

**Where does the multifunctionality of ‘lexical’ cloning come from?
A unified account of prototypicality, precisification and domain widening**

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The so-called lexical cloning (LC) (e.g. Horn 2018), also known as contrastive focus reduplication (e.g. Ghomeshi et al. 2004), or identical constituents compounding (e.g. Hohenhaus 2004), illustrated in (1) from English, is usually proposed to contrast items w.r.t prototypicality, especially when cloning nouns (cf. Horn 1993; Ghomeshi et al. 2004; Hohenhaus 2004; Finkbeiner 2014; Huang 2015, a.o.). E.g. in (1), DOG-dog would be a typical dog such as Husky, which is contrasted with less typical members, like Chihuahua. The pattern is observed in a variety of languages: besides English, e.g. German (Finkbeiner 2014; Bross & Fraser 2020; Frankowsky 2022), Dutch (Cavirani-Pots & Dirix 2023), Spanish (Felú Arquiola 2011), Serbo-Croatian (SC) (Milosavljević 2021), Kuwaiti Arabic (Albader 2023).

(1) I didn’t buy a Chihuahua, I bought a DOG-dog (Bazalgette 2015: 313).

Puzzle. There are two major problems for the prototypicality account. One concerns context-dependence of LC: while the prototypicality effect arises by default, the interpretation of cloned items can vary from context to context (cf. Whitton 2006; Huang 2015; Song & Lee 2011; Finkbeiner 2014; Horn 2018). E.g., DRINK-drink can indicate an alcoholic drink vs. beverages more generally, but also water vs. alcoholic drinks in another context, or hard liquor vs. wine, etc. (Whitton 2006, Song & Lee 2011: 444-447, Horn 2018: 244). Another problem with the prototypicality approach comes from the multifunctionality of LC: it can apply to different categories and receive different interpretations accordingly. E.g., the LC of some verbs (3) can be accounted in terms of prototypical meanings (different senses of *like*), yet with e.g. the verb *finish* in (4), the completion feature of the verb is targeted (Horn 2018: 243). With open-scale adjectives, the intensification effect arises (5), whereas with closed-scale adjectives (6), LC has a precisification effect (the greater closeness to the endpoint on a scale) (cf. Horn 2018: 245-246). The precisification effect arises also with contentful prepositions (7) and deictic adverbials (8). Cloning a universal quantifier (9) yields a domain-widening effect in the sense of Chierchia (2006): EVERYBODY-everybody ranges over every last member of the extended domain with no exceptions (cf. Horn 2018: 247). In SC, the LC of ordinals can have both the precisification effect (i.e. the strict vs. approximate interpretation, as in (10)), and the domain-widening effect, as in (11), where FIRST-first refers to the first kiss within the extended domain as opposed to the first kiss in the immediately relevant domain. Domain-widening effect in SC is also attested with the modal verb *morati* ‘must’ as in (12), where the quantification strength is extended to the very last domain/situation (without exceptions that can be tolerated with the non-cloned version). Similarly, cloning the negated auxiliary in (13) means that the negation holds without otherwise tolerable exceptions. Further, cloning the reflexive (14) may target the true identity reading as opposed to the statue reading (in the sense of Jackendoff 1992) of the antecedent. Another relevant example comes from cloning the long form of adjectives (15), which in SC marks definiteness/specificity (Aljovic 2002; Trenkic 2004): LC yields the contrast between the obligatory familiarity of the referent to the speaker (non-cloned version) and its obligatory familiarity to both interlocutors (cloned version).

Previous accounts and their problems. While previous accounts can accommodate context-dependence by resorting to dynamic prototypes (Song & Lee 2011), or to the Elsewhere condition in the sense of Kiparsky (1973), where prototype readings as default ones can be overridden by discourse-specific uses (as suggested in Horn 2018: 244-245), the multifunctionality problem poses more serious challenge to the existing accounts. Lexical narrowing in the sense

of Huang (2015) captures instances of purely *lexical* clones. Still, it cannot be easily extended to the clones of functional elements such as universal quantifiers, reflexives, auxiliaries, or long-form adjectives. Saliency due to the heightened relative values or due to the closeness to the endpoint of a scale proposed in Horn (2018: 246) cannot be easily extended to the domain-widening effect (it is not clear e.g. how the extension from the more relevant domain to the one containing less relevant individuals can be accounted in terms of saliency). Bazalgette (2015) proposes that LC in English contrastively focuses the reference index of a noun sitting in the SpecNP that refers to kinds. Verbs can be cloned because verbal roots first get nominalized, allowing the index to be added, LC applies, and then the entire structure gets verbalized with the v categorizer. According to this author, the nominalization step adds a more idiomatic nature to the meaning of the word undergoing LC, which explains the ban on LC of functional items (in English). Bross & Fraser (2020) also argue that ‘functional cloning’ (in German and English) is not possible, proposing that clones of NPs and adjectives move to the DP-internal SpecFocP, while clones of VPs move to the SpecFocP below the TP. However, the LC of *functional* material is possible even in English (e.g. universal quantifiers, pronominal words), and is prominent in SC (modals, reflexives, auxiliaries, etc.), so the same analyses cannot be extended to those cases (nor they easily account for the cloning of ordinals).

Proposal. I propose a unified account of all patterns of LC illustrated above in terms of situation semantics (cf. Barwise & Perry 1983; Kratzer 2007/2021). The mechanism behind LC is, as standardly assumed, a contrastive focus operator (which I label Σ), but, unlike in standard approaches to LC, it targets a situational argument of the given predicate rather than its denotation. It indicates that the given predicate is true of an entity (individual, eventuality) in a situation s and an alternative situation s' that significantly overlaps with s (2). s' is like s , differing from it only minimally, with context-tolerable or speaker-imposed exceptions (see Beltrama & Bochnak 2015 for a similar definition of the overlap relation). The stronger version to be defended in the talk is that s must be a subpart of s' .

- (2) $[[\Sigma^0]] = \lambda P \lambda x \lambda s \exists s' [s \sim s' \wedge P(x)(s) \rightarrow P(x)(s')]$,
 where \sim stands for a significant overlap relation between s and s' ,
 x stands for all types of entities that can be part of a situation (individual, event, ...)

The proposed semantics is most obvious in the case of typical domain widening: e.g. *everybody* is true of all *relevant* individuals in s , and EVERYBODY-everybody ensures that the same predicate is also true in s' , which contains all individuals from s , plus some additional, “less relevant” ones. (Here I follow Kratzer 2007/2021; Schwarz 2009 and much related work in assuming that quantifiers come with situational, domain-restriction variables.) The same holds for other instances of domain widening, with necessary adjustments (e.g. accounting for the LC of modal verbs should take into account quantification over situations/worlds rather than individuals).

The intensification effect found with adjectives can be accounted for by assuming with Anderssen (2006) that there is a parallel between domain widening in quantifiers and domain widening in comparison classes used with gradable adjectives. On my approach, the alternative, wider situation s' involves a higher standard of comparison than s (where s corresponds to context in which the standard of comparison is determined, as in Kennedy & McNally 2005). For example, the predicate *tall* holds of an individual in s , and TALL-tall ensures it is also true in s' , which comes with a different standard of comparison. Since *tall* can hold for the minimal value of the standard, it is implied that the standard in s' must be higher, resulting in the intensification effect (alternatively, the intensification may be a consequence of reduplication via Levinson 2000’s M-principle, where more form implies more meaning). A similar solution

is offered in Beltrama & Bochnak (2015) for the cross-categorial intensifying suffixes *issimo* in Italian and *šému* in Washo, which have a similar effect as LC. They employ quantification over contextual parameters rather than focusing a situation argument of a predicate.

Beltrama & Bochnak (2015) propose to account for the precisification effects of *issimo* in Italian with ordinals, closed-scale adjectives, etc., by assuming a free contextual variable that determines the amount of imprecision tolerated in the given context (which would be the same contextual variable that determines the standard of comparison of relative gradable predicates). On my approach, the equivalent precisification effect of LC can be captured by assuming that *s'* comes up with a more fine-grained level of granularity than *s*, which by default includes coarser levels of granularity. E.g., the approximate interpretation of ordinals may allow larger intervals (i.e. "around" interpretation), whereas LC makes them more precise by introducing an alternative *s'* that comes up with finer granularity. Similarly, while e.g. the situation argument in the case of the adverbial *now* comes by default with coarser intervals (e.g. corresponding to hours, days), the alternatives *s'* invoked by LC brings narrowed granularity (e.g. measured by instances, resulting in an interpretation of *now* closer to the deictic center).

Definiteness has been independently proposed to depend on the (resource) situation within DP (as an argument to D) in Schwarz (2009); Elbourne (2013), a.o. In this light, the cloning of long adjectives with definiteness/specificity effects can be analyzed as focusing a resource situation *s* that is familiar to the speaker, thus contrasting it with the alternative *s'* that must be familiar to both the speaker and the hearer. The LC of reflexives, with the contrast between the strict identity and statue reading, can be accounted for by assuming that *s* and *s'* are identical except that *s* contains individuals, whereas *s'* additionally contains their representations/proxies.

Finally, in the case where the prototype effects emerge under LC, the contrastive operator focuses the situation pronoun at the kind level, i.e. bare nP in the nominal domain (syntactically, Spec,nP), whose reference is accordingly constrained to kinds/types (on the kind-level nature of nP as the first layer merged with the root, see Bazalgette 2015, Gehrke 2017, a.o.). Here I build on the ideas in Bazalgette (2015), who places a referential index in Spec,nP, which links "encyclopedic information from the nominal root to the particular usage of the noun by specifying a referent (or set of possible referents) from its extension" (Bazalgette 2015: 317); see also Roberts (2017) for placing situation-like variables into Spec,nP. Prototype effects (e.g. DOG-dog as a typical dog) arise by default, but, as noted above (see an overview in Horn 2018), they can be overridden by more specific ordering imposed by the speaker. This is possible because the nP-level situation pronoun can be bound by higher pronouns, in this case arguably by the topic or utterance situation pronoun hosting the speaker as one of the participants.

The proposed analysis shares with Bazalgette (2015) the view that LC is an instance of *extensional* focus. However, while in his approach LC targets the index responsible for reference to kinds of *nominal* concepts, the approach employing situation variables has a broader coverage as it can cover also many functional domains (universal quantifiers, reflexives, modals, etc.). Also, under this approach, context-sensitivity of LC comes for free, from the nature of situational variables to be assigned values directly from the context. The proposed analysis is close in spirit to the analysis of the cross-categorial suffix *issimo* in Italian and *šému* in Washo proposed in Beltrama & Bochnak (2015), as in their approach quantification over a contextual parameter (an analog to the situation pronoun in my approach) is pursued rather than the more standard accounts relying on the direct targeting of the lexical context of relevant predicates. Similarly, McNabb (2012) relies on the quantification over contexts (which roughly correspond to situations in my approach) in accounting for the cross-categorial nature of modifiers such as Hebrew *mamaš* 'really' and its English counterpart. A more informative comparison of the approaches will be provided in the talk.

• **Additional examples from English**

- (3) Do you LIKE (him) like him? (Horn 2018: 239)
- (4) (Horn 2018: 243)
- a. Louis C. K.:
“It was delayed.”
- b. Jon Stewart:
“When did you FINISH it finish it? ’Cause I remember you were editing it, and this was ’96.”
- (5) He is not just tall. He is TALL-tall.
- (6) Speaker A: The café is empty.
Speaker B: EMPTY-empty?
Speaker A: There are just a few people there.
- (7) (Ghomeshi et al. 2004: 313)
- a. A: I was sitting across from your husband at dinner.
b. B: Really?
c. A: Well, not ACROSS–across (but close by).
- (8) a. Did you mean NOW-now or during the day?
b. HERE-here or here in the town?
- (9) (Horn 2018: 247)
Ebola in any form is pretty much bad news for everybody. Well, not EVERYBODY everybody... Lakeland Industries, the newly famous hazmat [hazardous materials] suit maker which manufactures the ChemMax 1 worn by medical staff treating Ebola patients, did great in early trading, reaching a high of 16.25 dollars a share today.

• **Additional examples from Serbo-Croatian**

- (10) a. Speaker A:
Prvog (januara) idem u Graz
first.GEN January.GEN go.1SG in Graz
‘I’m going to Graz on January 1st.’
- b. Speaker B [after some time]:
E jel’ baš PRVOG-prvog ideš tamo?
INTERJ QUEST.PART exactly first-first.GEN go.2SG there
‘Are you going there exactly on January 1st?’
- (11) [Forum Discussion on Forum.hr](#), adjusted
Ne sjećam se baš PRVOG prvog, ali sjećam se
NEG remember.1SG REFL exactly first.GEN first.GEN but remember.1SG REFL
prvog poljupca sa dečkom u kojeg sam se zaljubila u pravom
first.GEN kiss.GEN with boy.INS in which AUX.1SG REFL fall_in_love.1SG in true.INS
smislu te riječi.
sense.INS that word.GEN

‘I don’t remember exactly the very first one, but I remember the first kiss with the boy I fell in love with in the true sense of the word.’

- (12) [Forum Discussion on Forum.hr](#), adjusted

A ti baš MORAŠ-moraš piti da bi se mogao zabaviti?
and you exactly must.2SG-must.2SG drink COMP AUX REFL could have_fun

‘Do you really have to drink to have fun?’

- (13) Dobro jel baš NISI-nisi mogao to da
well QUEST.PART exactly NEG-AUX.2SG-NEG-AUX.2SG could that COMP
prećutiš?
keep_quiet.2SG

‘Couldn’t you just keep quiet about that?’

- (14) a. Speaker A:

Ringo je obrijao sebe
R. AUX shaved REFL.ACC

‘Ringo shaved himself.’

- b. Speaker B:

SEBE-sebe ili svoju statuu
REFL.ACC-REFL.ACC or POSS.REFL statue.ACC

‘Himself or his statue?’

- (15) a. Speaker A:

Tražio te onaj lepi dečko.
looked_for you.ACC that handsome boy

‘The handsome boy was looking for you.’

- b. Speaker B:

LEPI-lepi?
HANDSOME-handsome

‘THE handsome one?’

- c. Speaker A:

Da, baš taj!
yes exactly that

‘Exactly!’

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