Evidence from impersonals for $[\pm hearer]$

This paper has three main claims. First, I argue for a binary [±hearer] feature, rather than a privative [hearer] feature, drawing on the clusivity distinction in Mayan languages and first person plurals (1PL) used impersonally. Second, I posit an implication for impersonal (IMP) constructions: pronouns used impersonally contain no negatively valued person features. I further support this claim with data from impersonals in Germanic languages. Third, I suggest that the tendency for many languages to shift impersonal pronouns referentially as first person plurals (e.g., French *on*) comes from the fact that impersonals apply to everyone: speaker, hearer, and others, and therefore can easily shift to referential first person plural uses. The Mayan data (1PL-as-IMP) is a mirror to the cross-linguistically tendency for impersonals to shift to first person plural (IMP-as-1PL).

1PL-as-IMP in Mayan. In addition to its expected usages as a first person inclusive, the inclusive in Ch'ol (Ch'olan-Tseltalan subgrouping) is often used impersonally, passing all the diagnostics in Kitagawa & Lehrer (1990) for personal pronouns used impersonally. In a naturally occurring example from a conversation about the difficulties of getting timely services in Mexican clinics, the first person inclusive is used (1a). In a translated pamphlet on the coronovirus the inclusive is used in (1b); the original Spanish is ¿Qué hacer en caso de presentar síntomas por posible coronavirus? 'what to do in case of exhibiting possible symptoms of coronovirus' which does not include any first person plural, but rather an infinitival construction hacer 'to do'.

- (1) a. Mach weñ mi **la-j**-k'amañ tyi Mejiku.

 NEG good IPFV INCL-1-get.sick PREP Mexico

 'It's not good to get sick in Mexico.' (Lit. It's not good if we_{INCL} get sick in Mexico.)
 - b. Chuki yom la=k-mel che' mi i-tyaj-oñ=la coronavirus?
 what need INCL=A1-do c IPFV A3-find-B1=INCL coronavirus

 'What should you do if you catch coronavirus?' (Lit. ... if the coronavirus finds us_{INCL}) Ch'ol

In many cases the referential first person inclusive (1INCL) reading and impersonal reading can be retrieved. However, certain environments can force a particular reading. When the 1INCL pronoun is overt—i.e., in a focus structure in (2)—only the 1INCL meaning is maintained; the impersonal meaning is not possible. Furthermore, *lak-tyaty*, literally 'our father', is ambiguous between its literal meaning and a common noun meaning 'man.' If it is modified by a numeral only the general meaning of 'man' is preserved in (3).

(2) **Joñoñoñla** yom la-j-käñtyañ la-k-bäj. (3) Tyi juli juñ-tyikil **la=k-**tyaty.

PRON.INCL need INCL-1-care INCL-A1-self

'As for us, we need to take care of ourselves.'

'A man/*our father arrived.'

Ch'ol

Q'anjob'al (Q'anjob'alan subgrouping) makes a three-way distinction between 1PL, 1 INCL, and 1EXCL. In a book on Q'anjob'al taboos (Toledo Sebastián, 2020), the underspecified 1PL or 1INCL is used, but never the exclusive *on...-heq*. Note that the 1PL form has previously been analyzed as a dual (Mateo Pedro, 2010), however the source in (5) is from a book that is meant for a *group* of people—not just two. I thus re-analyze this form as a first person plural, underspecified for whether the hearer is included (see also discussion Harbour 2020's discussion of "Frankenduals").

(4) Q'anjob'al first person plural absolutive (5) Ch-on ya'b'an aj y-uj

1PL -on IPFV-1PL get.sick DIR 3-because

1EXCL -on...hon 'One gets sick because of it.' (Q'anjob'al)

1INCL -on...heq

I provide evidence that other Mayan languages such as Mam, Tseltal, and Tsotsil exhibit a similar pattern to Ch'ol and Q'anjob'al, employing 1INCL or 1PL impersonally.

A binary feature analysis. I compare a private feature (i.e., Harley & Ritter (2002); Cowper & Hall (2005); McGinnis (2005); Moskal (2018) i.a.) and a binary feature analysis (i.e., Noyer (1992); Watanabe (2013); Despić & Murray (2018); Pertsova (2022) i.a.). The analysis for Ch'ol is given in (6). As =la appears in both the inclusive and second person plural, I argue it tracks the positive or negative value of a hearer feature. For a binary feature analysis $lo(jo)\tilde{n}$ is the spell out of a [-hearer] feature and plural, accounting for why it appears to derive the exclusive form.

(6) Analysis: Ch'ol absolutive markers

	form	privative	binary
1 EXCL 1 INCL		[speaker] [speaker,hearer]	[+speaker,-hearer] [+speaker,+hearer]
2 PL	-ety=la	[hearer]	[+hearer]

The challenge for a privative feature system is what to do with la and $lo\tilde{n}$. As a privative feature analysis does not predict a composed exclusives, the morphological derivation for $o\tilde{n}=lo\tilde{n}$ poses a challenge (see Harbour (2013) for similar arguments). Furthermore, there needs to be a way to block $=lo\tilde{n}$ from being inserted in the inclusive. In the inclusive form, which has both the features [speaker] and [hearer], a choice must be made between whether the plural encodes [speaker] or [hearer]. We could need to stipulate a ranking system where [hearer] is ranked above [speaker] so the preference is to encode the hearer when given the choice between [speaker] and [hearer], such as in McGinnis (2005). However, no independent evidence in the language would suggest that hearer is ranked above speaker. Under a binary feature system the participant plural ending only tracks whether the hearer is - or + so the distinction can easily be made without stipulations on person hierarchies.

Extending to the impersonal constructions, we can think of Ch'ol as having an *inclusive* impersonal, much like how the impersonal pronoun *one* is in English. *One* cannot appear in impersonal constructions that exclude the speaker and hearer (*One built this house in 1819). This is similar to what has been reported for the inclusive impersonal pronoun *men* in Modern West Frisian (Hoekstra, 2010). Therefore it is not a leap to see how the inclusive in Ch'ol has developed these impersonal uses—it *already* encodes speaker and hearer.

In Q'anjob'al, there is a three-way distinction. I propose that [±hearer] is underspecified for the 1PL (-on) in Q'anjob'al in (7). This underspecified form could include others, such as the hearer, like how English we is often represented is with [+speaker] and it can include or cannot include the hearer, depending on context. The data poses challenges for a privative feature system—how can the 1PL and 1EXCL exist at the same time? Q'anjob'al provides support for binary features as well as underspecification as per Pertsova (2011, 2022).

(7) Analysis: Q'anjobal absolutive markers

	form	privative	binary
1 PL	-on	[speaker]	[+speaker]
1 EXCL	- <i>on</i> = <i>hon</i>	[speaker]	[+speaker,-hearer]
1 INCL	-on=heq	[speaker,hearer]	[+speaker,+hearer]
2 PL	<i>-ex</i>	[hearer]	[+hearer]

Typology of impersonals Although 1PL-as-IMP has not been widely studied, other languages employ 1INCL as IMP too (Lichtenberk (2005) for Acehnese (Austronesian); Ostrove (2021) for San Peras Mixtec (Oto-Manguean)). In all these cases, I argue that no pronoun used impersonally contains a negatively valued person feature. Theoretically, this means that for the features [±speaker] and [±hearer], pronouns that can be used impersonally can correspond to [+speaker], [+hearer] and [+speaker, +hearer], but not [+speaker,-hearer], [speaker,+hearer], [-speaker,-hearer]. This is borne out. Second person is commonly used impersonally (you in English) filling in [+hearer]. More recently, Zobel (2014, 2021) has argued for the impersonal use of the first person singular ich in German, filling in [+speaker]. Finally, work on impersonal pronouns such as man in German, men in Dutch (Fenger, 2018) and Multilcutural English impersonal man (Hall, 2020) argue for a lack of person features, providing us with the last possibility for an impersonal, underspecified for person []. **Implications.** The Mayan pattern is a mirror to European languages where impersonals such as *on* in French or the si construction in Italian have shifted their meaning from impersonal to referential first person plural. Cinque (1988: 550) suggests that impersonals have a tendency towards first person plurals because first person plurals are "the only combination of person and number features that may encompass all other feature combinations. In its inclusive reading, we may comprise 1st, 2nd, and 3rd person, whereas all the others exclude some. In other words, it is the most general (and arbitrary) of all personal referential pronouns." Mayan languages show that the relationship between impersonals and first person plurals is bidirectional—IMP-as-1PL and 1PL-as-IMP. Furthermore, the inclusive or unmarked first person plural (in the case of Q'anjob'al) form is the one used impersonally in Mayan—not the exclusive. This suggests that impersonals can only gain *positively* valued person features, not negative ones.