL1), Leipzig, Germany. Retrieved from http://archive.sfl.cnrs.fr/sites/sfl/IMG/pdf/swl-cabredo.pdf.

Cabredo Hofherr, Patricia. 2010. Binding properties of impersonal human pronouns in generic and episodic contexts. Paper presented at *Workshop on impersonal human pronouns*, UMR 7023 Structures formelles du langage CNRS/Université Paris-8, Paris, France..

Cheshire, Jenny. 2013. Grammaticalisation in social context: The emergence of a new English pronoun. *Journal of Sociolinguictics* 17 (5): 608–633.

Cheshire, Jenny, Paul Kerswill, Sue Fox, and Eivind Torgersen. 2011. Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguictics* 15 (2): 151–196.

Cheshire, Jenny, Susan Fox, Paul Kerswill, and Eivind Torgersen. 2013. Language contact and language change in the multicultural metropolis. *Revue Française de Linguistique Appliquée* 18 (2): 63–76.

Chierchia, Gennaro. 1995. The variability of impersonal subjects. In *Quantification in natural languages*, eds. E. Bach, E. Jelinek, A. Kratzer, and B. H. Partee, 107–143. Dordrecht: Kluwer Academic Publishers.

Chierchia, Gennaro. 1998a. Plurality of mass nouns and the notion of "semantic parameter". In *Events and grammar*, 53–108. Kluwer Academic Publishers.

Chierchia, Gennaro. 1998b. Reference to kinds across languages. *Natural Language Semantics* 6: 339–405.

Cinque, Guglielmo. 1988. On *Si* constructions and the theory of arb. *Linguistic Inquiry* 19 (4): 521–581.

Condoravdi, Cleo. 1989. Indefinite and generic pronouns. In *Proceedings of the 8th west coast conference on formal linguistics*, eds. E. Jane Fee and Katherine Hunt.

D'Alessandro, Roberta, and Artemis Alexiadou. 2002. Inclusive and exclusive impersonal pronouns: A feature-geometrical analysis. *Rivista di Grammatica Generativa* 27: 31–44.

Déchaine, Rose-Marie, and Martina Wiltschko. 2010. When and why can 1st and 2nd person pronouns be bound variables? Ms., University of British Columbia.

Egerland, Verner. 2003. Impersonal pronouns in Scandinavian and Romance. *Working Papers in Scandinavian Syntax* 71: 75–102.

Egli, Urs, and Klaus von Heusinger. 1995. The epsilon operator and E-type pronouns. In *Lexical knowledge in the organisation of language*, eds. Urs Egli, Peter E. Pause, Christoph Schwarze, Arnim von Stechow, and Götz Wienold. Amsterdam: Benjamins.

Elbourne, Paul. 2005. *Situations and individuals*. MIT Press.

Elbourne, Paul. 2013. *Definite descriptions*. Oxford: Oxford University Press.

Fenger, Paula. 2015. How impersonal does *one* get? A study of *man*-pronouns in Germanic. Ms. University of Conneticut.

Fox, Sue. 2012. Performed narrative: The pragmatic function of *this is* + speaker and other quotatives in London adolescent speech. In *Quotatives: Cross-linguistic and cross-disciplinary perspectives*, 231–258. Amsterdam: Benjamins.

Grodzinsky, Yosef, and Tanya Reinhart. 1993. The innateness of binding and coreference. *Linguistic Inquiry* 24 (1): 69–101.

Harbour, Daniel. 2016. *Impossible persons*. MIT Press: Cambridge, MA..

Hinterwimmer, Stefan. 2005. Q-adverbs as selective binders: The quantificational variability of free relatives and definite DPs. PhD diss, Humboldt-Universität zu Berlin.

Hoekstra, Jarich. 2010. On the impersonal pronoun *men* in Modern West Frisian. *Journal of Comparative German Linguistics* 13: 31–59.

Hoji, Hajime. 1991. *Kare*. In *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, eds. Carol Georgopoulos and Roberta Ishihara, 287–304. Dordrecht: Kluwer.

Holmberg, Anders, and On-Usa Phimsawat. 2016. Minimal pronouns. Ms. Newcastle University/Burapha University.

Katada, Fusa. 1991. The LF representation of anaphors. *Linguistic Inquiry* 22: 287–313.

Kerswill, Paul. 2013. Identity, ethnicity and place: the construction of youth language in London. In *Space in language and linguistics: Geographical, interactional, and cognitive perspectives*, eds. Peter Auer, Martin Hilpert, Anja Stukenbrock, and Benedikt Szmrecsanyi. De Gruyter Mouton.

Kerswill, Paul, Eivind Torgersen, and Susan Fox. 2008. Reversing "drift": Innovation and diffusion in the London diphthong system. *Language Variation and Change* 20: 451–491.

Kitagawa, Chisato, and Adrienne Lehrer. 1990. Impersonal uses of personal pronouns. *Journal of Pragmatics* 14: 739–759.

Krifka, Manfred, Francis Jeffry Pelletier, Gregory N. Carlson, Alice ter Meulen, Gennaro Chierchia, and Godehard Link. 1995. Genericity: An introduction. In *The generic book*, 1–125. Chicago: University of Chicago Press.

Link, Godehard. 1983. The logical analysis of plurals and mass terms: A lattice-theoretical approach. In *Meaning, use and interpretation of language*, eds. Rainer Bäuerle, Christopher Schwartze, and Arnim von Stechow, 302–323. Berlin: Walter de Gruyter.

Malamud, Sophia A. . 2012. Impersonal indexicals: *one*, *you*, *man* and *du*. *Journal of Comparative German Linguistics* 15 (1): 1–48.

Moltmann, Friederike. 2006. Generic *one*, arbitrary PRO, and the first person. *Natural Language Semantics* 14: 257–281.

Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language & Linguistic Theory* 25: 273–313.

Noguchi, Tohru. 1997. Two types of pronouns and variable binding. *Language* 73 (4): 770–797.

Reinhart, Tanya. 1983. *Anaphora and semantic interpretation*. London: Croom Helm.

Roberts, Ian. 2015. On the interpretation of certain arbitrary elements. Talk presented at IGG41.

Sharma, Shriram. 2016. *Acquisition of nectar, philosopher's stone and wish-fulfilling tree*. Uttarakhand (India): Vedmata Gayatri Trust (TMD).

Siewierska, Anna. 2011. Overlap and complementarity in reference impersonals: Man-constructions vs. third person plural-impersonals in the languages of Europe. In *Impersonal constructions: A cross-linguistic perspective*, eds. A. Malchukov and A. Siewierska, 57–90. Amsterdam/Philadelphia: John Benjamins.

Sigurðsson, Halldór Ármann, and Verner Egerland. 2009. Impersonal null-subjects in Icelandic and elsewhere. *Studia Linguistica* 63 (1): 158–185.

von Heusinger, Klaus. 2004. Choice functions and the anaphoric semantics of definite NPs. *Research on Language and Computation* 2: 309–329.

Wilson, George M. 1991. Reference and pronominal descriptions. *The Journal of Philosophy* 88 (7): 359–387.

Zobel, Sarah. 2014. Impersonally interpreted personal pronouns. PhD diss, University of Göttingen.