On Cognate Objects in Norwegian: An Empirical Approach

Introduction: This paper provides a corpus-based analysis of cognate objects in Norwegian. Cognate objects (COs) are noun phrases whose head noun is semantically and often morphologically related (i.e., ‘cognate’) to the verb (Faarlund et al. 1997:665), as illustrated in (1).
 (1) a. Hun *sov* [en urolig *søvn*]. b. De *lever* [et *hundeliv*].
 she slept a restless sleep they live a dog’s.life
 ‘She slept a restless sleep.’ ‘They live a dog’s life.’
Cross-linguistically, COs have been subject of a lot of research throughout the last decades (e.g, Perl-mutter 1978, Pereltsvaig 2002), but a separate study for Norwegian is yet to be done. This study thus sheds new light on COs in Norwegian and by that contributes to our general understanding of cognate object constructions in human languages. The following research questions all form an important part of the previous research on COs (e.g., see Kuno & Takami 2004, Nakajima 2006): In Norwegian, [i] which verbs can appear in cognate object constructions, [ii] are COs arguments or adjuncts, and [iii] do COs require modification? By collecting authentic language data from NoWaC, Norwegian Web as Corpus (Guevara 2010), I get to observe how COs and modifiers are used and to what extent (i.e., frequencies).
 Question [i]: To account for which verbs can take COs in Norwegian, I explore the Unergative Restriction on the Cognate Object Construction cited in Kuno and Takami (2004:107), according to which COs are restricted to unergative predicates, taking a semantic Agent or Experiencer as their subject, as opposed to unaccusatives, whose subject is Theme or Patient (Perlmutter 1978:162–163). The corpus searches and classification of verbs into verb classes are primarily based on translations of the English counterparts in Perlmutter (1978:162-163) and Levin (1993:95). Out of 36 predicates in NoWaC, as much as 33 verbs are unergatives, with a total of 30 736 unannotated matches (i.e., prior to elimination of false positives and duplicates): [1] verbs of non-verbal expression (1.23%), such as *le* ‘laugh’, *smile* ‘smile’; [2] manner of speaking verbs (10.85%), such as *prate* ‘chatter’, *synge* ‘sing’; and [3] various verbs (87.92%), such as *leve* ‘live’, *spørre* ‘ask’, *tenke* ‘think’. By contrast, only 206 annotated matches involve unaccusative verbs: *dø* ‘die’ (97.1%), *falle* ‘fall’ (1.9%), and *åpne* ‘open’ (1.0%). Accordingly, the above findings largely confirm the Unergative Restriction in that most Norwegian COs combine with unergatives, with *dø* ‘die’ being the main exception.
 Question [ii]: Whether Norwegian COs behave like arguments (direct objects) or adjuncts (ad-verbials), depends upon their syntactic properties. Thus, I apply three diagnostics (e.g., see Akkuş & Öz-türk 2017:4-6) to twelve randomly selected COs: *dans* ‘danse’, *drøm* ‘dream’, *død* ‘death’, *latter* ‘laughter’, *lek* ‘game’, *liv* ‘life’, *løp* ‘run’, *rop* ‘shout’, *sang* ‘song’, *skrik* ‘scream’, *smil* ‘smile’, and *søvn* ‘sleep’. Firstly, the majority of Norwegian COs are argumental because they can appear in coor-dination with other objects, but not with adverbs (2a). However, the object of unaccusative *dø* cannot combine with either of them, whereas *latter*, *smil* and *søvn* might be conjoined with more complex DP objects (i.e., [DP [CP]]). Secondly, COs of more transitive-like verbs can undergo *it*-pronominalization (2b), as opposed to *død*, *latter*, *smil* (2c), and *søvn*. Lastly, COs can be questioned by interrogatives such as *hvilken*/ *hvilket* ‘what/which’ and *hva slags* ‘what kind of’ (2d), similar to English (Nakajima 2006:677), although COs of motion verbs occasionally take interrogative adverbials.
 (2) a. Vi danset [en tradisjonell *dans*] og {*ballet* / \**hele kvelden*}.
 ‘We danced a traditional dance and {ballet / the whole night}.’
 b. Barna lekte [en morsom *lek*]i. De lekte *den*i kun om sommeren.
 ‘The children played a fun game. They played it only during the summer.’
 c. Heidi smiler [et bredt *smil*]i. ?/\*Hun smiler *det*i alltid når hun er glad.
 ‘Heidi smiles a broad smile. She always smiles it when she is happy.’
 d. *Q*: {*Hvilket* / *Hva slags* / \**Hvordan*/ *Hvor langt*} *løp* løp du forrige uke? ‘{What / What kind of / How / How long} run did you run last week?’
 *A*: Et {(langt) *løp* (på mange mil) / *maratonløp*}.
 ‘A {(long) run (of many miles) / marathon}.
 Question [iii]: I investigate if COs in Norwegian require modification by annotating constructions consisting of the twelve COs mentioned above. The annotation criteria (i.e., various types of modifi-ers) are as follows: adjective, possessive, demonstrative, quantifier, perpositional phrase, apposition, relative clause, and compound. There are 2138 annotated matches altogether (after eliminating false positives and duplicates). Non-modified COs amount to 7.2%. In these cases, the objects attach to more transitive-like verbs that can take non-cognate objects as well (3a). On the other hand, modifica-tion seems to be required for COs of verbs that *only* take objects to which they are morphologically and sem-antically related (3b). What makes an exception is *rope* ‘shout’ and *skrike* ‘scream’, whose objects seem to require modiciation even though the predicates allow non-cognate objects.
 (3) a. *danse* {en (rolig) *dans*/en vals} ‘dance {a (calm) dance/a valse}’, *drømme* {en (skummel)
 *drøm*/at jeg kan fly} ‘dream {a (scary) dream/that I can fly}’, *leke* {en (morsom) *lek*/
 sisten} ‘play {a (fun) game/tag}’, *leve* {et (aktivt) *liv*/drømmen} ‘live{an (active) life/
 the dream}’, *løpe* {et (sterkt) *løp*/maraton} ‘run {a (strong) run/a marathon}’, *synge* {en
 (barne)*sang*/et vers} ‘sing {a (children’s) song/a verse}’ b. *dø* en \*(tragisk) *død* ‘die a (tragic) death’, *le* en \*(trillende) *latter* ‘laugh a (rippling)
 laughter’, *rope* {\*(sinte) *rop*/farvel} ‘shout {(angry) shouts/farewell}’, *skrike* {et \*(kort)
 *skrik*/at jeg burde dra} ‘scream {a (short) scream/that I should leave}, *smile* et \*(bredt) *smil*
 ‘smile a (broad) smile’, *sove* en \*(dyp) *søvn* ‘sleep a (deep) sleep’
I thus claim that the modification requirement of COs in Norwegian depends upon the verbs’ valency. For instance, while *lek* ‘game’ delimits the number of possible actions denoted by the verb and does not require modification, *latter* ‘laughter’ does, simply because the object has a less restricted meaning and does not provide any new information on its own. The same redundancy applies to parasynthetic compounds like *brunøyd* ‘brown-eyed’. Nevins and Myler (2014) argue that the head of such compo-unds (here: *øyd*) is uninformative – though technically grammatical – when it is non-modified: com-pare *laugh a* \**(rippling) laughter* to *en \*(brun)øyd jente* ‘a \*(brown-)eyed girl’. Moreover, there are 2762 modifiers in total, out of which adjectives amount to 41.7% and thus make up the largest part. Adjectives are also the most frequent modifier for most of the COs in (3b). The other half, (3a), are more susceptible to compounding, which constitutes 23.9% of all modifiers. Appositions are in stark contrast to the other modifiers, being the least frequent one (1.3%). Since they have an identical or similar reference as the noun they combine with, the CO will often be omitted.
References:
Akkuş, Faruk, and Balkız Öztürk. 2017. On cognate objects in Sason Arabic. In *Proceeding of the
 40th Annual Penn Linguistics Conference* 23(1), 1–10.
Faarlund, Jan Terje, Lie, Svein, and Kjell I. Vannebo. 1997. *Norsk referansegrammatikk*. Oslo:
 Universitetsforlaget.
Guevara, Emiliano R. 2010. NoWaC: a large web-based corpus for Norwegian. In *Proceedings of the
 NAACL HLT 2010 Sixth Web as Corpus Workshop*, 1–7.
Kuno, Susumu, and Ken-ichi Takami. 2004. *Functional Constraints in Grammar: On the Unergative
 Unaccusative Distinction*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
Levin, Beth. 1993. *English Verb Classes and Alternations: A Preliminary Investigation.* Chicago/
 London: The University of Chicago Press.
Nakajima, Heizo. 2006. Adverbial cognate objects. *Linguistic Inquiry* 37(4):674–684.
Nevins, Andrew, and Neil Myler. 2014. A brown-eyed girl. *UCLA Working Papers in Linguistics* 18:243–257.
Pereltsvaig, A. 2002. Cognate objects in Modern and Biblical Hebrew. In *Themes in Arabic and
 Hebrew Syntax*, ed. by Jamal Ouhalla and Ur Shlonsky, 107–136. Dordrecht: Kluwer
 Academic Publishers.
Perlmutter, David M. 1978. Impersonal passives and the unaccusative hypothesis. In *Proceedings of
 the Annual Meeting of the Berkeley Linguistics Society* 38(4), 157–189.