

Annotation Guidelines for a Corpus of Indefinite Uses

Introduction

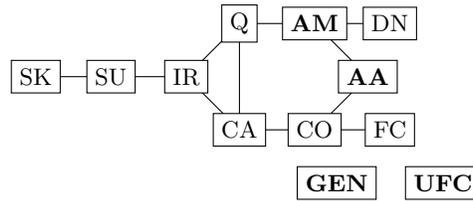
The following guidelines provide a decision procedure to annotate examples of use of indefinites such as *some* or *any* with the functions that these indefinites take in a given context. Within the annotation task you will be presented a number of short text samples in which an English indefinite will be marked. Using the guidelines annotate every example given in the database with functions provided here.

The guidelines present first the extended Haspelmath's map of indefinite functions, which provides the labels you will use in the annotation task, followed by a decision tree and a series of tests used in the decision procedure. The bottom nodes in the decision tree are the same as labels of the functions given by the map. Each description of a diagnostic test contains its name and a short description of the procedure you should follow when applying the test to the current example. The procedure is sometimes followed by a schematic representation of the test. A number of examples is presented to show possible outcomes of the tests.

When annotating an example in the database, first identify the sentence which includes the target indefinite. Then apply the first test in the decision tree, [a], and follow its result to reach another test, repeating the procedure until you reach a final node. Annotate the example with the function found at the last node. If the sentence you are considering has two different readings in the given context (i.e. you find it ambiguous), consider all of them individually. If that leads to annotation of different labels, you should annotate the sentence with multiple labels. If at some point one of the tests turns out to be inconclusive, you can choose the label *unclear* and further specify the tag of the inconclusive test in the syntax label in the database.

Haspelmath's Map & Decision Tree

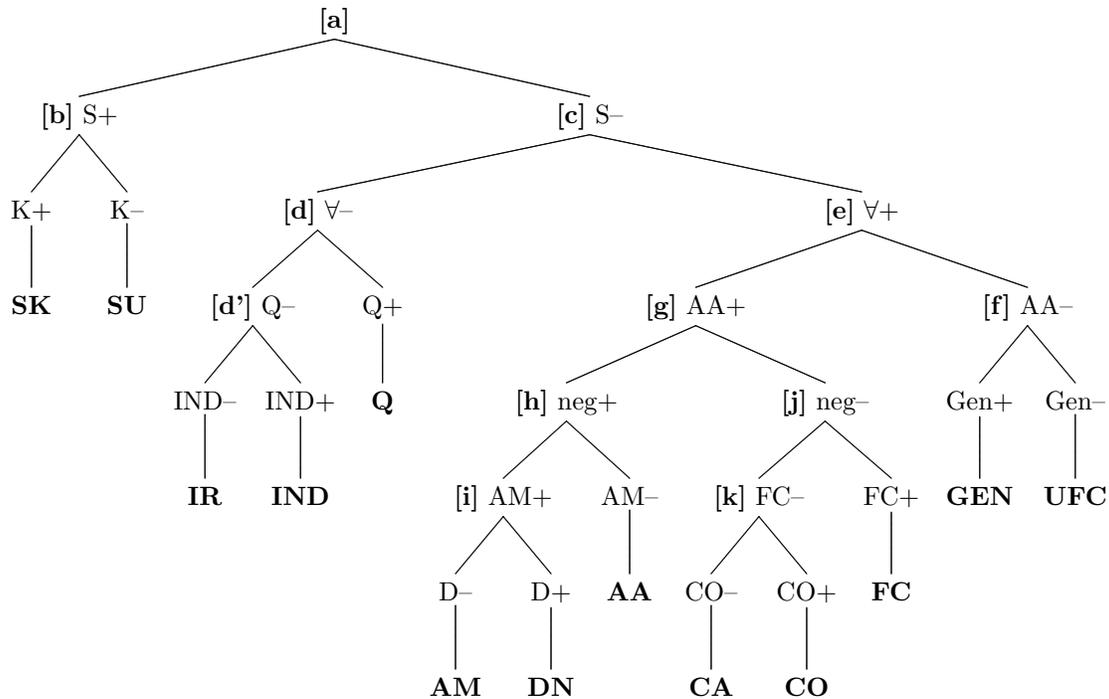
(1) *Our extended Haspelmath's map*



(2) *Functions on the map*

	Abbr	Label	Example
a.	SK	specific known	<i>Somebody</i> called. Guess who?
b.	SU	specific unknown	I heard <i>something</i> , but I couldn't tell what it was.
c.	IR	irrealis	You must try <i>somewhere</i> else.
d.	Q	question	Did <i>anybody</i> tell you anything about it?
e.	CA	conditional antecedent	If you see <i>anybody</i> , tell me immediately.
f.	CO	comparative	John is taller than <i>anybody</i> .
g.	DN	direct negation	John didn't see <i>anybody</i> .
→ h.	AM	anti-morphic	I don't think that <i>anybody</i> knows the answer.
→ i.	AA	anti-additive	The bank avoided taking <i>any</i> decision.
→ j.	FC	free choice	You may kiss <i>anybody</i> .
→ k.	UFC	universal free choice	John kissed <i>any</i> woman with red hair.
→ l.	GEN	generic	<i>Any</i> dog has four legs.
→ m.	IND	indiscriminative	I don't want to sleep with just <i>anybody</i> anymore.

(3) *Decision tree*



For each node in the decision tree we give now the corresponding test, and, as an illustration, we apply it to the sentences we have used in (2) to exemplify our functional labels.

Diagnostic Tests

- (a) Test for specificity [S+/-]: it tests whether an indefinite expression refers to a specific individual in the actual world ([S+]) or not ([S-]).

Procedure: Is it possible to continue the given sentence with a sentence with a pronoun *he/she/it* such that this pronoun is anaphoric to the indefinite expression?

If yes then [S+], if no then [S-].

NB: the possible continuation should denote a situation/event in the actual world (i.e. they must have episodic interpretation), even if the sentence with an indefinite does not (in this latter case the test is supposed to give a negative result). (I.e. no modal subordination). Here is an example of test applied in a bad way:

You can invite any girl. She must be pretty. (The modal verb *must* makes the sentence non-episodic. The possible continuation is correct, which would lead to a false positive [S+])

Watch out for ambiguities (see examples m. and n.)

Sentence (S): ...indefinite_i ... **Possible Continuation (PC):** ...*he/she/it*_i ... [S+]

Examples:

- | | |
|---|------|
| a. <i>Somebody</i> _i called. She _i wanted a new appointment. | [S+] |
| b. I heard <i>something</i> _i . It _i was very loud. | [S+] |
| c. You must try <i>somewhere</i> _i else. # It _i is a very nice place. | [S-] |
| d. Did <i>anybody</i> _i tell you anything about it? # He _i is a real chatterbox. | [S-] |
| e. If you see <i>anybody</i> _i , tell me immediately. # He _i is a nice guy. | [S-] |
| f. John is taller than <i>anybody</i> _i . # He _i is short. | [S-] |
| g. John didn't see <i>anybody</i> _i . # He _i was very tall. | [S-] |
| h. I don't think that <i>anybody</i> _i knows the answer. # He _i did not even try. | [S-] |
| i. The bank avoided taking <i>any</i> decision _i . # It _i was difficult. | [S-] |
| j. You may kiss <i>anybody</i> _i # She _i is beautiful. | [S-] |
| k. John kissed <i>any</i> woman _i with red hair. # She _i is Italian. | [S-] |
| l. <i>Any</i> dog _i has four legs. # It _i is very cute. | [S-] |
| m. John wants to marry some Norwegian _i . She _i is very pretty. | [S+] |
| n. John wants to marry some Norwegian _i (because he speaks the language). # She _i is very pretty. | [S-] |

- (b) Test for known [K+/-]: it tests whether the speaker knows who the referent of an indefinite is ([K+]) or not ([K-]).

Procedure: Can the given sentence be continued with a phrase "Guess who/what?" (If yes then [K+]).

Also, consider a continuation "But I don't know who/what" (if it is possible then [K-]).

If both are possible then the example is ambiguous.

S: ...indefinite ... **PC:** Guess who/what? [K+]
S: ...indefinite ... **PC:** But I don't know who/what. [K-]

Examples:

- | | |
|--|-------------|
| a. <i>Somebody</i> called. Guess who? | [K+] → [SK] |
| b. <i>Somebody</i> called. But I don't know who. | [K-] → [SU] |
| c. I heard <i>something</i> , but I couldn't tell what it was. # Guess what? | [K-] → [SU] |

- (c) Test for universal meaning [V+/-]: tests whether the sentence states something about a single individual (group of individuals) or it can be applied to all individuals in the domain specified by the sentence.

Procedure: substitute the indefinite expression with a variable *x* and add "For every thing *x*/person *x*/place *x*/corresponding noun *x*..." at the beginning of the sentence. Does the resulting sentence follow from the original one?

If yes then [V+], otherwise [V-].

... **Op** (... indefinite ...) ... \Rightarrow ... $\forall x$ (**Op**... x ...) ... [\forall +]
 (NB: there can be multiple operators, see examples k. and l.)

Examples:

- a. You must try *somewhere* else \nrightarrow for all places x : you must try x [\forall -]
- b. Did *anybody* tell you anything about it? \nrightarrow for every x : did x tell you about it? [\forall -]
- c. If you see *anybody*, tell me immediately \Rightarrow for every x : if you see x , tell me immediately [\forall +]
- d. John is taller than *anybody* \Rightarrow for every x : John is taller than x [\forall +]
- e. I didn't see *anybody* \Rightarrow for every x : I didn't see x [\forall +]
- f. I don't think that *anybody* knows the answer \Rightarrow for every x : I don't think x knows the answer [\forall +]
- g. The bank avoided taking *any* decision \Rightarrow for every decision x : the bank avoided taking x [\forall +]
- h. You may kiss *anybody* \Rightarrow for every x : you may kiss x [\forall +]
- i. John kissed *any* woman with red hair. \Rightarrow for every woman x with red hair: John kissed x [\forall +]
- j. *Any* dog has four legs \Rightarrow for every dog x : x has four legs [\forall +]
- k. If she can solve *any* problem, she'll get a prize. \Rightarrow for every problem x : if she can solve x , she'll get a prize [\forall +]
- l. If she can solve *any* problem, she'll get a prize. \Rightarrow If, for all problems x : she can solve x , she'll get a prize [\forall +]

(d) Test for polar question [Q+/-]: is the indefinite embedded under a polar (“yes/no”) question operator?

Procedure: add “, or not” at the end of the clause containing the indefinite. If it can be done, then [Q+].

Examples:

- a. You must try *somewhere* else (# or not?) [Q-]
- b. Did you see *anybody* (or not?) [Q+]
- c. I wonder whether/if he saw anybody (or not?). [Q+]

(d') Test for indiscriminacy [IND+/-]: it tests whether the existential non-specific reading has a free choice (or randomness, average) flavor. In this use the English indefinite *any* is accompanied by *just*.

Procedure: is there a word *just* before the indefinite expression, or can it be placed there without change in the overall meaning? If yes then [IND+], otherwise [IND-].

Examples:

- a. You must try (# just) *somewhere* else. [IND-] \mapsto [IR]
- b. John didn't have just any disease, he had AIDS. [IND+] \mapsto [IND]

(e) Test for anti-additivity [AA+/-]: here we test anti-additivity of the sentential operator (formal definition is provided below), not of the indefinite.

Procedure: construct the following sentences from the original one: for some NPs a, b (1) substitute the occurrence of the indefinite with a disjunction of the form “a or b”; (2) substitute the occurrence of the indefinite with a; (3) substitute the occurrence of the indefinite with b. Given that (1) is true, is it also (necessarily) true that “(2) and (3)” is true?

If yes then [AA+], if no then [AA-].

NB Do not consider the reading **Op**($a \vee b$).

Op($a \vee b$) \Rightarrow **Op**(a) \wedge **Op**(b) [AA+]

Examples:

- a. If you see *anybody*, you should tell me immediately. [If you see John or Mary, you should tell me immediately \Rightarrow If you see John, you should tell me immediately and if you see Mary, you should tell me immediately] [AA+]
- b. John is taller than *anybody*. [John is taller than Lee or Mary \Rightarrow John is taller than Lee and John is taller

- than Mary] [AA+]
- c. John didn't see *anybody*. [John didn't see Lee or Mary \Rightarrow John didn't see Lee and John didn't see Mary] [AA+]
- d. I don't think that *anybody* knows the answer. [I don't think that Mary or Lee know the answer \Rightarrow I don't think that Mary knows the answer and I don't think that Lee knows the answer] [AA+]
- e. The bank avoided taking *any* decision. [The bank avoided taking decision A or decision B \Rightarrow The bank avoided taking decision A and the bank avoided taking decision B] [AA+]
- f. You may kiss *anybody*. [You may kiss John or Mary \Rightarrow you may kiss John and you may kiss Mary] [AA+]
- g. John kissed *any* woman with red hair. [John kissed Lee or Bea \nRightarrow John kissed Lee and John kissed Bea] [AA-]
- h. *Any* dog has four legs. [Fido or Bobby has four legs \nRightarrow Fido has four legs and Bobby has four legs] [AA-]

(f) Test for genericity [Gen+/-]: it tests whether the sentence makes a general statement about the *kind* of individuals denoted by the NP.

Procedure: substitute the indefinite expression with a corresponding noun modified by the indefinite article *a*. Does it have a similar meaning as the original sentence? If yes then [Gen+], otherwise [Gen-].

NB: normally, a free choice indefinite like *any* specified as [Gen+] does not convey *exactly* the same meaning as a noun modified by *a*. A generic sentence with the latter is evaluated as true if there are exceptions to the statement expressed by the sentence, while a sentence with the former typically express more categorical statements (don't allow for exceptions).

...indefinite ... \cong ... *a* noun ... [Gen+]

Examples:

- a. John kissed *any* woman with red hair \ncong John kissed a woman with red hair [Gen-] \mapsto [UFC]
- b. *Any* dog has four legs \cong A dog has four legs [*Even though there can be dogs with a different number of legs*] [Gen+] \mapsto [GEN]

(g) Test for negative meaning [Neg+/-]: it tests whether the sentential operator of the clause where the indefinite occurs has negative meaning. The idea behind it is that if it is negative, then applying it to a proposition which is always true will result in a proposition which is always false.

Procedure: Is the indefinite in the immediate scope of sentential negation ("not")? If yes, then [Neg+]. Otherwise, substitute the indefinite with a disjunction of two indefinites of the *some* and *no* series, i.e. anything \rightarrow something or nothing, etc. Decide whether the resulting sentence can be true ([Neg-]) or not ([Neg+]).

Op($a \vee \neg a$) is inconsistent (never true) [Neg+]

Note Do not consider the reading **Op**(a) \vee **Op**($\neg a$).

Examples:

- a. John didn't see *anybody*. [*didn't* is a direct negation] [Neg+]
- b. I don't think that *anybody* knows the answer. [I don't think that somebody or nobody knows the answer \mapsto inconsistent] [Neg+]
- c. The bank avoided taking *any* decision. [The bank avoided taking some or no decision \mapsto inconsistent] [Neg+]
- d. You may kiss *anybody*. [You may kiss somebody or nobody \mapsto not inconsistent] [Neg-]
- e. If you see *anybody*, you should tell me. [If you see somebody or nobody, you should tell me \mapsto not inconsistent] [Neg-]
- f. John is taller than *anybody*. [John is taller than somebody or nobody \mapsto not inconsistent] [Neg-]

(h) Test for anti-multiplicativity [AM+/-]: it tests anti-multiplicativity of the sentential operator, not of the indefinite. We check if the negative meaning of the context is coming from an explicit negation or from inherently negative meaning of a predicate.

Procedure: construct the following sentences from the original one: for some NPs a, b (1) substitute the

occurrence of the indefinite with a; (2) substitute the occurrence of the indefinite with b; (3) substitute the occurrence of the indefinite with a conjunction of the form “a and b”. Given that “(1) or (2)” is true, is it also (necessarily) true that (3) is true?
 If yes then [AM+], if no then [AM-].

Op(a)∨Op(b) ⇒ Op(a ∧ b) [AM+]

Examples:

- a. John didn't see *anybody*. [John didn't see Mary or John didn't see Sue ⇒ John didn't see (Mary and Sue)] [AM+]
- b. I don't think that *anybody* knows the answer. [I don't think that Lee knows the answer or I don't think that Mary knows the answer ⇒ I don't think that (Lee and Mary) know the answer] [AM+]
- c. The bank avoided taking *any* decision. [The bank avoided taking decision A or the bank avoided taking decision B ⇏ The bank avoided taking (decision A and decision B)] [AM-] ⇨ [AA]
- d. Your office lacks *any* kind of electrical equipment. [Your office lacks a computer or your office lacks a printer ⇏ Your office lacks a computer and a printer] [AM-] ⇨ [AA]

(i) Test for clausal negation [D+]

Procedure: is the negation in the same clause where the indefinite occurs. If yes then [D+], otherwise (i.e. negation is in the higher clause) [D-].

Op is clausal negation. [D+]

Examples:

- a. John didn't see *anybody*. [D+] ⇨ [DN]
- b. I don't think that *anybody* knows the answer. [D-] ⇨ [AM]

(j) Test for free choice [FC+/-]: it tests whether there is a free choice between certain (maybe opposite) alternatives. Often free choice readings occur in sentences with possibility modals (*can, might*).

Procedure: Substitute the indefinite with a disjunction of two indefinites of the *some* and *no* series, i.e. anything → something or nothing, etc. Decide whether the resulting sentence is always true ([FC-]) or not ([FC+]).

Op(a ∨ ¬a) is informative [FC+]

Examples:

- a. If you see *anybody*, you should tell me. [If you see somebody or nobody, you should tell me ⇨ antecedent is not informative] [FC-]
- b. John is taller than *anybody* [John is taller than somebody or nobody ⇨ not informative] [FC-]
- c. You may kiss *anybody* [You may kiss somebody or nobody ⇨ informative] [FC+] ⇨ [FC]

(k) Test for comparative construction [CO+]

Procedure: does the indefinite expression occur in the comparative construction? If yes then [CO+]. Otherwise, [Co-].

Examples:

- a. If you see *anybody*, tell me immediately. [CO-] ⇨ [CA]
- b. John is taller than *anybody*. [CO+] ⇨ [CO]
- c. John is as tall as anybody. [CO+] ⇨ [CO]
- d. Every man who loves any girl is happy. [CO-] ⇨ [CA]