Instructions for nullness
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A striking fact about language is that the rules of syntax change depending on register. For example, Instructional Contexts (IC) in English allow both null agents and null patients (1).

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

A variety of approaches to null arguments in reduced written English have been proposed in the literature. For example, Bender (1999) argues that English null objects are a grammatical option and are associated directly in the grammar with social information, with no reference to an external register context. Others propose that this register lacks the left periphery (Haegeman 2017), or involves the use of special pronouns (e.g. Ruda 2014, Weir 2017). All these proposals are based on English data. By presenting new data from Malagasy and Niuean we develop a view where pragmatics interacts with regular syntactic mechanisms. We propose that null arguments are a universal pragmatic desideratum of the IC register (cf. Culy 1999), but that the realization of this desideratum is mediated by the syntax of a given language. As a result, 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.

We propose that the IC prefers to omit unnecessary elements. Since the agent is given (the reader), as is the patient (the object of manipulation), by Gricean maxims both can be omitted. The IC does not, however, stipulate the syntactic means to this omission. Individual languages then leave it to regular syntactic mechanisms to determine how to omit arguments.

Turning first to agents, the syntactic means to $\emptyset$ can arise via the use of the imperative (in English), but also via other means, such as the infinitive (in French). In Malagasy (VOS), null agents in the 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 $\emptyset_{agent}$ $\emptyset_{patient}$ ao   anaty   vilany
       TT.wash   DET rice and TT.pour   there   in   pot
       'Wash the rice and pour into pot.' (Boissard 1983:31)

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. All these construction types, though, result in $\emptyset$.

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 (Massam, Bamba, & Murphy 2017). Exploiting pronominal feature geometry (e.g. Harley & Ritter 2002), we hold that animacy is at the top of the Niuean feature paradigm, so that such pronouns are featureless, falling outside of the pronominal paradigm, with no corresponding vocabulary item, as in (3). Thus, in IC, as in (4), Niuean achieves $\emptyset$ through regular means, namely by using the featureless 3rd person inanimate pronoun that is always null. Topic binding, as in English (Massam & Roberge 1987) is not required. We further argue that null agents in Niuean (and null patients in Malagasy) are achieved via regular pro-drop.

(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)

To summarize, we posit a pragmatic source for null arguments in IC and identify four different mechanisms used for achieving this: topic binding, underspecified pronouns, optional pro

drop, and voice, supporting the view that register is both pragmatically and syntactically mediated. In addition, we provide new IC and null argument data from Malagasy and Niuean, thus expanding the empirical domain of syntax/register studies.

References:

Bender, E. 1999. Constituting context: Null objects in English recipes revisited. *University of Pennsylvania Working Papers in Linguistics* 6.1: 53–68.

Culy, C. 1996. Null objects in English recipes. *Language Variation and Change* 8, 91–124.

Haegeman, L. 2013. The syntax of registers: Diary subject omission and the privilege of the root. *Lingua* 130: 88–110.

Harley, H. & E. Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78: 482–526.

Massam D. & Y. Roberge. 1989. Recipe context null objects in English. *Linguistic Inquiry* 20: 134–139.

Massam, D., K. Bamba & P. Murphy. 2017. Obligatorily null pronouns in the instructional register and beyond, *Linguistic Variation* 17: 272–91.

Ruda, M. 2014. Missing objects in special registers: The syntax of null objects in English. *Canadian Journal of Linguistics* 59: 339–372.

Weir, A. 2017. Object drop and article drop in reduced written register. *Linguistic Variation* 17: 157-185.

Sources:
Niuean

Haia: An Introduction to Vagahau Niue. 2009. Wellington: Ministry of Education, Wellington, New Zealand.

Traditional Niuean Recipes, compiled by Team EduKai, through The University of Canterbury, and the Pacific Islands Trade and Invest group through the 21 Day Pacific Challenge.

Malagasy

Boissard, P. 1983. *Cuisine malgache, cuisine créole*. Antananarivo: Librairie de Madagascar.