The Reversible Core of ObjExp, Location, and Govern-type Verbs

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1. Reversible Verbs: I provide a unified analysis of object experiencer (ObjExp) psych-verbs, location verbs, and govern-type verbs [1, 2, 3], which captures facts related to the syntactic and semantic alternations they undergo. An account of these verbs should explain their behavior in (1)–(3): they all systematically alternate between causative and stative variants, with the subject of stative uses surfacing as an optional with-phrase in causative uses. If the with-phrase is left out in a causative use, it is interpreted as existentially bound.

(1) a. John amused Bill (with his antics). (Causative ObjExp)
   b. {Something / John’s antics} amused Bill. (Stative ObjExp)

(2) a. John covered the screen (with the blanket). (Causative Location)
   b. {Something / the blanket} covered the screen. (Stative Location)

(3) a. John protected the diamond (with the security system). (Causative Govern-type)
   b. {Something / the security system} protected the diamond. (Stative Govern-type)

I propose a decompositional account of these facts, which uses standard assumptions about operations of incorporation, head movement, and semantic composition to model this alternation.

I propose the optional with-phrase is an argument of these verbs, much like the optionally expressed object of, e.g., eat and drink, but in contrast to non-argument instrumental with-phrases. I also extend [4]'s analysis of ObjExp verbs' objects as underlyingly locative to location and govern-type verbs. Syntactically, then, these verbs’ objects are PPs headed by a null P°; semantically, they are locations. This is shown in (4):

(4)

We could paraphrase these sentences as roughly “John caused amusement with his antics to be at Bill” [cf.

To arrive at a head that can be spelled out as the surface word cover, I assume CAUSE requires incorporation of a lower stative head, and propose that √COVER raises to (at least) CAUSE to fulfill this requirement, with a spell out rule [√COVER CAUSE] → “cover” applying.

The stative use derives from the same core structure as in (4), with v Agent and CAUSE replaced by v, a categorizing head that does not introduce an external argument, shown in (5). The derivation then proceeds as illustrated in (6) for cover: with incorporates into the verb, which raises to v; and the DP in the with-phrase gets probed by T, receiving nominative case and ultimately “reversing” over the object to Spec,TP.

(5)

In (6), I assume that there is a spell out rule [√COVER with] → “cover.” Here, with must incorporate because there is no spell out rule that gives bare [√COVER] a pronunciation. Proposing two spell out rules leading to the same result ([√COVER with] and [√COVER CAUSE] both → “cover”) allows us to model why
some verbs similar to location verbs do not undergo the causative-stative alternation. Consider load:

(7)  a. John loaded the truck with the books.  
    b. * The books loaded the truck.

The meaning of (7a) is similar to that of (2a): “John caused the load of the books to be on the truck.” But, as shown in (7b), stative load is ungrammatical. I propose this is because, unlike with cover, there is no spell out rule \( \sqrt{\text{LOAD}} \, \text{with} \rightarrow \text{“load”} \). Thus any derivation along the lines of (6) will lead to a spell out failure.

2. Backwards Binding: Puzzlingly, ObjExp verbs allow backwards binding (BB) [1, 5], where an object anaphorically binds an element in the subject, which is typically prohibited (cf. (8)). Notably, only stative uses of ObjExp verbs allow this [5], which extends to location and govern-type verbs as well.

(8)  * Each other’s friends murdered the men.  
     (Non-ObjExp, -Loc, -Govern, *BB)

(9)  a. Pictures of each other, annoy the politicians.  
    (Stative ObjExp, √BB)
    b. * Each other’s friends deliberately annoyed the party-goers.  
    (Causative ObjExp, *BB)

(10)  a. A picture of itself quickly covered every pail.  
    (Stative Location, √BB)
    b. * A copy of itself quickly covered every robot with a sheet.  
    (Causative Location, *BB)

(11)  a. Its own thick skin protects every whale.  
    (Stative Govern-type, √BB)
    b. * His advisor protected every regent with a bodyguard.  
    (Causative Govern-type, *BB)

The present analysis explains these facts: in causative uses, the subject c-commands the object at all levels of representation, preventing the object from binding into it; in stative uses, the surface subject is initially c-commanded by the object, allowing for binding.

3. Adjectival Passive By-phrases: The present account opens a path toward understanding the behavior of by-phrases with adjectival passives, which are only freely available with ObjExp, location, and govern-type verbs, other verbs allowing them only when certain contextual conditions are met [3, 6, a.o.]. However, only stative subjects of these verbs may be freely realized as by-phrases in adjectival passives; causative subjects may not. In addition, stative subjects may also be expressed as a with-phrase in such cases. Finally, verbs like load that disallow stative uses also disallow by-phrases in adjectival passives, but do allow with-phrase.

(12)  a. The curtain seems destroyed (\( ?? \) by the cat).  
    (Non-ObjExp, -Loc, -Govern)
    b. Bill seems annoyed (\( \{ \text{by / with} \} \) John’s antics \( ?? \) by John).  
    (ObjExp)
    c. The screen seems covered (\( \{ \text{by / with} \} \) the blanket \( ?? \) by John).  
    (Location)
    d. The diamond seems protected (\( \{ \text{by / with} \} \) the security system \( ?? \) by John).  
    (Govern-type)
    e. The truck seems loaded (\( \{ \text{*by / with} \} \) the books \( ?? \) by John).

The general availability of by-phrases referring to stative subjects of these verbs, as well as the by/with optionality, lies in the two spell out rules each verb has. In adjectival passives, the verb root may either raise to cause to be spelled out (e.g., \( \sqrt{\text{COVER}} \, \text{CAUSE} \rightarrow \text{“cover”} \)), or with may incorporate into the verb root (e.g., \( \sqrt{\text{COVER}} \, \text{with} \rightarrow \text{“cover”} \)). (Doing both is not possible; no spell out rule gives a pronunciation to, e.g., \( \sqrt{\text{COVER}} \, \text{with} \, \text{CAUSE} \)). When the verb root raises to cause, the with-phrase is pronouned normally. When with incorporates into the verb root, a by-phrase results, as with is not spelled out independently.

Thus the reason that by-phrases with these verbs are more available in adjectival passives than they are with other verbs is because they have a different source, referring not to an agent, but to the stative subject. The by/with optionality is explained as a result of the two possible ways of arriving at the spell out “cover.” The fact that verbs like load do not allow by-phrases in their adjectival passives is linked to their lack of a stative use: there is no spell out rule \( \sqrt{\text{LOAD}} \, \text{with} \rightarrow \text{“load,”} \) so spell out fails.

Of course, with cannot generally alternate with by, so this is only a beginning of a story about the adjectival passive facts. A full story would require explaining how/where by is introduced in adjectival passives of these verbs, but the optionality of with incorporation provides the first step.