Re: configurational verbs

Introduction: The prefix *re-* has been argued to possess a restitutive presupposition similar to that of *again*, whereby some presupposed prior state is restored. For example, both sentences in (1) are felicitous in a context in which the door was open before, regardless of whether anyone opened it previously, i.e. it may have been built open (Dowty 1979; Keyser & Roeper 1992; Marantz 2007; Bhadra 2024).

1) a. Jim reopened the door. b. Jim opened the door again.

In this paper, I demonstrate the existence of a previously unnoticed use of *re-,* the presupposition of which is neither repetitive nor restitutive. Rather, this variant of *re-*, which I term *reconfigurational*, presupposes the existence of a prior value with respect to a property encoded in the verb. I propose an analysis of the verb roots that host reconfigurational *re-* as denoting functions from individuals and times to *values*–conceived of as reified properties of the individual at that time–and treat *re-* as asserting a change in value after an event while presupposing the existence of a non-trivial value prior to the event.

Reconfigurational *re-*: when prefixed to certain verbs, *re-* can be used in contexts that support neither a repetitive nor a restitutive presupposition. In all three of the contexts below, the (a) sentences featuring a verb prefixed with *re-* are felicitous, despite the fact that no prior state is being restored. Furthermore, no relevant event is repeated in the context, ruling out a repetitive reading of *re-* that is known to be available to *again* (Dowty 1979; von Stechow 1996). That neither a repetitive nor restitutive presupposition is supported is established by the striking infelicity of *again* in all three contexts, as the (b) sentences show.

2) Context: Aamir comes upon a group of three rocks. The rocks happen to be lined up from smallest to largest from left to right. Jim moves the rocks around so that they are now ordered from largest to smallest from left to right.
   a. Aamir reordered the rocks. b. #Aamir ordered the rocks again.
3) Context: Roya uncovers a bright green stone while digging in the ground. While she thinks the stone would make a lovely gift for a friend of hers, she does not like its color, so she takes it home to her workshop and changes its color to red.
   a. Roya recolored the stone b. #Roya colored the stone again
4) Context: Zara enters a large cavern with a variety of rock formations. She decides to make the cavern her home, and with a set of tools she manages to move the rock formations and place them in a way that appeals to her aesthetic sensibilities.
   a. Zara reorganized/rearranged the rock formations.
   b. #Zara organized/arranged the rock formations again.

While *re-* cannot be said to have the same presuppositions as restitutive or repetitive again in these examples, it does presuppose that the object(s) undergoing a change possessed some prior value with respect to the property encoded in the verb. This is shown in (5), where the absence of a prior order or color renders the use of *re-* infelicitous.

5) a. Context: Aamir finds a disorganized pile of rocks and lines them up from smallest to largest. So <u>Aamir (#re)ordered the rocks.</u>
   b. Context: Roya found a colorless orb buried in the ground. She took it home and painted it red. So <u>Roya (#re)colored the orb.</u>

Here, while the form of the verb without *re-* can be used in contexts where no prior value exists for the object in question, the addition of *re-* renders the sentence infelicitous.

Configurational verbs: the reconfigurational reading of *re-* occurs with a class of verbs exemplified by the non-exhaustive list in (6), which I refer to as *configurational* verbs.

6) *color, organize, arrange, order, configure, structure, …*

What these verbs have in common is that they entail the assignment of a particular value with respect to a (not necessarily scalar) property. For example, to *color* something is to *endow it with a particular color*, and to *order* something is to *endow it with a particular order*. Likewise, verbs in this class prefixed with reconfigurational *re-* entail a change in a pre-existing value with respect to that property: (2a) can be paraphrased as *Aamir changed <u>the rocks' order</u>,* and (3a) as *Roya changed <u>the stone's color</u>.* The formal analysis I propose in what follows builds on these intuitions.

Analysis: On my analysis, the semantic core of a configurational verb is a *configuration*, a function from individuals and times to what I term *values*, a kind of particularized property of an object, cf. Moltmann's (2009) tropes or Wellwood's (2014) states. For example, the function COLOR takes an individual and a time argument and returns the individual's color at that time.

7) a. *color* ⇝ λx.λt.COLOR(x)(t) b. *order* ⇝ λx.λt.ORDER(x)(t)

I assume that configurations are total functions, but may map some individuals and times to a special trivial value #, used to represent no value with respect to the particular property, i.e. for an object x with no color at time t, COLOR(x)(t) = #. This is where *re-* comes in: *re-* takes a configuration c, two individual's x and y, and an event e, presupposes that x's value with respect to c at the beginning of e is not #, and asserts that x's value at the beginning of e is distinct from its value at the end of e, with y serving as the agent of the event of change (note that verbs formed from configurational roots are generally transitive).

8) *re-* ⇝ λc.λx.λy.λe: c(x)(beg(e)) ≠ #.c(x)(beg(e)) ≠ c(x)(fin(e)) & c(x)(fin(e) ≠ # & Ag(e) = y

The meaning of the sentence in (3a) is derived as in (9), which presupposes that the stone's possessed a non-trivial value for COLOR prior to the event, and asserts that Roya was the agent of an event whereby the stone's value for COLOR changed after the event.

9) (3a) ⇝ ∃e: COLOR(*stone*)(beg(e)) ≠ #. COLOR(*stone*)(beg(e)) ≠ COLOR(*stone*)((fin(e))
& COLOR(*stone*)(fin(e) ≠ # & Ag(e) = *roya*

This analysis captures the properties of reconfigurational *re-* as distinct from those of *again*: that the presupposition of *re-* is satisfied in the contexts in (2-4) falls out from the fact that *re-* takes a configuration, rather than an event predicate, as an argument. The fact in (5) falls out from the fact that *re-* presupposes the existence of a prior defined value for the object. I note an additional prediction of the analysis: note that the analysis of reconfigurational *re-* in (8) contains a conjunct c(x)(fin(e) ≠ #, i.e. the value of x's configuration after the event is non-trivial. This correctly predicts that the sentence in (3a), for example, is infelicitous in the context provided in (10).

10) Context: Roya found a red stone. She took it to her lab and experimented on it, rendering it completely colorless.
#Roya recolored the stone.

What of configurational verbs without a prefix? Here I posit a null function with a translation nearly identical to the *re-* prefixed version, but with no presupposition that there be a prior defined value for the verbal property.

11) ø ⇝ λc.λx.λy.λe.c(x)(beg(e)) ≠ c(x)(fin(e)) & c(x)(fin(e) ≠ # & Ag(e) = y

A verb like *color*, then, involves a change in color of x to some particular value other than #, but allows for a situation in which the value prior to the event is undefined, as in the contexts in (5) above. While the use of the bare verb often seems to imply that a prior value does not exist, e.g. in (5a), *Aamir ordered the rocks* implies the rocks were previously unordered, I argue that this arises via competition with the *re-*prefixed form, using *Maximize Presupposition!* (Heim 1991). Note, for instance, that the *re-*prefixed form is compatible with situations in which an object changes from one value to another, especially if the new value is named.

12) a. The stone was originally blue, but I decided to color it so that it would match the other stones in my collection.
b. The meteorites were arranged from smallest to largest, but I ordered them so that visitors to the museum would see the oldest ones first.

Selected references: Bhadra, D. (2024). Verb roots encode outcomes: argument structure and lexical semantics of reversal and restitution. *Linguistics and Philosophy*, *47*(4), 557-610; **Dowty, D. (1979).** Word meaning and Montague grammar. Dordrecht: D. Reidel Publishing; **Keyser, S. J., & Roeper, T. (1992).** Re: The abstract clitic hypothesis. *Linguistic Inquiry*, *23*(1), 89-125; **Marantz, A. (2007).** Restitutive re-and the first phase syntax/semantics of the VP. *Talk given at the University of Maryland*; **Moltmann, F. (2009).** Degree structure as trope structure: A trope-based analysis of positive and comparative adjectives. *Linguistics and philosophy*, *32*, 51-94. **Wellwood, A. (2015).** On the semantics of comparison across categories. *Linguistics and Philosophy*, *38*, 67-101.