

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

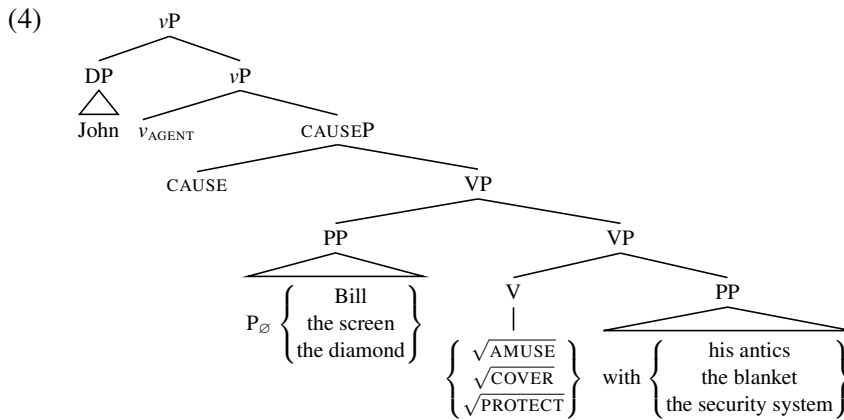
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1. Reversible Verbs: I provide a unified analysis of object experiencer (ObjExp) psych-verbs, location verbs, and *govern*-type verbs [1, 2, 3], which captures facts related to the syntactic and semantic alternations they undergo. An account of these 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):

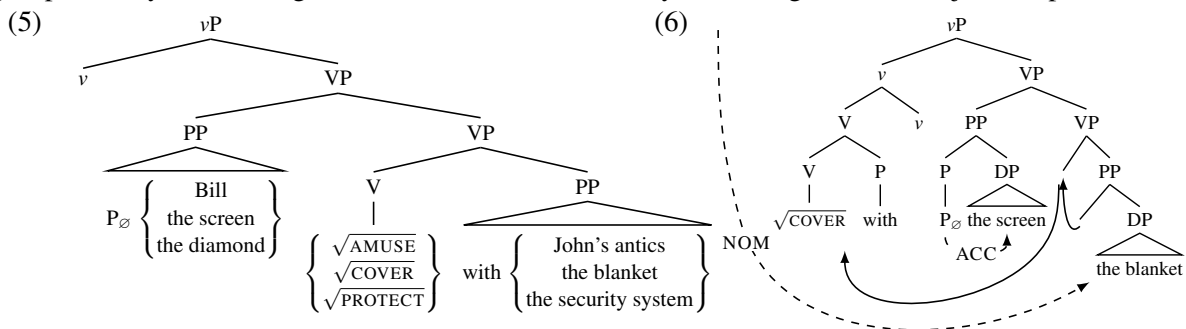


We could paraphrase these sentences as roughly “John caused amusement with his antics to be at Bill” [cf. 4], “John caused the blanket to lay upon the screen, covering it,” and “John caused the protection of the security system to be over the diamond,” with some spatial relations understood abstractly [cf. 4].

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 $\sqrt{\text{COVER}}$ raises to (at least) CAUSE to fulfill this requirement, with a spell out rule $[\sqrt{\text{COVER}} \text{ CAUSE}] \rightarrow \text{“cover”}$ 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.



In (6), I assume that there is a spell out rule $[\sqrt{\text{COVER}} \text{ with}] \rightarrow \text{“cover.”}$ Here, *with* must incorporate because there is no spell out rule that gives bare $[\sqrt{\text{COVER}}]$ a pronunciation. Proposing two spell out rules leading to the same result ($[\sqrt{\text{COVER}} \text{ with}]$ and $[\sqrt{\text{COVER}} \text{ CAUSE}]$ both $\rightarrow \text{“cover”}$) 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 $[\sqrt{\text{LOAD with}}] \rightarrow \text{“load.”}$ 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_i’s friends murdered the men_i. (Non-ObjExp, -Loc, -Govern, *BB)
 (9) a. Pictures of each other_i annoy the politicians_i. (Stative ObjExp, ✓BB)
 b. * Each other_i’s friends deliberately annoyed the party-goers_i. (Causative ObjExp, *BB)
 (10) a. A picture of itself_i covered every pail_i. (Stative Location, ✓BB)
 b. * A copy of itself_i quickly covered every robot_i with a sheet. (Causative Location, *BB)
 (11) a. Its_i own thick skin protects every whale_i. (Stative Govern-type, ✓BB)
 b. * His_i advisors protected every regent_i 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*-phrases.

- (12) a. The curtain seems destroyed (??by the cat). (Non-ObjExp, -Loc, -Govern)
 b. Bill seems annoyed ({ by / with } John’s antics / ??by John). (ObjExp)
 c. The screen seems covered ({ by / with } the blanket / ??by John). (Location)
 d. The diamond seems protected ({ by / with } the security system / ??by John). (Govern-type)
 e. The truck seems loaded ({ *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., $[\sqrt{\text{COVER CAUSE}}] \rightarrow \text{“cover”}$), or *with* may incorporate into the verb root (e.g., $[\sqrt{\text{COVER with}}] \rightarrow \text{“cover”}$). (Doing both is not possible; no spell out rule gives a pronunciation to, e.g., $[\sqrt{\text{COVER with CAUSE}}]$). When the verb root raises to CAUSE, the *with*-phrase is pronounced 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 $[\sqrt{\text{LOAD with}}] \rightarrow \text{“load,”}$ 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.

References: [1] Belletti & Rizzi (1988). Psych-verbs and θ -theory. *NLLT*. [2] Pesetsky (1995). *Zero Syntax*. [3] García-Pardo (2017). Aspect and argument structure in adjectival passives. *Borealis*. [4] Landau (2010). *The Locative Syntax of Experiencers*. [5] Pesetsky (1987). Binding problems with experiencer verbs. *LI*. [6] McIntyre (2013). Adjectival passives and adjectival participles in English. *Non-Canonical Passives*.