## **Gerundive Complements of P: Either property or proposition**

Idan Landau

The main question. A long-standing debate in the literature of control revolves around the semantic type of subjectless complements: Do they denote properties or propositions? The property-analysis has been advocated mainly within the semantic literature (Chierchia 1984, 1990, Dowty 1985 Percus and Sauerland 2003, von Stechow 2003, Anand 2006, Stephenson 2010, Pearson 2013, 2016), while the prposition-analysis has been popular within the syntactic literature (Chomsky 1981, Manzini 1983, Bouchard 1984, Koster 1984, Borer 1989, Sag and Pollard 1991, Wyngaerd 1994, Landau 2000). A number of works, however, assume a duality of mechanism that allows for a systematic distinction between property-complements and propositional ones (Williams 1992, Wurmbrand 2002, Grano 2015, Landau 2015, 2017, to appear). The present study corroborates this dual system with novel evidence from object control constructions in the frame [V DP P Gerund], (henceforth, *the P-gerund construction*) which have rarely, if ever, been discussed in the generative literature.

**The construction**. At least seven prepositions appear in the P-gerund construction.

- (1) a. They confined the prisoner **to** eating dog food.
  - b. His team mates scared him **into** thinking the bus was about to crash.
  - c. John talked Sue **out of** accepting a bribe.
  - d. John restrained Sue **from** making a long statement.
- (2) a. Mary accused John of stealing the formulae.
  - b. They charged Mandela with being a Communist.
  - c. They warned my grandma **against** breaking the law.

The P-gerund frame is a special case of the more common P-DP frame. The latter, however, does not guarantee the former (Rudanko 1989).

- (3)  $\sqrt{P+DP}$ , \*P-gerund
  - a. John convinced Bill of the advantages of the project.
  - b. \* John convinced Bill of taking part in the project.
  - c. The host treated his guest to a glass of port.
  - d. \* The host treated his guest to drinking a glass of port.

The opposite pattern is unattested, suggesting that gerunds and DPs are "close enough" for c-selection but not for s-selection: the semantic spectrum of DPs subsumes that of gerunds, but not vice versa.

**Two types of complements**. The constructions in (1) and those in (2) display systematic differences, both semantic and syntactic, so far undocumented. They are illustrated below with sample pairs. **First**, all the verbs in (1) are *causative* and *implicative* (entailing their complement or its negation), while those in (2) are not (for relevant observatins, limited to *into*-gerunds, see Rudanko 1989, 2011, Kim & Davies 2015). Thus, (1a,b) entail that the prisoner ate dog food and that he thought the bus was about to crash, respectively; and (1c,d) (*negative implicative verbs*) entail that Sue didn't accept a bribe and that Sue didn't make a long statement, respectively. By contrast, neither the complements of *of/with/against* nor their negations are entailed in (2a-c). We can therefore label the two groups *implicative* and *nonimplicative*.

**Second**, implicative P-gerund constructions resist partial control (4a) while nonimplicative ones alllow it (4b), in line with Landau's (2000) findings for standard control complements.

- (4) a. \* They limited the chair, **to** [PRO<sub>i+</sub> gathering during weekends only].
  - b. Caruso said police wrongly accused him, of [PRO<sub>i+</sub> gathering without a permit].

**Third**, PRO cannot alternate with a lexical subject in implicative complements, but it can in nonimplicative ones.

- (5) a. John talked Sue's partner **out of** [(\*her) accepting a bribe].
  - b. He used to threaten me **with** [him not seeing the kids].

**Fourth**, the object controller cannot be dropped in any of the implicative constructions; with nonimplicatives, it can easily be dropped before *against*- and occasionally before *of/with*-gerunds.

- (6) a. Bill said that his first wife tricked \*(him) **into** selling their house.
  - b. Paul said nothing would go wrong, but I warned (him) **against** putting himself in unnecessary danger.

**Fifth**, the constituent [PP P gerund] cannot be fronted with implicative constructions but can with nonimplicative ones (although P-stranding is preferred; the judgment is contrastive).

- (7) a. \* To appearing in just nine games, injury setbacks have restricted him.
  - b. **Of** being a terrorist, I doubt that they suspect you.

Analysis. Following Landau 2015, implicative complements instantiate predicative control and nonimplicative ones logophoric control. In predicative control, the complement denotes a property, formed by abstraction over the subject position (PRO is the  $\lambda$ -abstractor). Syntactically, it is a FinP complement of Pred<sup>0</sup>, forming a direct predication relation with the controller DP inside PredP. In logophoric control, the complement denotes a proposition, formed by saturating the predicative FinP with a "participant" *pro* in Spec,CP. Control is achieved not via predication but rather via an intensional relation between the controller and its doxastic counterpart (the *de se* center).

(8) *vP of implicative P-gerund constructions*  $[_{vP} \text{ Subj } [_{v'} \text{ v } [_{vP} \text{ V } [_{PredP} \text{ DP } [_{Prred'} \text{ Pred}^0 [_{PP} \text{ to/into/out of/from } [_{FinP} \text{ PRO}_i \text{ Fin } [_{TP} \text{ PRO}_i \text{ V-ing }]]]]]]]) vP of nonimplicative P-gerund constructions
<math display="block">[_{vP} \text{ Subj } [_{v'} \text{ v } [_{VP} \text{ DP } [_{v'} \text{ V } [_{PP} \text{ of/with/against } [_{CP} \text{ pro } C_{+log} [_{FinP} \text{ PRO}_i \text{ Fin } [_{TP} \text{ PRO}_i \dots ]]]]]]]]])$ 

The first three properties follow from the semantic type distinction between the complements of (8a) and (8b). In (8a), the implicative entailment results from predicating the complement of the controller; partial control is impossible as it is in any predicative relation (cf. *John worked as a crew \*(member))*; and a lexical subject is excluded since the complement of Pred<sup>0</sup> must denote a property (otherwise, the DP in [Spec,PredP] would not be semantically integrated). Object drop (the fourth property) is likewise impossible since subjects of predicates must be syntactically present (*He pounded (the metal) with a hammer, He pounded \*(the metal) flat)*. Finally, if we assume that Pred<sup>0</sup>, similarly to other null functional head, is a PF-affix, PP-fronting (the fifth property) in (8a) robs this affix of its host P, resulting in ungrammaticality. By contrast, the propositional type of the complement, the absence of a direct predication relation and a PredP projection in (8b) explain why none of these properties are attested with nonimplicative constructions.

Resturning to the main question, the clustering of properties, both semantic and syntactic, around each type of P-gerund construction, furnishes a strong argument in favor of the dual analysis of clausal complements and against the uniform property-analysis. The latter can neither explain why partial control and the possibility of a lexical subject are perfectly correlated, nor why only in the implicative construction is predication syntactically realized in a dedicated structure (namely, PredP).

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