Impersonal null-subjects in Icelandic and elsewhere

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IMPERSONAL NULL-SUBJECTS IN ICELANDIC AND ELSEWHERE*

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Abstract. This paper discusses impersonal null-subjects in Icelandic and elsewhere. Despite the fact that the interpretation of Icelandic impersonal null-subjects obeys restrictions similar to those observed for overt impersonal subject pronouns in various languages, they cannot be analyzed as lexical pronouns, deleted in PF. Rather, it is argued, impersonal null-subjects are constructed in syntax, by combination (merger) of abstract features. In general, it seems that pronouns, silent and overt, are PF representations of complex syntactic structures, rather than tokens for discrete terminal nodes. In addition, the paper discusses the cross-linguistic distribution and typology of impersonal null-subjects.

1. Introduction

We use the term 'impersonal arguments', *impersonals* for short, to refer to impersonal +HUMAN pro and indefinite +HUMAN pronouns like English *one*, Italian *si*, French *on*.[1] Elaborating on the approach in Egerland (2003a, 2003b) we distinguish between three subtypes or readings of impersonals:[2]

- *Generic*, like generic English *you* (and generic *one*, in more formal registers)
- *Arbitrary*, like arbitrary English *they*
- *Specific*, often referring to the speaker or a group including the speaker

We will discuss these notions more thoroughly in section 2.

Relatively little is yet known about the cross-linguistic distribution of silent and overt impersonals. As noticed by Holmberg (2005, 2007b),

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[1] We treat clauses containing clitics like *si* as containing an overt and not a zero impersonal. For our purposes, it is immaterial whether *si*, Spanish *se*, etc., are subjects or in an agree relation with subject pro (see Cinque 1988).

[2] Our understanding of the notion 'arbitrary' is slightly different from that of Egerland (2003a, 2003b). In his seminal work, Cinque (1988) referred to the generic reading as arbitrary, but made a distinction between quasi-universal and quasi-existential readings.

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however, some consistent pro-drop languages, like Spanish and Italian, lack *generic* impersonal 3 person pro, in contrast to partial pro-drop languages like Hebrew and Finnish. Compare the Finnish clause in (1) with the Spanish and Italian ones in (2):

(1) Sinne ei muuta vapaehtoisesti. *Finnish* (Holmberg 2007b)
there not.3SG moves voluntarily
'One doesn't move there voluntarily.'

(2) a. En este país **se** trabaja duramente. *Spanish*
in this country SE works.3SG hard (Jaeggli 1986a:53)
'In this country, one works hard.'
b. **Si** lavora sempre troppo. *Italian* (Cinque 1988:522)
SI works.3SG always too-much
'One always works too much.'

Without *se*/*si*, the Spanish and Italian examples get an exclusively referential 3SG reading, 'he' or 'she'. Finnish, in contrast, has no overt impersonal pronoun. Also, unlike Spanish and Italian, it has no 'free' or general definite 3 person pro, that is, (1) cannot have a definite reading. We will return to these facts in section 5.

Icelandic has both overt and silent impersonals. Illustrative examples with overt impersonals are given in (3).[3]

(3) a. Fyrst beygir **maður** til hægri.
first turns.3SG one to right
'First, one turns to the right.'
b. Í þessari fjölskyldu drekkur **þú** bara ekki áfengi.
in this family drink.2SG you just not alcohol
'In this family, one just does not drink alcohol.'

Historically, impersonal *maður* stems from the noun *maður* 'man, person, human', but its pronominal function is a relatively recent

[3] Icelandic has two other words that can function as impersonal subjects, the 3PL.MASC pronoun *þeir* 'they' and the plural *menn* (of *maður*), literally 'men' but 'they' or 'some people' when impersonal:

(i) a. **Þeir** segja að það rigni á morgun.
they.MASC say.3PL that it rains on morning
'They say it is going to rain tomorrow.' (i.e., 'It is said that …')
b. **Menn** náðu bófanum um kvöldið.
men cought.3PL culprit.the in evening.the
'They cought the culprit in the evening.'

We do not include these impersonals in our study, for reasons of space, and also because they are not common or central as impersonals.

phenomenon, and the impersonal function of the 2SG pronoun is even more recent.[4]

Icelandic impersonal null-subjects are largely confined to three constructions, namely the (Germanic) impersonal passive, the so-called impersonal modal construction, and an impersonal present participle construction (see Sigurðsson 1989:161ff). Illustrative examples are given in (4) (the characteristic morphology of the constructions is highlighted).

(4) a. Fyrst er __ **beygt** til hægri. (passive)
first is.3SG __ turned to right
'First, one turns to the right.'

b. Í þessari fjölskyldu **má** __ bara ekki
in this family may.3SG __ just not
drekka áfengi. (modal)
drink alcohol
'In this family, one is simply not allowed to drink alcohol.'

c. Það er __ ekki **flytjandi**
it is.3SG __ not moving (='movable')
þangað. (present participle)
to-there
'One cannot move there.'

In passing, notice that expletive *það* 'there, it', seen in (4c), is only optional, competing with various other elements for the preverbal, initial position (see Thráinsson 2007:309ff and the references cited there). It does not invert with the finite verb in V1 and V2 contexts, nor does it show any other clear subject properties.

The impersonal null-subject is the focus of our interest here, but we will be using the *maður* construction as a ground for comparison, so as to get a clearer picture of the properties and limitations of impersonal null-subject constructions. As far as we can judge, the impersonal 2SG pronoun *þú* has much the same properties as impersonal *maður*, so we will not consider it further (but see Egerland 2003a for some discussion).

A central result of our study is that the Icelandic impersonal null-subject has more in common with overt impersonals in other languages than with Icelandic *maður*. That is, the Icelandic impersonal pro cannot be considered to be a 'null *maður*', as it were.[5] We take this to constitute evidence that null impersonals are constructed in syntax but interpreted as zero in the overt, expressive component of language, PF,

[4] Smári (1920:130) says that impersonal (generic) *maður* has become common in both the spoken and the written language, but adds that it is of a Danish and German origin and "completely wrong". In Böðvarsson (1963:416) impersonal *maður* is judged questionable and "overused". Neither work mentions the impersonal 2SG pronoun. Kristinsson (1998:168), on the other hand, says that using the impersonal 2SG pronoun is "not careful language", bot he does not comment on or warn against impersonal *maður*.

[5] Similar observations hold across overt vs. covert impersonals in other languages as well.

rather than being transferred to PF with a phonological matrix and then deleted.

In section 2, we develop a feature analysis of overt impersonals, largely based on the approach to Swedish *man* 'one' in Egerland (2003a, 2003b). In section 3, we describe the distribution and the formal properties of Icelandic impersonal null-subject constructions. Section 4 analyzes the semantic properties of Icelandic zero impersonals. Section 5 discusses zero impersonals in a comparative perspective, illustrating that the variation is fine-grained, suggesting that it cannot be accounted for in terms of a single parameter. Section 6 concludes the paper.

2. The features of overt impersonals

Many languages have overt subjects or subject markers in impersonal constructions, see (5).

(5) English *one*, *you*, *they*; French *on*; Italian *si*, Catalan, Portuguese, Romanian, Spanish *se*;
Polish *się*; Czeck, Serbo-Croatian, Slovenian *se*, as well as Serbo-Croatian *ćovjek* and Slovenian *èlouk*; Dutch *men*, German, Danish, Norwegian, Swedish *man*, Faroese *man(n)*, Icelandic *maður*; Hungarian *az ember*, etc.

This short and arbitrary list is sufficiently long to illustrate that overt impersonals are common, at least in well-known European languages.

Egerland (2003a, 2003b) discusses impersonals in Scandinavian and Romance, illustrating, as we mentioned in the introduction, that one has to distinguish between three readings of such pronouns: *Generic*, *arbitrary* and *specific*. Slightly revising Egerland's approach, we assume the following understanding of these notions:

(6) a. Generic: non-restricted + HUMAN reading, i.e., people in general[6]
b. Arbitrary: a non-specific + HUMAN reading, excluding the speaker or the hearer
c. Specific: a specific + HUMAN reading, referring to a wholly or a partly specific set of individuals, most commonly including the speaker

Crucially, the generic reading *potentially includes the speaker and the hearer*, whereas the arbitrary reading is always *speaker and hearer exclusive*. The French examples in (7), from Egerland (2003a:80-81), illustrate the difference (the specific 'we' reading is also possible in both examples, as indicated):

[6] The generic reading is closely tied with generic time reference, see further below. Under either generic or 'expanded' time reference, some plural NPs (including plural pronouns) can refer to both a generic superset and a more specific subset.

(7) a. **On** doit travailler jusqu'a l'age de 65 ans. (gen/spec)
one must work until the age of 65 years
'One has to / We have to work until the age of 65.'
b. **On** a travaillé deux mois pour résoudre
one has worked two months to resolve
le problème. (arb/spec)
the problem
'They/We worked for two months to resolve the problem.'

The English examples in (8) and (9) also illustrate the difference. First, we illustrate the generic reading, potentially including the speaker and the hearer, see (8).

(8) a. To find the station **you** first turn to the right (or at least **I** always do).
b. To find the station **one** first turns to the right (or at least **I** always do).

The arbitrary reading, excluding the speaker and the hearer, is illustrated in (9).

(9) **They** are on strike in the hotel (# or at least **I** am).

As seen, the speaker can naturally proceed in (8) by adding a clause implying that he or she is included in the reference of the impersonal pronoun, whereas this does not make any sense in (9).

Italian *si*, French *on*, German *man*, Swedish *man*, etc., can be both generic and arbitrary. Icelandic *maður*, in contrast can be generic but *not arbitrary*. This is illustrated in (10), which should be compared to (8) and (9) above.

(10) a. Til að finna stöðina beygir **maður** fyrst til hægri.
to find station.the turns.3SG one first to right
b. *Ég heyrði í gærdag að **maður** sé í verkfalli
I heard in yesterday that one is.3SG in strike
á hótelinu.
in hotel.the

The same applies to Hungarian *az ember*, 'one' (literally 'the man'), as illustrated in (11).[7]

[7] Valéria Molnár and Gréte Dalmi, p.c. The same is true of Serbo-Croatian *ćovjek* 'man' (Željko Bošković, p.c.) and Slovenian *èlouk*, a colloquial form of *èlovek* 'man' (Lanko Marušić, p.c.). This restriction is more categorial than some of the restrictions on Italian *si*, French *on* and Swedish *man* 'one' discussed by Cinque (1988:542ff) and Egerland (2003a, 2003b), but since the arbitrary reading is excluded for *maður*, *az ember*, *ćovjek* and *èlouk* it is difficult to make a detailed comparison of the languages in this respect, and we will not try to.

(11) a. **Az embernek** dolgoznia kell 65-éves koráig. (generic)
the man.DAT work.3SG must 65-years age-to
'One has to work until the age of 65.'
b. **Az ember** kénytelen pénzt keresni. (generic)
the man.NOM obliged money earn.3SG
'One must earn money.'
c. Azt __ mondták a rádioban hogy ... (arbitrary)
it said.3PL the radio-in that
'They said … / It was said on the radio that ...'

We will return to this important restriction.

The specific reading is illustrated for French *on* in (12), from Egerland (2003a:84).

(12) Hier soir **on** a été congédié. (specific)
yesterday evening one has been fired
'We were fired yesterday evening.'

In Romance, the specific reading usually gets plural interpretation, 'we', and is thus sometimes referred as the (speaker) 'inclusive' reading. In some other languages, the specific reading commonly refers to the speaker alone. This is no doubt the most central reading of both Icelandic specific *maður* and Swedish speaker inclusive *man* (cf. Jónsson 1992, Egerland 2003a, 2003b) see examples (13) and (14).

(13) Já, **maður** var óheppinn í gær. *Icelandic*
yes, one was unlucky in yesterday
'Yes, I was unlucky yesterday.' (specific / *arbitrary)

(14) Ja, **man** hade otur igår. *Swedish*
yes, one had bad-luck yesterday
'Yes, I was unlucky yesterday.' (specific)
/'Yes, they were unlucky yesterday.' (arbitrary)

However, Icelandic *maður* and Swedish *man* may also have a specific 1PL interpretation, albeit less centrally. Given a context where one addresses a married couple, either one of the partners may answer with *maður* and *man* to refer to both of them as in (15) and (16).

(15) Já, **maður** er búinn að vera saman ansi lengi. *Icelandic*
yes, one is done to be together quite long
'Yes, we have been together for quite long.'

(16) Ja, **man** har varit ihop rätt länge. *Swedish*
yes, one has been together quite long
'Yes, we have been together for quite long.'

In addition, both Icelandic *maður* and Swedish *man* (as also e.g. French *on*) can actually denote the addressee (or addressees), at least in 'nurseese' (where one may also use the 1PL pronoun for the same purpose, much as in English). Imagine a situation where a nurse or a doctor enters a patient's room; in such a situation, they could naturally address the patient as in (17) and (18).

(17) Hvernig hefur **maður** það þá í dag? *Icelandic*
how has one it then to day
'How are you today, then?'

(18) Hur mår **man** idag då? *Swedish*
how feels one today then
'How are you today, then?'

Specific 3 person reading is also possible for Swedish *man*, as in example (19).

(19) **Man** är uppenbarligen inte gift.
one is obviously not married
'He/She is / I am obviously not married.'

In contrast, the specific 3 person reading is excluded for Icelandic *maður*, as shown in (20).

(20) **Maður** er augljóslega ekki giftur.
one is obviously not married.MASC.SG
'It is obvious that I am not married.' / ok specific 1SG
*'He/She is obviously not married.' *specific 3SG

The reason why this is the case is that Icelandic *maður* cannot be both speaker and hearer exclusive.[8]

Evidently, the features that enter into the interpretation of impersonal pronouns, as well as of pronouns in general, include the following ones:

(21) a. Generic = +human, …
b. Arbitrary = +human, −speaker, −hearer, …
c1. Specific, 1P = +human, +speaker, −hearer, …
c2. Specific, 2P = +human, −speaker, +hearer, …
c3. Specific, 3P = +human, −speaker, −hearer, +specific, …

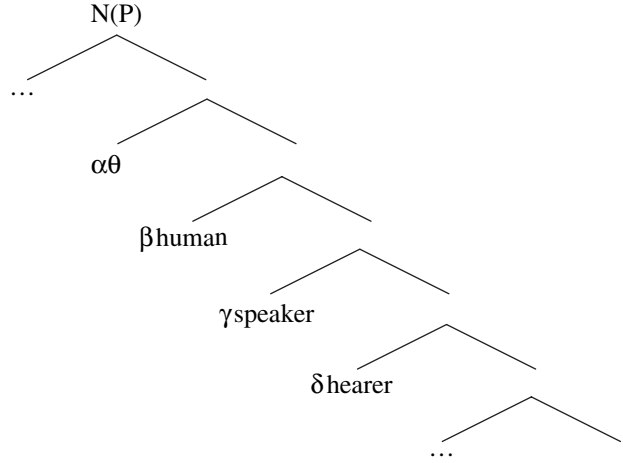
The exact nature of third person specificity is not important here, so we simply use the term 'specific'. We also abstract way from number/gender

[8] Our description is based on Sigurðsson's intuitions and also in part on the description in Jónsson (1992). We believe the variety described here is a central one, and we are not aware of any radically different varieties.

distinctions and certain other aspects of pronominal systems that are important in general but not relevant for our purposes.

We adopt the fairly common generative view that feature combinations of this sort are syntactic. The universality of the features involved suggests that they belong to Universal Grammar, and there is clear evidence that the settings of the speaker and hearer feature values are computed in syntax.[9] Thus, we assume that N(P)s are hierarchic bundles of features, and that any argument minimally expresses some specification of the partial feature structure in (22) (where +/–θ distinguishes between expletive and nonexpletive NPs).[10]

(22)

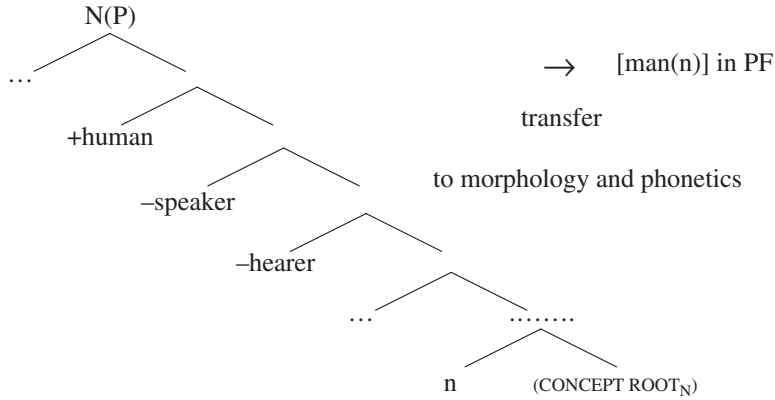


Combining semantic-syntactic constellations of this sort with a CONCEPT ROOT yields a 'word', symbolized or signalled by an arbitrary string of sounds in PF. This is sketched for arbitrary Swedish *man* in (23), where *n* is a silent noun forming head or feature.

[9] That is, these features are variables within the NP (cf. Platzack 2004), valued in a matching relation with the speaker and hearer CP features, referred to as the logophoric agent/patient in Sigurðsson 2004a, 2004b (related ideas have recently been pursued by many other researchers, including Bianchi 2006 and Shlonsky 2009).

[10] This is conceptually close to the approach in Heim & Kratzer (1998:244). We are not committed to any more specific claims about the internal structure of N(P)s, but, for more elaborated approaches, see, for instance Déchaine & Wiltschko (2002), Julien (2005).

(23)



The CONCEPT ROOT or the irreducible conceptual content of a word corresponds, roughly, to what Katz & Postal (1964:14) referred to as semantic distinguishers. An alternative approach is to assume that even words like *helicopter* and *quantum particle* can (or could) be exhaustively analyzed in terms of general semantic-syntactic features. However, what matters for our present purposes (see also Egerland 2003a) is only that 'purely grammatical' words like Swedish impersonal *man* have exclusively syntactic semantics, consisting only of specific settings of syntactic features, like +HUMAN and −SPEAKER (hence the parentheses around CONCEPT ROOT in (23)).[11]

Equipped with the analysis in (21)-(23), we now turn to zero impersonals.

3. Icelandic impersonal null-subject constructions

As mentioned in section 1, Icelandic impersonal null-subjects are largely confined to three morphologically specific constructions, sketched in (24), where the characteristic morphology is highlighted; as indicated, the finite verb is always in the 3 person singular in Icelandic null-subject constructions (and participles in the impersonal passive are exclusively neuter singular, NT.SG).

(24) a. The impersonal passive: here is.3SG __ **danced**.NT.SG.
b. The impersonal present participle construction: here is.3SG __ not **dancing** (= 'danceable')
c. The impersonal modal construction: here **may**.3SG __ not dance

[11] There are reasons to believe that word structures are bundled up or 'packed' together by successive roll-up movement (Sigurðsson 2006:220, 228f), but we will not discuss that issue here.

The corresponding Icelandic examples are given in (25).

(25) a. Hér er __ **dansað**.
here is.3SG __ danced.NT.SG
'People dance here. / There is dancing here.'
b. Hér er __ ekki **dansandi**.
here is.3SG __ not dancing
'One cannot dance here.'
c. Hér **má** __ ekki dansa.
here may.3SG __ not dance
'One is not allowed to dance here.'

As illustrated in (26), the plain verb *dansa* 'dance' does not licence a zero impersonal all by itself.

(26) *Hér dansar/dansa __ oft.
here dance(s).3SG/3PL __ often

This is a general pattern, that is, Icelandic zero impersonals are normally only licensed in the three constructions illustrated in (24)–(25), an issue we will return to in section 5.[12]

A few remarks on these constructions are in place here. The impersonal passive is a common (V2) Germanic trait, but it is more central and usual in Icelandic than in the other modern Germanic languages, as far as we can judge (see Sigurðsson 1989, Maling & Sigurjónsdóttir 2002). It basically applies to any intransitive unergative main verb, including transitive verbs when optionally intransitive and also including even aspectual verbs like *vera* 'be' (progressive and durative, much like English *be* V-*ing*) and *fara* 'begin' (literally 'go, leave, travel') as well as some control verbs, like *reyna* 'try', see example (27).

(27) a. Hér er **verið** að dansa.
here is been to dance
'People are dancing here / There is ongoing dancing here.'
b. Þá var **farið** að dansa.
then was gone to dance
'People then began to dance.'
c. Þá var **reynt** að opna dyrnar.
then was tried to open door.the
'Then, somebody tried to open the door.'

The impersonal passive seems to be limited to verbs that denote (null-) subject controlled or volitional action, that is, it is incompatible with

[12] However, a handful of perception verbs (including *heyrast* 'hear, be audible', *sjást* 'see, be visible', *grilla í* 'be poorly or hardly visible') may take an impersonal null-subject. The verb *segja* 'say' may also take a zero impersonal in literary style (type: 'In this story says.3SG that …').

temporal and modal auxiliaries, raising verbs, unaccusative verbs, most psych verbs, weather and other 'environmental' verbs and fate verbs (*drift*, *get swamped*, *get covered with snow/water*, etc.).[13]

The present participle construction is somewhat reminiscent of the Latin gerundivum, but it typically induces epistemic (possibility) modality, as in (4c) and (25b) above, whereas the Latin construction usually involves deontic (obligation/necessity) modality.[14] It is a passive or a middle construction of sorts, applying to largely the same verb classes as the impersonal passive.[15] There are some differences, though. Thus, the present participle construction can in some cases have an unaccusative main verb, like *deyja* 'die', whereas it is incompatible with aspectual auxiliaries, see (28).

(28) a. Hér er __ ekki **deyjandi** á mannsæmandi hátt.
here is __ not dying in decent manner
'One cannot die here in a decent manner.'
b. *Þá var __ **verandi** að dansa.
then was __ being to dance

The present participle construction involves a modal evaluation of a hypothetical event, i.e. a speaker judgement that something is or is not possible or doable. In contrast, the impersonal passive involves volitional (null-)*agent* control of a factive (sub)event. Aspectual verbs cannot by themselves get a hypothetical event reading, which is presumably the reason why (28b) is unacceptable. In contrast, the main verb *vera* 'be, stay' is natural in the impersonal present participle construction, see (29).

(29) Það er ekki **verandi** í þessum hávaða.
it is.3SG not being in this noise
'One cannot stay in this noise.'

The impersonal modal construction is compatible with transitive verbs, unergative verbs, some aspectual verbs and some control verbs, whereas it is marginal or unacceptable with most unaccusatives, raising verbs and psych verbs and generally incompatible with passive verbs. Some

[13] If the verb refers to a possibly human action a non-human reading is normally excluded (i.e., examples like *Þá var hlaupið/étið* 'then was run/eaten', cannot usually be understood as referring to or implying non-human, animal behavior). However, a few verbs that specifically describe animal behavior, like *hneggja* 'neigh', *gelta* 'bark', *verpa* 'lay eggs' and *hrygna* 'spawn', can take a +ANIMATE zero impersonal in the impersonal passive (as opposed to the present participial and modal constructions, which are strictly confined to a +human reading). A natural example would for instance be *Þá var hneggjað í hesthúsinu*, literally 'then was neighed in the barn', i.e., 'Some X then neighed in the barn.'

[14] As in Cato's famous words "… *Carthaginem esse* ***delendam***", lit. '… (that) Carthago be destroying', i.e., 'is to be / should be destroyed'.

[15] Like past participles, present participles are also compatible with 'regular' passive/middle NP-movement: *Vatnið er ekki drekkandi*, lit. 'the water is not drinking' = 'drinkable', etc., see below. Outside of the passive/middle construction, present participles have similar properties as in related languages (*John arrived singing*, etc.).

illustrative examples with *mega* 'may' are given in (30) (*má* is the 3SG.PRESENT.INDICATIVE form):

(30) a. Hér má **byggja** nýja brú. (transitive)
here may build new bridge
'One is allowed to / One can build a new bridge here.'
b. Það má ekki **hlaupa** hér. (unergative)
it may not run here
'Running is not allowed here.'
c. Nú má **fara** að dansa. (aspectual)
now may go to dance
'One may begin to dance now.'
d. Það má **reyna** að opna dyrnar. (control)
it may try to open door.the
'One can try to open the door.'
e. ?Í fangelsi má aldrei **virðast** vera kúgaður. (raising)
in prison may never seem be oppressed
'In prison one may never seem to be oppressed.'
f. ?Það má ekki **deyja** hér. (unaccusative)
it may not die here
g. *Það má ekki **líka** þetta ofbeldi. (psych)[16]
it may not like this violence
h. *Það má ekki vera **dansað** hér. (passive)
it may not be danced here

The impersonal modal construction is thus rather broadly applicable.[17] In one respect, though, it is rather constrained, as it is confined to only a handful of modals (all having roughly the distribution described for *mega* in (30)).

(31) a. *mega*: 'may, be allowed to, have the permission to'
b. *eiga*: 'have to, have the obligation to, be supposed to, be planned, be going to'
c. *verða*: 'must, have to'
d. *þurfa*: 'need to, be necessary to'

In addition, *skulu* 'shall, have to, must', *bera* 'have the (moral) obligation to' and *vera* 'be' (with a dative subject) in the deontic meaning 'must, have to' may be used in the impersonal modal construction in formal language. The four modals in (31) are most commonly deontic (obligation, necessity, permission), but they may also be epistemic (possibility) in some cases, especially *mega*.

[16] *Líka* 'like' is a dative taking psych verb. Some nominative taking psych verbs are grammatical or at least not sharply ungrammatical in the impersonal modal construction.

[17] It is for instance commonly used in subordinate finite *wh*-clauses, translating as *wh*-infinitives in English (including the generic instructional *how to* type).

Temporal auxiliaries like *hafa* 'have' and (non-passive) aspectual verbs like *fara* 'begin' cannot take a null-subject, and the same applies to other modals than the ones mentioned above, as illustrated in (32).

(32) a. *Hér **kann** að byggja nýja brú. *kunna*: know (how to), can
here knows to build new bridge
b. *Hér **getur** byggt nýja brú. *geta*: can (stage level)
c. *Hér **vill** byggja nýja brú. *vilja*: want
d. *Hér **hlýtur** að byggja nýja brú. *hljóta*: be bound to
e. *Hér **ætlar** að byggja nýja brú. *ætla*: intend to, will

Thus, the impersonal modal construction is confined to modals that (usually) express *deontic modality* (obligation, necessity, permission).[18,19]

Icelandic impersonal null-subjects are evidently syntactically active, as seen by control facts, anaphora and subject-oriented adverbials (as discussed in, for instance, Sigurðsson 1989 and Maling 2006; cf. Holmberg 2007b on similar facts in Finnish). This is illustrated for the impersonal passive in (33).

(33) a. Það var reynt **að hjálpa** honum. (control)
it was tried to help him
'NN tried to help him.'
b. Eftir vinnu var bara farið heim til **sín**. (anaphora)
after work was just gone home to self.REFL
'After work, NN just went home (to their own place).'
c. Það var horft framhjá honum **af ásettu ráði**. (adverbial)
it was looked past him by intended means
'He was deliberately neglected/discriminated.'

Holmberg (2005, 2007b) argues that the Finnish generic null-subject is in Spec,vP, and the external theta role is evidently trapped within vP in both the impersonal present participle construction and the impersonal passive in Icelandic (Sigurðsson 1989), much in line with traditional generative approaches to passive morphology (see Jaeggli 1986b).

The impersonal modal construction is structurally different from both the participial constructions. The latter show familiar effects of external theta role 'absorption' in the sense of Jaeggli (1986a) and are thus incompatible with an overt subject, no matter how semantically vague it may be, see (34).

[18] However, *fá* 'get, be allowed to' is excluded from the impersonal modal construction. We have not been able to develop any deeper understanding of this curious fact.

[19] Notice that *hljóta* 'be bound to, must' usually expresses inferential, propositional modality (i.e., the speaker infers or concludes that something must be somehow).

(34) a. Hér er (*fólk) dansað.
here is (people) danced
b. Hér er (*maður) naumast dansandi.
here is (one) hardly dancing (= 'danceable')

This does not extend to the modal construction, that is, the modals in (31) are free to be either impersonal or take an overt subject, see (35).

(35) a. Hér má (**maður**) dansa.
her may.3SG (one) dance
b. Hér mega *(**þeir**) dansa.
here may.3PL (they) dance

That is, as one would expect, the modals differ from participles in not trapping the external role vP-internally. Accordingly, the external role *blocks NP-movement* in the modal construction, as opposed to the participial constructions. Thus, the null-subject in the modal construction presumably either occupies the target position of NP-movement or intervenes between it and the object position, see (36)–(38).

(36) a. Hér er **bókin** auglýst __. (passive)
here is book.the.NOM advertised
'The book is advertised here.'
b. *Hér er auglýst **bókin/bókina**.
here is advertised book.the.NOM/ACC

(37) a. Hér er **bókin** ekki
here is book.the.NOM not
auglýsandi __. (pres pcpl)
advertising (= 'advertisable')
'The book cannot be advertised here.'
b. *Hér er ekki auglýsandi **bókin/bókina**
here is not advertising book.the.NOM/ACC

(38) a. *Hér má **bókin** ekki auglýsa __.[20] (modal)
here may book.the.NOM not advertise
b. Hér má __ ekki auglýsa **bókina**/***bókin**.
here may __ not advertise book.the.ACC/*NOM
'One may not advertise the book here.'

The order of temporal auxiliaries, aspectual verbs and modals varies to an extent, for reasons that are partly opaque (but see Cinque 2006). There

[20] This is also unacceptable (albeit less sharply so) on a reading where the book is understood as the advertiser (advertising something unspecified).

is however a general tendency for the order illustrated in (39) and (40) (see also Thráinsson & Vikner 1995:78).

(39) (finiteness >) epistemic modality > non-finite tense
> deontic modality

(40) Hann **kann** að **hafa orðið** að selja húsið.
he can to have must to sell house.the
'It is possible that he (has) had to sell the house.'

Inasmuch as deontic modals can take a higher position than other modal verbs, they regularly shift from a deontic (event) modality to a more epistemic (propositional) modality. The clause in (41) is degraded, but to the extent that it gets an interpretation it must mean something like 'It must be the case (I the speaker judge) that it was possible that he (had) sold the house'.

(41) ?Hann **verður** að **kunna** að **hafa** selt húsið.
he must to can to have sold house.the

We thus tentatively suggest that the null-subject is in an intermediate 'subject field' in the impersonal modal construction, lower than the canonical 'Spec,IP' position of overt definite subjects but outside of vP and thus higher than null-subjects in the participial constructions.

The exact location of the null-subjects is less important for our purposes than the plain fact that they are syntactically active.[21] We will thus not discuss the structural properties of Icelandic impersonal null-subject constructions any further here, turning instead to the referential properties of the null-subjects themselves.

4. The features of zero impersonals

We have now developed a feature analysis of overt impersonals (section 2) and discussed the central formal properties of Icelandic impersonal null-subject constructions (section 3). Now, we can thus take a closer look at the features of Icelandic zero impersonals. We will focus on the impersonal passive, as it is the most central null-subject construction in the language.

Unspecified time reference is commonly a prerequisite for the generic reading of overt impersonals (Cinque 1988, Chierchia 1995, among many).[22] The same is true of zero impersonals. Thus, as indicated in the

[21] NP-moved arguments in the (regular, 'non-impersonal') passive block some of the activity of the external role, but typically not all of it, cf. *He was arrested in his home to prevent a disaster*, where the moved NP binds the genitive *his* (taking a reflexive form in the Scandinavian languages), whereas the silent external arrester role is the controller of PRO.

[22] This is sufficiently accurate for our purposes (but for arguments that the relevant notion is (im)perfective aspect, see e.g. Egerland 2003b).

translation, the clause in (42) is ambiguous between generic and arbitrary reading, whereas specific reading is excluded.

(42) Þess vegna er farið þangað á báti. ^{ok}*gen*/^{ok}*arb*/**spec*
that for is gone there on boat
'Therefore, **you**$_{\text{GEN}}$/**they**$_{\text{ARB}}$ travel there on a boat.'

The unavailability of specific reading here accords with the generalization in (43).[23]

(43) Specific reading of impersonal subjects is commonly excluded in the absence of aspectual and temporal limits

Conversely, as illustrated in (44), even only the simple past and future tenses are sufficiently delimiting to exclude generic reading and enable specific reading.

(44) a. Það **var** farið með lest frá Malmö
it was gone with train from Malmö
til Lundar. **gen*/^{ok}*arb*/^{ok}*spec*
to Lund
b. Það **verður** farið með lest frá Malmö
it will-be gone with train from Malmö
til Lundar. **gen*/^{ok}*arb*/^{ok}*spec*
to Lund

(45) a. *Arbitrary*: 'Some group of people (*not* including you and me) went/will go with the train from Malmö to Lund'.
b *Specific*: 'A specific group of people went/will go with the train from Malmö to Lund' ('a specific group of people' most commonly including the speaker).

Specified tense evidently scopes over the null-subject, thereby excluding the generic reading. Following e.g. Chierchia (1995) we thus assume that the generic reading is licensed by a generic operator, G. By probing or agreeing with the subject, specified tense precludes the generic operator from agreeing with it as well (plausibly by intervention).

There is an inverse correlation between specific reading and general relevance. A specific reading is the more likely the less general relevance an event or a situation has (i.e., the more idiosyncratic it is). This is true even in the absence of temporal and aspectual limits. Consider the clauses in (46); the minus marker in front of *gen* in the right hand column in (46a) indicates that the generic reading is marked or degraded in most situations but not categorically excluded.

[23] Notice that this generalization is vaguely formulated. It holds quite generally for the Icelandic null-subjects under discussion, but it describes only a tendency for e.g. Swedish *man*.

(46) a. Það er spilað allan daginn. *–gen/^{ok}arb/^{ok}spec*
it is played all day.the
'NN play(s) all day.'

b. Er spilað allan daginn? **gen/^{ok}arb/^{ok}spec*
is played all day.the
'Do/Does NN play all day?'

c. Það er víst spilað allan daginn. **gen/^{ok}arb/^{ok}spec*
it is gather played all day.the
'NN play(s) all day (I gather).'

The information that somebody is playing all day (cards, instruments or games) must pertain to some special situation and thus it cannot plausibly apply to humans in general, even though it is temporally unspecified. On an unmarked reading, all three sentences are thus ambiguous between an arbitrary reading, 'they, some (other) people' and specific readings. As for the specific readings, a speaker inclusive reading is the most likely one in (46a), whereas that reading is naturally excluded from the question in (46b) (which, accordingly, has either a specific 3 person reading or a hearer inclusive reading, in addition to the arbitrary reading). Adding the evidentiality (hearsay) particle *víst* '(I) gather; they say' in (46c) also excludes the speaker inclusive reading, that is, the clause either has an arbitrary reading or a specific reading that excludes the speaker.

Notice however that the generic reading is not strictly speaking universal (i.e. it is quasi-universal in the sense of Cinque 1988). Thus, the generic reading is in fact available in (46a), for instance if one is in some special place (e.g. prison) and is talking about what generally happens there.[24]

Forced speaker and hearer exclusion precludes the generic reading, as in (46b) and (46c). This is further exemplified in (47a); in (47b), on the other hand, the speaker and the hearer are not excluded (by the event location), the generic reading thus being possible.[25]

(47) a. Í Ódysseifskviðu er yfirleitt ferðast
in Odyssey is generally traveled
á báti. **gen/^{ok}arb/*spec*
on boat
'In the Odyssey **they**$_{\text{arb}}$ generally travel on a boat.'

[24] In other words, the generic reading can be excluded by 'grammatical limits' (temporal, aspectual), but not by 'real world limits', except when such limits lead to speaker and hearer exclusion (one of many facts that indicate that 'real world pragmatics' are not part of grammar, in contrast to deictic and temporal anchoring phenomena).

[25] As seen, a specific reading is also excluded here. This may follow from properties of the impersonal passive rather than from the properties of the null-subjects themselves (as suggested by the fact that overt impersonals are less restricted in this respect), but we will not pursue the issue here.

b Í Feneyjum er yfirleitt ferðast á báti. ^{ok}*gen*/^{ok}*arb*/**spec*
in Venice is generally traveled on boat
'In Venice **you**$_{\text{gen}}$/**they**$_{\text{arb}}$ generally travel on a boat.'

We can test the importance of the speaker/hearer features for the generic reading by comparing the passive null-subject with impersonal *maður*. Recall that arbitrary reading is unavailable for *maður*. A clause with impersonal *maður* should therefore have no grammatical reading if generic and specific readings are also unavailable. This is borne out, as illustrated in (48a), which should be compared to (48b) (where the generic reading is grammatical and the specific reading at least not categorically excluded).[26]

(48) a. *Í Ódysseifskviðu ferðast **maður** yfirleitt
in Odyssey travels one generally
á báti. **gen*/**arb*/**spec*
on boat

b. Í Feneyjum ferðast **maður** yfirleitt
in Venice travels one generally
á báti. ^{ok}*gen*/**arb*/–*spec*
on boat

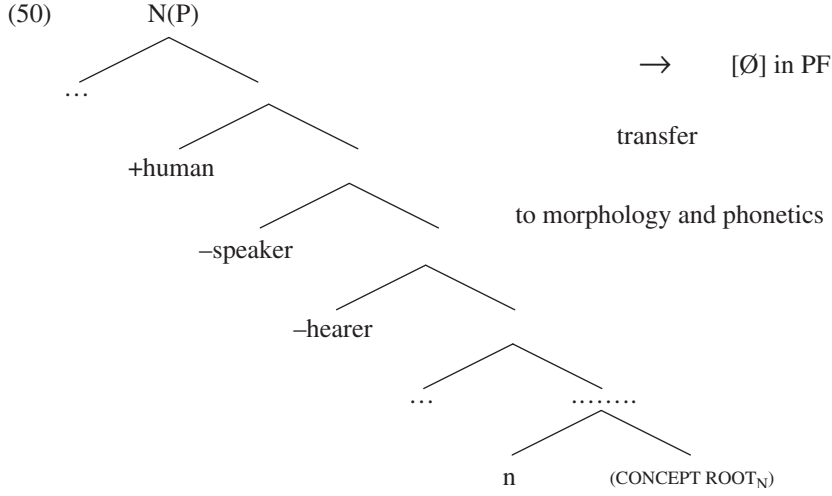
However, if the event is hypothetical, speaker and hearer exclusion cannot be forced, the generic reading thus being possible as in (49) (as the speaker and the hearer can be thought of as belonging to the 'possible world' described).

(49) Á tunglinu væri ferðast á báti. ^{ok}*gen*/^{ok}*arb*/**spec*
on moon.the were traveled on boat
(væri = SUBJUNCTIVE)
'One would travel on a boat on the moon'

More or less the same observations and generalizations obtain for all the three impersonal null-subject constructions in Icelandic, but there are also some subtle differences (specific readings are for instance unavailable or at least heavily constrained in the impersonal modal construction). The factors that constrain or condition the readings of Icelandic impersonal null-subjects are familiar from the literature on overt impersonals in other languages (Cinque 1988, Egerland 2003a, 2003b). Thus, generic, arbitrary and specific readings are not as easily available for all verb classes, specific readings are commonly colloquial, and so on. However, we will not go into any further analytical details here.

[26] Recall that Hungarian *az ember* is like *maður* in having the generic and not the arbitrary reading. As we would expect, *az ember* is also excluded in the Hungarian translation of (48a) (Katalin E. Kiss, p.c.).

It is evident that the interpretation of impersonal null-subjects is affected by various factors. Strikingly, the possible readings are not just accidentally distributed over an unlimited feature space but severely limited – to the same readings as expressed by overt impersonal pronouns like French *on* and Swedish *man*. We interpret this fact as evidence that null-subjects represent the same kind of syntactic structures as overt impersonal subjects, the difference being that the structures are interpreted in PF as zero, as sketched in (50) for the arbitrary reading (cf. (23) above, for Swedish *man*).



More generally, we assume that words can express almost arbitrarily large syntactic structures (as for instance suggested by *yes*/*no* answers to questions, cf. Holmberg 2007a) and do not link to any phonological representation (including nulls) until in PF.

It is clear, though, that nulls often have a special distribution. However, the common observation (see e.g. Cardinaletti & Starke 1999, Huang 2000:88–90, Frascarelli 2008) that overt pronouns and null-arguments typically have different functions/domains is only generally true internally to individual languages, and not cross-linguistically. Zero arguments in language L_1 commonly have different functions/domains than overt pronouns in that particular language but more or less the same functions/domains as some overt pronouns in another language, L_2. That is, nulls in one language or in one context may express exactly the same semantics as expressed or signalled by some phonological string in another language or another context. The reason why this is so is that meaning resides in syntax and concepts, and not in sounds or other types of externalized expressions.

5. Comparative issues

Impersonal null-subjects have not been studied nearly as closely as 'personal' or definite null-subjects, so many issues regarding them have remained unclear. Perhaps the most central of these issues is the question of whether there is any relation between having definite and impersonal pro drop. As we mentioned in the introduction, Holmberg (2005, 2007b) notices that some consistent pro-drop languages, like Spanish and Italian, lack generic impersonal 3 person pro. This is illustrated in (51) for Italian.

(51) a. **Lavora** sempre troppo. (definite 3SG)
works.3SG always too-much
'She/He always works too much.'
b. **Si lavora** sempre troppo. (generic)
SI works.3SG always too-much
'One always works too much.'

As indicated, generic reading requires overt *si*, as in (51b). The same is true of Spanish, generic reading requiring *se*.[27] In both languages, impersonal pro is compatible with 3PL morphology, but it gets an arbitrary and not a generic reading, as seen in (52); the Spanish example in (52a) is adapted from Jaeggli (1986a:45).

(52) a. **Llaman** a la puerta.
call.3PL at the door
'They are knocking at the door.' (definite 3PL)
/'Somebody is knocking at the door.' (arbitrary)
b. **Bussano** alla porta.
knock.3PL at-the door.
'They are knocking at the door.' (definite 3PL)
/'Somebody is knocking at the door.' (arbitrary)

Hebrew and Finnish, in contrast, have no overt impersonal subject marker like *si*/*se*, whereas both languages have generic pro, 3SG in Finnish but 3PL in Hebrew. This generic pro is illustrated in (53) (the examples are adapted from Holmberg 2007b).

(53) a. Tässä **istuu** mukavasti. *Finnish*
here sits.3SG comfortably
'One can sit comfortably here.'
b. **Yxolim** la-ševet be-noxiout ba-kise ha-ze. *Hebrew*
can.3PL to-sit in-comfort in-the-chair the-this
'One can sit comfortably in this chair.'

Both languages also differ from Spanish and Italian in only having antecedent-linked ('controlled') definite 3p pro. This is illustrated for

[27] On an analysis where *si*/*se* clauses contain pro agreeing with *si*/*se* (as in Cinque 1988), the relevant generalization must instead be stated in termes of 'complete absence of an overt marker'. The difference is immaterial for our purposes.

Finnish in (54) (based on Holmberg 2005:539; as also illustrated by Holmberg the same restriction is found in the plural).

(54) a. *(**Hän)** puhuu englantia.
he/she speaks.3SG English
b. Pekka$_1$ väittää että __$_{1/*2}$ puhuu englantia hyvin.
Pekka claims that __ speaks.3SG English well
c. Pekka$_1$ väittää että **hän**$_{1/2}$ puhuu englantia hyvin.
Pekka claims that he speaks.3SG English well

Very similar facts are found in Marathi and Brazilian Portuguese (Holmberg 2005:553, Holmberg et al. 2009) as well as in Russian, whereas e.g. Hungarian, Czech, Polish, Serbo-Croatian and Slovenian all are consistent null-subject languages (with general 3p definite pro) and have an overt generic marker or pronoun, like Italian and Spanish.[28]

These facts seem to suggest an inverse correlation between consistent or general definite pro drop and generic pro, and this is the understanding argued for by Holmberg (2005, 2007b). A strong version of this putative generalization is stated in (55).

(55) a. General definite 3p pro → *Generic 3p pro
b. Generic 3p pro → *General definite 3p pro

Holmberg does not argue directly for this strong version, but it should follow from his approach. He suggests that consistent pro drop languages like Italian have a (referential, definite) D-feature in I, which is lacking in Finnish and other partial pro drop languages of the Finnish/Hebrew type. More specifically, (Holmberg 2005:555) makes the following suggestion (where ϕP, the 'phi-phrase', is a pronoun, overt or pro):

> I propose that the D-feature is parameterized in the following way: presence of a D-feature in I means that a null ϕP that enters into an Agree relation with I can be interpreted as definite, referring to an individual or a group. Furthermore, I assume it means that a null subject *cannot* [original emphasis] be interpreted as generic … Absence of D in I, on the other hand, means that a null ϕP subject must be either bound by a higher DP or else interpreted as generic [as in Finnish, HS & VE]

Holmberg (2005:552) suggests that the generic reading is last resort, applying in the absence of referential binding by either D-in-I, as in Italian, or by a DP antecedent, as in Finnish. Since pro cannot escape

[28] This brief summary of the relevant facts in these languages is based on p.c. with Ora Matushansky (Russian), Ivona Kucerova (Czech), Pjotr Garbacz (Polish), Željko Bošković (Serbo-Croatian), Lanko Marušić (Slovenian), and Valéria Molnár, Gréte Dalmi, Huba Bartos and Katalin E. Kiss (Hungarian). See also Lindseth & Franks (1995), Cabredo Hofherr (2006), Livitz (2006). The well-known fact that Hungarian has more extensive argument drop than the Italian type of languages is not important in the present context.

Table 1. Definite 3 person pro vs. generic 3 pers pro

	It	Hung	BrP	Heb	Fin	Mar	Rus	Ice
General 3p pro	**yes**	**yes**	no	no	no	no	no	no
Controlled 3p pro	yes	yes	yes	yes	yes	yes	yes	no
Generic 3p pro	**no**	**no**	yes.SG	yes.PL	yes.SG	yes.SG	yes.PL	yes.SG
Generic 3p pronoun	*si*.SG	*az ember*.SG	*se*.SG	no	no	no	no	*maður*.SG

It: Italian, Spanish, European Portuguese, Czech, Polish, Serbo-Croatian, Slovenian, … Other languages: Hungarian, Brazilian Portuguese, Hebrew, Finnish, Marathi, Russian, Icelandic

being locally bound by D-in-I in the Italian type of languages the generic reading is never available for pro in these languages, hence they have to express it with an overt pronoun like *si*. We refer to this approach as the I^D *approach*.

Like most generalizations the one in (55) raises new questions. With regard to only definite 3 person pro vs. generic 3 person pro, the picture is rather neat as seen in Table 1.[29]

In passing, notice that 2 person definite pro and 2 person generic pro are not mutually exclusive in any similar manner. Consider the following Italian (56a) and Hungarian (56b) 2SG examples.

(56) a. **Giri** a destra. *Italian*
turn.2SG to right
'You (the hearer) turn / One turns to the right.' (definite/generic)

b. Ilyen esetben nem **tehetsz** semmit. *Hungarian*
such case-in not do-can.2SG nothing
'In such a case, you (the hearer)/one can do nothing.' (definite/generic)

This would seem to suggest that 2 person pro is somehow rather different from 3 person pro, which, as a matter of fact, tallies well with Holmberg's approach to Finnish 'free' 1 and 2 person pro.[30]

However, even if we consider only the 3 person, the generalization in (55) and the pattern in Table 1 give an overly homogeneous picture. First, *arbitrary* pro has a distribution that is rather different from that of *generic* pro, as sketched in Table 2. As indicated, we have no information on arbitrary subjects in Marathi.

[29] In addition to the informants mentioned in footnote 28, thanks to Anders Holmberg, Satu Manninen, Idan Landau, Ur Shlonsky, and Hagit Borer.

[30] While pro drop in general is subject to context linking in the extended sense of Sigurðsson & Maling (2008), there are various additional facts that suggest that 1 and 2 person pro is also partly different from 3 person pro. See e.g. Rosenkvist (2006), Frascarelli (2008), Shlonsky (2009).

Table 2. Definite 3 person pro vs. arbitrary 3 person pro

	It	Hung	BrP	Heb	Fin	Mar	Russ	Ice
General 3p pro	**yes**	**yes**	no	no	no	no	no	no
Controlled 3p pro	yes	yes	yes	yes	yes	yes	yes	no
Arb 3p pro	yes.PL	yes.PL	yes.PL	yes.PL	yes.SG	(?)	yes.PL	yes.SG
Arb 3p pronoun	*si.SG*	no	*se.SG*	no	no	(?)	no[31]	no[32]

If the generalization in (55) has a principled explanation, it is unclear why it does not extend to arbitrary pro. The natural interpretation of Holmberg's I^D approach is that it predicts that arbitrary and generic 3p pro should have the same distribution across languages and constructions, contrary to fact. Or, to put it differently, had the distribution turned out to be the same, then that would presumably have been taken to provide evidence in favor of the I^D approach.

Second, Old Norse had both definite and generic 3p pro (as well as arbitrary 3p pro). This is illustrated in (57) for definite pro and in (58) for generic pro:

(57) a. **fóru** þá síðan til skips síns, **lǫgðu** þegar
went.3PL then after to ship their, headed.3PL at-once
út ór ánni
out of river.the
'They then went back to their ship,
[and] they headed immediately out of the river.'
(Nygaard 1906:10)

b. engi er svá fróðr, at telja **kunni** ǫll stórvirki hans
noone is.3SG so learned that tell can.3SG all feats his
'Noone is so learned that he can tell of all his feats.'
(Nygaard 1906:10)

(58) **má** þar fœða her manns
may.3SG there feed army of-men
'One can feed a whole army there.'
(Nygaard 1906:14)

Third, it is noteworthy that (Modern) Icelandic (as opposed to e.g. Russian) does not license definite pro under control or antecedent-linking. Compare the ungrammatical (59a) with the grammatical extraction example in (59b) and the grammatical impersonal null-subject example in (59c) (showing that Icelandic neither has a *that*-trace effect nor a strict phonological EPP effect).

[31] Apart from certain cases with 3SG. morphology and reflexive/middle *–sja*.

[32] Apart from certain cases with 3PL *menn* 'people' (lit. 'men') and *þeir* 'they', mentioned in fn. 2.

Table 3. Four types of 3 person pro drop languages

	Definite 3p pro		Impersonal 3p pro	
	general	controlled	generic	arbitrary
Old Norse:	yes	yes	yes	yes
Italian, etc:	yes	yes	no	yes
Finnish, etc:	no	yes	yes	yes
Icelandic:	no	no	yes	yes

(59) a. *Pétur segir að __ tali ensku.
Peter says.3SG that speaks.3SG English
b. Pétur$_1$ segir hún að __$_1$ tali ensku.
Peter says.3SG she that speaks.3SG English
'Peter, she says (that he) speaks English.'
c. Þetta var galli sem ég hélt að __ mætti laga.
this was flaw that I though that might.3SG fix
'This was a flaw I though one could fix.'

It is pedagogical to distinguish between only two major types of pro drop languages, consistent and partial. In fact, however, there are several types of 3 person pro drop languages. Abstracting away from specific readings of impersonals, we can distinguish between at least the four types illustrated in Table 3.

If we also consider overt impersonals, we get further segregation: Finnish, Hebrew and Russian are like Old Norse in not having any (general) overt impersonals, Brazilian Portuguese has both generic and arbitrary *se* (as well as generic 3SG pro and arbitrary 3PL pro), and Icelandic is like e.g. Serbo-Croatian, Slovenian and Hungarian in having an overt impersonal (*maður* / *ćovjek* / *èlouk* / *az ember*) that expresses a generic but not an arbitrary reading.

There are 16 logical possibilities of combining the four categories in Table 3. Four of these possibilities are exemplified in the table. A (largely) non-null argument language like English exemplifies the fifth one (no definite 3p pro and no impersonal 3p pro).[33] Further research will hopefully reveal whether the other 11 combinations can be found or at least whether they are likely to be found. We have not been able to identify any principled reason to claim or believe that they should be non-existent. If they are non-existent, that is a curious or even a potentially interesting fact.

[33] It is also exemplified by Oevdalian ('Älvdalsmålet'), which has neither any singular (1, 2 or 3 person) nor 3PL null-subjects, hence no zero impersonals, even though it has 1PL and 2PL null subjects (see Rosenkvist 2006).

6. Conclusion

Little is yet known about the distribution of silent impersonals, both cross-linguistically and internal to individual languages (with a few exceptions, including Italian, Hebrew, Finnish). It is therefore important to extend our knowledge of this field by carefully examining the function and distribution of zero impersonals in more languages. Our main purpose in this work has thus been to explore and describe the properties of impersonal pro in Icelandic and also to compare it to overt impersonals in Icelandic and to zero impersonals in other languages.

As it turns out, Icelandic impersonal null-subjects have more or less the same semantics (but not the same distribution) as overt impersonals in many related languages. In contrast, it has markedly different properties from the Icelandic impersonal pronoun *maður* 'one' (which, in turn, has its 'mates' in some languages, including Hungarian *az ember*). In particular, *maður* cannot have an arbitrary reading ('they', 'some people not including you or me'), whereas the zero impersonal frequently has that reading (as well as generic and specific readings). Thus, the zero impersonal cannot be considered to be a 'null *maður*', as it were, and hence it cannot be derived by deletion of the phonological matrix of *maður* in PF. We take this to constitute one piece of evidence in favor of a non-lexicalist view of syntax, where 'words' in general can express almost arbitrarily large syntactic structures and do not link to any phonological representation (including nulls) until in PF.

Comparison of Icelandic impersonal null-subjects with zero impersonals in a number of other languages suggests that a monoparametric account of the cross-linguistic variation is not feasible. One cannot even claim that *a language* 'has' or does 'not have' impersonal null-subjects. Thus, as we have demonstrated, impersonal null-subjects are construction bound or domain specific in Icelandic (and there are many well-known cases of domain specific 'parametric' phenomena in other languages, including, for instance, the tense-dependent distribution of definite pro in Hebrew, see e.g. Shlonsky 2009).

The fact that the distribution of impersonal null-subjects in Icelandic is construction bound suggests that it results from a complex interplay of micro-factors that are much harder to discern and define than easily observable macro-tendencies. It is in fact rather obvious that macro-parameters of the classical type (Holmberg & Platzack 1995, Baker 2001) do not make exact predictions about variation across any substantial number of languages or constructions. We do not wish to argue against the 'parametric spirit', though. It is evident from the history of science, including the short history of syntactic theory, that grand and often not very accurate generalizations pave the way for future research (see the discussion in Roberts & Holmberg 2005). However, it should be kept in

mind that any *universal* approach to language variation should have something to say about how sign languages, visual and tactile, relate to oral languages, and also, in fact, about how written codes of extinct languages (Sumerian cuneiforms, etc.) relate to Universal Grammar, i.e., how they can be deciphered without an 'oral link'.[34]

Another fact to bear in mind is that perceptible signs and 'markers' in all these externalization modes need not express but a fraction of the much richer structure of I(nternal)-Language: they are nevertheless processable. Impersonal subjects, overt as well as covert, are but one of numerous phenomena that evidence this.

7. References

Baker, M. C. 2001. *The Atoms of Language*. Oxford & New York: Oxford University Press.

Bianchi, V. 2006. On the syntax of personal arguments. *Lingua* 116, 2023–2067.

Böðvarsson, Á. 1963. *Íslenzk orðabók*. Reykjavik: Bókaútgáfa Menningarsjóðs.

Cabredo Hofherr, P. 2006. 'Arbitrary' pro and the theory of pro-drop. *Agreement and arguments*, eds. P. Ackema, P. Brandt, M. Schoorlemmer & F. Weerman, 230–257. Oxford & New York: Oxford University Press.

Cardinaletti, A. & Starke, M. 1999. The typology of structural deficiency: a case study of the three classes of pronouns. *Clitics in the Languages of Europe*, ed. H. van Riemsdijk, 145–233. Berlin: Mouton de Gruyter.

Chierchia, G. 1995. The variability of impersonal subjects. *Quantification in Natural Languages*, eds. E. Bach, E. Jelinek, A. Kratzer & B. H. Partee, 107–143. Dordrecht: Kluwer.

Chomsky, N. 2007. Approaching UG from Below. *Interfaces + Recursion = Language? Chomsky's Minimalism and the view from Syntax-Semantics*, eds. H.M. Gärtner & U. Sauerland, 1–30. Berlin: Mouton de Gruyter.

Cinque, G. 1988. On *si* constructions and the theory of *arb*. *Linguistic Inquiry* 19, 521–581.

Cinque, G. 2006. *Restructuring and Functional Heads*. Oxford & New York: Oxford University Press.

Déchaine, R.-M. & Wiltschko, M. 2002. Decomposing pronouns. *Linguistic Inquiry* 33, 409–442.

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

Egerland, V. 2003b. Impersonal *man* and aspect in Swedish. *Venice Working Papers in Linguistics* 13, 73–91.

Frascarelli, M. 2008. Subjects, Topics and the Interpretation of Referential pro. An interface approach to the linking of (null) pronouns. *Natural Language and Linguistic Theory* 25, 691–734.

Heim, I. & Kratzer, A. 1998. *Semantics in Generative Grammar*. Oxford: Blackwell.

[34] Sounds, written symbols and manual and facial signs are evidently the most effective and flexible media for expressing language, but there is no obvious reason to believe that language cannot or could not be expressed through different media, say, some special kind of dancing. In Otto Jespersen's words, as cited by Chomsky (2007): "no one ever dreamed of a universal morphology."

Holmberg, A. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36, 533–564.
Holmberg, A. 2007a. Null subjects and polarity focus. *Studia Linguistica* 61, 212–236.
Holmberg, A. 2007b. The silence of the generic subject pronoun in Finnish. *To appear in Null subjects and parameters in a minimalist perspective*, eds. T. Biberauer, A. Holmberg, I. Roberts & M. Sheehan. Cambridge: Cambridge University Press.
Holmberg, A., Naydu, A. & Sheehan, M. 2009. Three partial null-subject languages: a comparison of Brazilian Portuguese, Finnish, and Marathi. *Studia Linguistica* 63.
Holmberg, A. & Platzack, C. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford & New York: Oxford University Press.
Huang, Y. 2000. *Anaphora: A Cross-linguistic Study*. Oxford & New York: Oxford University Press.
Jaeggli, O. A. 1986a. Arbitrary plural pronominals. *Natural Language and Linguistic Theory* 4, 43–76.
Jaeggli, O. A. 1986b. Passive. *inguistic Inquiry* 17, 587–622.
Jónsson, J. G. 1992. The pronoun *maður* in Icelandic. Ms., UMass.
Julien, M. 2005. *Nominal Phrases from a Scandinavian Perspective*. Amsterdam & Philadelphia: John Benjamins.
Katz, J. J. & Postal, P. M. 1964. *An Integrated Theory of Linguistic Descriptions*. Cambridge, MA: MIT Press.
Kristinsson, A. P. 1998. *Handbók um málfar í fjölmiðlum* [A Handbook on Language in the Media]. Reykjavík: Málvísindastofnun Háskóla Íslands.
Lindseth, M. & Franks, S. 1996. Licensing and identification of null-subjects in Slavic. in *Formal Approaches to Slavic Linguistics*, Vol. 3, ed. J. Toman, 199–244. Ann Arbor: Michigan Slavic Publications.
Livitz, I. 2006. What's in a nominative? Implications of Russian non-nominative subjects for a cross-linguistic approach to subjecthood. B.A. honors thesis, Harvard University.
Maling, J. 2006. From passive to active: Syntactic change in progress in Icelandic. *Demoting the agent: passive and other voice-related phenomena*, eds. TS. Solstad & B. Lyngfelt, 197–223. Amsterdam & Philadelphia: John Benjamins.
Maling, J. & Sigurjónsdóttir, S. 2002. The new impersonal construction in Icelandic. *The Journal of Comparative Germanic Linguistics* 5, 97–142.
Nygaard, M. 1906. *Norrøn syntax*. Oslo: H. Aschehoug & Co (W. Nygaard).
Platzack, C. 2004. Agreement and the person phrase hypothesis. *Working Papers in Scandinavian Syntax* 73, 83–112.
Roberts, I. & Holmberg, A. 2005. On the role of parameters in universal grammar: a reply to Newmeyer. *Organizing grammar. Linguistic studies in honor of Henk van Riemsdijk*, eds. H. Broekhuis, N. Corver, R. Huybregts, U. Kleinhenz & J. Koster, 538–553. Berlin: Mouton de Gruyter.
Rosenkvist, H. 2006. Null-subjects in Övdalian. *Working Papers in Scandinavian Syntax* 78, 141–171.
Shlonsky, U. 2009. Hebrew as a partial null-subject language. *Studia Linguistica* 63.
Sigurðsson, H. Á. 1989. *Verbal syntax and case in Icelandic*. Ph.D. dissertation, University of Lund. [Republished 1992 in Reykjavik: Institute of Linguistics].
Sigurðsson, H. Á. 2004a. Meaningful silence, meaningless sounds. *Linguistic Variation Yearbook 2004*, Volume 4, eds. Pierre Picaet al., 235–259. Amsterdam & Philadelphia: John Benjamins.

SIGURÐSSON, H. Á. 2004b. The syntax of person, tense, and speech features. *Italian Journal of Linguistics* 16, 219–251. [Special issue, eds. V. Bianchi & K. Safir.]
SIGURÐSSON, H. Á. 2006. Agree in syntax, agreement in signs. In *Agreement systems*, ed. C. Boeckx, 201–237. Amsterdam & Philadelphia: John Benjamins.
SIGURÐSSON, H. Á. & MALING, J. 2008. Argument drop and the Empty Left Edge Condition. *Working Papers in Scandinavian Syntax* 81, 1–27.
SMÁRI, J. 1920. *Íslenzk setningafræði* [Icelandic syntax]. Reykjavik.
THRÁINSSON, H. 2007. *The syntax of Icelandic*. Cambridge: Cambridge University Press.
THRÁINSSON, H & VIKNER, S. 1995. Modals and double modals in Scandinavian languages. *Working Papers in Scandinavian Syntax* 55, 51–88.

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