## Nominal MWEs - Annotation Guidelines

# Version 0.1 (in progress - pilot annotation due) <br> Contributors: Agata Savary, Voula Giouli, Carlos Ramisch, Stella Markantonatou, Sara Stymne 

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## Annotation process and decision diagram

We propose the following methodology for MWE annotation:

- Step 1 - identify a candidate, that is, a combination of words which could form a MWE. Recall that a candidate can be composed of only one token if it contains several words (cf. the_MWT tests). If the candidate has the structure of a meaning-preserving variant, find the corresponding_canonical form. This is non-trivial only for VMWEs, since for all other categories, any meaning-preserving variants are considered canonical forms. The following steps should be applied to this canonical form. This step is largely based on the annotators' linguistic knowledge and intuition after reading this guide.
- Step 2 - determine which components of the candidate (or of its canonical form) are lexicalized, that is, if they are omitted, the MWE does not occur anymore. Corpus and web searches may be required to confirm intuitions about acceptable variants.
- Step 3 - apply the generic decision diagram to the candidate's canonical form, in its reformulated context (looking at its lexicalized components). Notice that your intuitions used in Step 1 to identify a given candidate are not sufficient to annotate it: you must confirm them by applying the tests in the guidelines.

The decision tree below indicates the order in which tests should be applied in step 3. The decision trees are a useful summary to consult during annotation but contain very short descriptions of the tests. Each test is detailed and explained with examples in the following sections.

## Decision Tree for Nominal MWEs

Test NMWE. 3 - [SPECIF_REF] - Specific referent: Is the candidate used in context to refer to a single specific entity in the discourse world?
$\Rightarrow$ Yes $=>$ Apply test NMWE. 4

- (en) John Smith showed up unexpectedly.
- (en) He used the cold weapon hidden under his coat $\rightarrow$ cold weapon refers to a specific weapon
- (en) The theory of relativity was proposed by Einstein.
- (en) The UN Secretary-General visited Greece.
$\Rightarrow$ No => Apply test NMWE. 6
- (en) Many Johns Smiths live in London.
- (en) A cold weapon is a weapon that does not involve fire or explosions $\rightarrow$ cold weapon is used generically, i.e. refers to all instances of a class
- (en) Cold weapons are prohibited on a plane $\rightarrow$ cold weapon is used generically, i.e. refers to the whole class
- (en) The two cold weapons were found at the place of the crime $\rightarrow$ cold weapon refers to several instances of the class

Test NMWE. 4 - [CONCEPT_NAMING_CONV] - Concept naming convention. Does the naming convention between the candidate c and an entity e refer to all instances of a whole concept, i.e. can crefer to another entity e' based on the properties of $e^{\prime}$, with no need of an extra naming convention?
$\Rightarrow$ Yes $\Rightarrow$ Apply test (NMWE.5)
$\Rightarrow$ No, because there could be no other $e^{\prime}=>$ Go to the next test (NMWE.5)
(en) The UN Secretary-General visited Greece $\rightarrow$ There is currently no other UN Secretary-General
(en) quantum physics, president of the US
$\Rightarrow$ No $=>$ this is most likely a proper name, exit
Test NMWE. 5 [SEM_TYPE] Is the entity e referred to by c a PERSON, ORGANIZATION, LOCATION, HUMAN PRODUCT or EVENT?
$\Rightarrow$ Yes $\Rightarrow$ this is most likely a proper name, exit
$\Rightarrow \mathrm{No} \Rightarrow$ Go to the next test
Test NMWE. 6 - [CRAN: Cranberry word?] Does the candidate contain a cranberry word?
$\Rightarrow$ Yes, annotate as a NID
(en) cran/berry - cran is a cranberry word
(en) status quo - foreign words like 'status' and 'quo' are considered cranberry words
(el) סoúpعוo̧ ínпоৎ durios ipos 'Trojan horse'- סoúpعוos is a cranberry word (obsolete word for wooden)
(el) $\dot{\alpha} \rho \varepsilon \varsigma \boldsymbol{\mu} \dot{\alpha} \rho \varepsilon \varsigma$ кочкоuvó $\rho \varepsilon \varsigma$ ares mares kukunares lit. ares mares pine-cones 'nonsense' - both $\boldsymbol{\alpha} \rho \varepsilon \varsigma$ and $\mu \dot{\alpha} \rho \varepsilon \varsigma$ are cranberry words that simply rhyme with koukouvápes kukunares 'pine-cones'
(sv) körsbär Lit. körs|berry Trans. 'cherry' - körs is a cranberry word
$\Rightarrow N o$, go to the next test
(en) eager beaver - both 'eager' and 'beaver' are stand-alone words
(el) $\alpha \iota \chi \mu \dot{n}$ tou סópatos echmi tu doratos both $\alpha \iota \chi \mu$ ń and סópu are stand-alone words
(sv) blåbär Trans. 'blueberry' - both 'blå' and 'bär' are stand-alone words
Test NMWE.7-[MORPH] Does a regular morphological change lead to ungrammaticality or an unexpected meaning shift?
$\Rightarrow$ Yes, annotate as a NID
(en) bits and pieces - \#bit and piece
(el) $\chi \omega \rho$ кк $\alpha$ ú $\delta \alpha \tau \alpha$ chorika idata 'territorial waters' - $\chi \omega \rho$ цкó ú ú $\omega \rho$ choriki idor \# territorial water
$\Rightarrow N o$, go to the next test
(en) light year - light years
(el) ह́to̧ ф $\omega \tau$ ós etos fotos lit. year.SG light.GEN.SG light year - ह́tn $\phi \omega t o ́ \varsigma ~ e t i ~ f o t o s ~ l i t . ~ y e a r . P L ~ l i g h t . G E N . S G ~$ light years

Test NMWE.8-[IRREG_STRUCT] Does the candidate have an irregular internal syntactic structure? $\Rightarrow$ Yes, annotate as a NID
(en) secretary general
$\Rightarrow N o$, go to the next test
(en) general secretary
Test NMWE. 9 [IRREG_STRUCT_DISTRIB] Does the candidate have an internal structure which is unexpected for its (external) distribution, i.e., it does not have the distribution of a nominal? $\Rightarrow$ Yes, annotate as a NID
(fr) à-coup - this expression functions as a noun, but has an internal PREP+N structure $\Rightarrow N o$, go to the next test

Test NMWE. 10 [INSERT] Does regular insertion of modifiers (adjectives, relative clauses, adverbs, determiners, PPs, etc.) for internal components of the candidate result in ungrammaticality or unexpected meaning shift?
$\Rightarrow$ Yes, annotate as a NID
(en) very cold weapon
$\Rightarrow$ No, go to the next test
Test NMWE. 11 - [SYNT: Does a regular syntactic change that would normally be allowed by general grammar rules lead to ungrammaticality or to an unexpected change in meaning?]
$\Rightarrow$ Yes, annotate as a NID
(en) state-of-the-art - \#art state
$\Rightarrow$ No, go to the next test
Test NMWE. 12 [COORD] Does coordination of the candidate with another candidate of the same head lead to ungrammaticality or unexpected meaning shift?
$\Rightarrow$ Yes, annotate as a NID
(en) *blue- and blackberry $\Rightarrow$ No, go to the next test -
(en) car and boat traffic
Test NMWE. 13 - [ID:Is the semantic head $h$ of the candidate $c$ its hypernym, which can be reformulated by "is c a type of h"? Note that sometimes the semantic and syntactic heads do not coincide.]
$\Rightarrow$ No, annotate as a NID
(en) white elephant - It is not a type of elephant, it is a valuable possession
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(sv) jordgubbe Lit. earth|man Trans. strawberry - It is a berry, not a man
(fr) cordon bleu 'lit. cord blue' 'good cook' is not a cordon 'cord' (ro) etaje climatice 'climate floors' - etaj 'floor' is not an existing term in the domain of climatology
$\Rightarrow Y e s$, go to the next test
(en) student teacher 'teacher-in-training' - a student teacher is both a student and a teacher, so technically passes the test (el) ко́ккıvo ס́́́vєıo kokino danio lit. red load 'non performing loan' - a red loan is a loan
(sv) blueberry Lit. blue|berry Trans. blueberry - a blueberry is a berry
(en) piece of land - the syntactic head is piece but the semantic head is land and it is a hypernym of piece of land

Test NMWE. 14 - [LEX: Does a regular replacement of one of the lexicalized components by related words taken from a relatively large semantic class lead to ungrammaticality or to an unexpected change in meaning?]
$\Rightarrow$ Yes, annotate as a NID - (en) hot dog / \# hot cat
$\Rightarrow N o$, go to the next test
Test NMWE. 15 - [DEVERBAL: Does the candidate contain a deverbal noun and can it be rephrased (in the given context) using a verbal expression which passed any of the VMWE tests?]
$\Rightarrow$ Yes, annotate as a VMWENom
(en) She is a quick decision maker. => She makes decisions quickly. - makes decisions is an LVC No, exit (it is not a MWE).

