

A recipe for null arguments

A striking fact about language is that the rules of syntax change depending on register. For example, while English normally disallows null definite patients, this constraint is suspended in Instructional Context (IC) constructions. Less often a point of discussion is that IC sentences also exhibit null agents, as illustrated in (1).

- (1) \emptyset_{agent} Take 2 carrots. \emptyset_{agent} Cut $\emptyset_{\text{patient}}$ finely, before adding $\emptyset_{\text{patient}}$ to potato mixture.

IC null patients raise questions about how a register can license a dedicated syntactic property, while it is not clear whether null agents are an independent feature of IC or if they appear as a side-effect of the use of the imperative mood. (See e.g. Haegeman 1987, Massam & Roberge 1989, Cote 1996, Ruppenhofer & Michaelis 2010, Weir 2017, Ruda 2014.)

There is little work on IC sentences cross-linguistically. In this paper, we focus on two Austronesian languages, Malagasy and Niuean, whose syntactic characteristics enable us to expand our understanding about the role and licensing of null arguments in the IC. We argue that null agents and patients are a universal pragmatic or functional desideratum of the IC register, but that the realization of this is mediated by the syntax of a given language. This means that Nullness (henceforth \emptyset) is achieved through different means for agents versus patients in a single language, as well as for each argument type across languages.

Turning first to agents, in many languages (e.g. English, French, Chinese, Japanese, Niuean, Malagasy, Tagalog), they are null in IC. We therefore propose this as a feature of the IC register. Note that the syntactic means to the null agent can arise via the use of the imperative (in English), but also via other means, such as the infinitive (in French). In Malagasy, however, null agents in IC arise due to the use of non-active voice morphology, not via imperatives or infinitives. In (2), taken from a recipe, both verbs are in Theme Topic voice and the agent is null.

- (2) Sasana \emptyset_{agent} ny vary, ary arotsaka \emptyset_{agent} $\emptyset_{\text{patient}}$ ao anaty vilany
 TT.wash DET rice and TT.pour there in pot
 ‘Wash the rice and pour into pot.’

Crucially, this null agent is not particular to IC, and is always possible with non-active verbs in Malagasy. Moreover, the verbal morphology is not imperative (there are distinct imperative forms in Malagasy) and the language lacks infinitives. Finally, this null agent cannot be derived via Haegeman’s (2013) structural truncation analysis of null subjects in certain written registers in English as the null agent in Malagasy is low in the structure (Guilfoyle, Hung and Travis 1992).

Let us turn to null patients in the IC. Here too we see that languages can achieve the register desiderata for \emptyset through a variety of syntactic means. It has been proposed that null patients are licensed through coindexation with a null IC topic in the left periphery, and that, in addition, a special type of pronoun is involved (see references above). The special pronoun view is supported through the observation that null IC objects are always third person inanimate, and in English, they are only possible in the IC. We adopt the view that IC involves a special pronoun, which is featureless, with no #, π , animacy, or gender of its own. In English, such a pronoun cannot be recovered through the usual means, (all overt pronouns have at least person or number) but only via immediate coindexation with an IC running topic.

As we saw above for agents, there is also variation in the IC licensing of null patients. Niuean, for example, routinely includes a featureless pronoun in its inventory: Niuean 3rd person inanimate pronouns never have overt form (cf. Latin, Chinese, Japanese, Brazilian Portuguese). Exploiting pronominal feature geometry (e.g. Harley & Ritter 2002), we argue that animacy is at the top of the Niuean pronominal feature paradigm, so that inanimate pronouns are featureless, and fall outside of the pronominal paradigm, with no corresponding vocabulary item, as in (3). Thus, in IC, as in (4), Niuean can achieve \emptyset through regular means, namely by using the featureless 3rd person inanimate pronoun that is generally available and always null.

- (3) Moua tuai e au. (4) Helehele ke kai mafanafana poke hahau.
 find PERF ERG 1.SG slice SBJV eat warm or cold
 ‘I’ve found (it).’ (*Haia*: 263) ‘Slice (it) and serve (it) warm or cold.’ (TNR 8)

Unlike Niuean, Malagasy is not generally considered to be a null argument language, yet the patient (subject) pronoun of an IC sentence is virtually always null (2). However, our textual analysis (from *Le lac bleu* Ravolomanga 1996) shows that inanimate pronouns in Malagasy are also very often null, as illustrated in (5).

- (5) Dia omeko peratra ity ianao, ka tehirizo \emptyset tsara tsy ho very \emptyset .
 COMP TT.give.1SG ring DEM 2SG so TT.keep.IMP good NEG FUT lost
 ‘I give you this ring, so keep (it) safe so (it) doesn’t get lost.’

We can thus posit that Malagasy IC patients are null through a regular preferred option for pro-drop for inanimate pronouns. This demonstrates a third syntactic mechanism that can be exploited to achieve \emptyset for patients, that of regular optional pro-drop. We demonstrate further that Niuean, which also exhibits optional pro-drop for animate pronouns, achieves the desired \emptyset for agents (as in (4)), through this mechanism as well.

In conclusion, we have posited a pragmatic source for null arguments in IC and have identified four mechanisms for achieving this: IC topic binding, underspecified pronouns, optional pro drop, and voice, supporting the view that register is syntactically mediated (Stowell 1990). In addition, we provide new IC and null argument data from Malagasy and Niuean.

References: Cote, 1996. *Grammatical and discourse properties of null arguments in English*. PhD dissertation, U of Penn. Guilfoyle, Hung, & Travis, 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages, *NLLT* 10: 375–414. Haegeman, 1987. Register variation in English: Some theoretical observations, *JEL* 20: 230–248. Haegeman, 2013. The syntax of registers: Diary subject omission and the privilege of the root. *Lingua* 130: 88–110. Harley & Ritter, 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78:482–526. Massam & Roberge. 1989. Recipe context null objects in English. *LI* 20: 134–139. Massam, Bamba & Murphy, 2017. Obligatorily null pronouns in the instructional register and beyond, *LV* 17:272–91. Ruda, 2014. Missing objects in special registers: The syntax of null objects in English. *CJL* 59: 339–372. Ruppenhofer & Michaelis. 2010. A constructional account of genre-based argument omissions. *Constructions and Frames* 2: 158–184. Stowell, 1990. C-command effects found in newspaper headlines. Ms. UCLA. Weir, 2017. Object drop and article drop in reduced written register. *LV* 17: 157-185.