analyses. We should be wary of our use of features, lest we end up like the biologists who put all their (and our) money on genes and genome sequencing activities, and are now left picking up the pieces and wondering what they all mean. It is time that we recover from our severe case of featuritis.

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Author's address: Departament de Filologia Catalana, Facultat de Lletres,

Edifici B, Universitat Autònoma de Barcelona,

08193 Bellaterra (Barcelona), Spain

Cedric.Boeckx@uab.cat

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**Idan Landau**, *The locative syntax of experiencers* (Linguistic Inquiry Monographs **53**). Cambridge, MA: MIT Press, 2010. Pp. x + 165.

Reviewed by Martin Salzmann, University of Zurich

Perhaps the most remarkable aspect of Idan Landau's *The locative syntax* of experiencers is that upon reading, one wonders why the link between experiencers and locatives has not been exploited earlier. Although it has frequently been observed that experiencers are characterized by a 'special' syntax, displaying what is often referred to as 'psych effects', Landau's monograph is the first to offer a comprehensive theory of the syntax of psych verbs. Landau's important contribution consists in simplifying and synthesizing various ideas into a coherent and admirably simple central proposal: as mental locations, experiencers are locative Prepositional Phrases (PPs) that undergo locative inversion (LI), either overtly or covertly, depending on the language (6). Landau's theory covers a much wider range of data than previous approaches by connecting seemingly unrelated properties like obligatory resumption in relativization and adjunct control. The locative nature of experiencers accounts for both properties related to obliqueness (PP-behavior) and properties related to high scope at L(ogical)F(orm) (LI-behavior).

The book is structured along the divide of PP- vs. LI-behavior. While Part I is devoted to establishing 'The obliqueness of experiencers', Part II, 'The scope of experiencers', which is somewhat more speculative in nature, purports to show that experiencers occupy a high A-position at LF.

Landau's starting point is the tripartite classification of psych verbs by Belletti & Rizzi (1988), as given in (1) (5–6).

- (I) (a) Class I: Nominative experiencer, accusative theme John loves Mary.
  - (b) Class II: Nominative theme, accusative experiencer The show amused Bill.
  - (c) Class III: Nominative theme, dative experiencer The idea appealed to Julie.

Landau restricts his claim about the oblique nature of experiencers to those of class II and III. Subject experiencers (class I) are only briefly dealt with (on pages II-I5), and are not analyzed as oblique because they do not show the psych effects found with object experiencers.

The oblique nature of experiencers of class III verbs is obvious in most languages. The experiencer is either encoded by means of oblique case (often dative) or by means of a PP. Following Belletti & Rizzi (1988), class III verbs are classified as unaccusative. Landau assumes that object experiencers universally bear inherent case and that inherent case is universally assigned by P (20–21). In class III, P assigns dative. The VP structure of a class III verb is then as in (2).

(2) 
$$[_{VP}[_{PP}PDP][_{V'}VDP]]$$
 (8, ex. (12b)) Experiencer Theme

The preposition can be lexical (English) or null (in languages with morphological case). Depending on the language, the experiencer may move overtly to the subject position, resulting in the famous so-called 'quirky' experiencers; alternatively, in languages like English, which disallow case-marked Determiner Phrases (DPs) in the specifier of Tense (SpecTP), the theme moves to SpecTP in overt syntax (while the experiencer moves at LF, see below).

The oblique nature of experiencers is much less obvious with class II verbs, which in many languages take superficially nominal (accusative) object experiencers. Still, Landau argues that these experiencers also bear inherent case and consequently must be PPs (headed by a null P). The major argument for this position is empirical: superficially nominal/accusative experiencers display PP/dative behavior just like experiencers of class III verbs.

Before I turn to such PP behavior, let me introduce the more fine-grained typology of class II verbs used by Landau. Class II verbs fall into three groups. The first group comprises stative verbs like *interest*, *concern*, *depress*, which are unaccusatives and thus have the same structure as class III verbs (except that the experiencer is governed by a null P). The second and major group includes eventive non-agentive verbs like *frighten*, *anger*, *surprise*. Landau classifies these as transitive, with a causer

as the external argument and the experiencer as an oblique object, as represented in (3).

(3) 
$$\left[ v_{P} DP \left[ v' V \left[ v_{P} V \left[ PP DP \right] \right] \right] \right]$$
 (8, ex. (12b)) Causer Experiencer

Finally, there are eventive agentive class II verbs. These are regular transitive verbs that take a direct object (I30–I3I). Agentive class II verbs differ systematically from non-agentive ones in not displaying the special syntax of psych verbs. Rather, they behave like bona fide transitive verbs. It should be pointed out that while some class II verbs are only either stative (*concern*) or eventive (*startle*), many verbs in class II are ambiguous: some have both stative and eventive readings (*frighten*); and most eventive verbs allow both agentive and non-agentive interpretations, the boundaries not always being clear-cut.

In Chapter 3, 'Core psych properties', Landau addresses psych effects. He focuses on class II verbs because their obliqueness cannot be read off the surface but has to be determined indirectly by means of syntactic tests. The chapter contains an impressive list of diagnostics from diverse languages (a summary is found on page 75), showing that class II experiencers behave like datives/PPs. I will present two of Landau's diagnostics. The first concerns extraction. While regular direct objects are transparent for extraction, object experiencers are not, as the following sentence pair from Italian shows.

- (4) (a) Il candidato di cui questa ragazza apprezza i the candidate of whom this girl likes the sostenitori. (23, ex. (44a)) supporters
  - (b) \*Il candidato di cui questa prospettiva impaurisce i the candidate of whom this perspective frightens the sostenitori. (23, ex. (44b)) supporters

If experiencers are PPs, the ungrammaticality of (4b) follows straightforwardly since Italian disallows preposition stranding.

The second diagnostic involves resumption in Greek. While direct objects do not allow resumptives, they are obligatory for dative arguments, and, crucially, also for accusative object experiencers (28), see the examples in (5).

(5) (a) Simbatho ton anthropo pu (\*ton) sinantise o like.ISG the man that CL.ACC met.3SG the Petros. (28, ex. (54a))

Peter.NOM
'I like the man that Peter met.'

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- (b) Simbatho ton anthropo pu o Petros \*(tu) edhose like.ISG the man that the Peter CL.DAT gave to vivlio. (28, ex. (54b)) the book
  - 'I like the man that Peter gave the book to.'
- (c) O anthropos pu \*(ton) provlimatizun ta nea the man that CL.ACC puzzles the news bike mesa. (28, ex. (55)) came in

'The man that the news puzzles came in.'

Landau shows convincingly that the psych effects are limited to non-agentive class II verbs. Agentive class II verbs behave like transitive verbs, i.e. the experiencer patterns with regular direct objects.

Chapter 4, 'Passive', discusses an issue that has generated much controversy in the literature on psych verbs, viz. the question of whether class II verbs have a verbal passive. This is where the subdivision of class II into three groups becomes important. Stative class II verbs (and all class III verbs) universally fail to passivize because they are unaccusative. Agentive eventive class II verbs are normal transitive verbs and therefore universally allow passivization. But things become delicate with nonagentive eventive class II verbs. Since these are not unaccusative, passivization is not a priori ruled out. However, and this is where the oblique nature of experiencers becomes important, since quirky cases are not absorbed under passivization, such verbs are predicted not to passivize unless the language can resort to special strategies. There are two such strategies, preposition stranding+reanalysis (pseudo-passive) and quirky passive (the oblique case/PP is preserved under passive and may move to the subject position). Languages like Italian, French or Hebrew do not have either strategy and therefore disallow the passivization of non-agentive eventive psych verbs. English, on the other hand, allows passives of such verbs because of the possibility of pseudo-passive, see (6).

(6) Sue was continually being scared by odd noises. (50, ex. (98a))

Finnish allows passivization of eventive class II verbs because it allows obliques in subject position (53–54). The picture concerning the passivization of psych verbs is thus fairly intricate, with unaccusativity and obliqueness of the experiencer being the two major factors governing the cross-linguistic variation.

After discussing properties only putatively related to psych verbs in Chapter 5, 'Peripheral psych properties', Landau turns to the LF-properties of experiencers. In Chapter 7, he proposes 'Experiencers as quirky subjects'. The claim is relatively straightforward for languages like Greek or Icelandic,

where quirky experiencers are readily tolerated in subject position and display several subject properties. However, it is a more surprising claim to make for surface object experiencers. Landau argues that these move to SpecTP at LF, creating a multiple-specifier structure. The LF for nonagentive eventive (class II) psych verbs is thus (7a), and that for stative psych verbs (class II/III) is (7b).

(7) (a) 
$$[_{TP}[_{PP} P DP]_{2}[_{TP} DP_{1} T [_{VP} t_{1} v [_{VP} V t_{2}]]]]$$
 (87, ex. (168a)) Experiencer Causer  
(b)  $[_{TP}[_{PP} P DP]_{2}[_{TP} DP_{1} T [_{VP} t_{2} V t_{1}]]]$  (88, ex. (168b)) Experiencer Theme

The trigger for movement is taken to be semantic: all temporal and locative descriptions, including experiencers, must form a semantic as well as syntactic relation with T, the spatio-temporal anchor of the clause. Since the semantic relation is taken to be predication or functional application, the syntactic relation must be sisterhood. The cross-linguistic variation concerning the overtness of quirky experiencers is related to a parameterized PF-filter that regulates which cases are tolerated in SpecTP at Phonological Form (PF) (85). Languages like English and French require nominative in SpecTP at PF and thus have quirky experiencers only at LF. Languages like Italian, Spanish and Dutch allow quirky dative/PP experiencers in subject position; and languages like Icelandic and Greek allow quirky subjects bearing any case.

'Arguments for LF-quirkiness' are presented in Chapter 8, where Landau discusses adjunct control, super-equi, functional readings and forward binding. The special behavior of experiencers in these constructions is readily explained if they raise to SpecTP overtly or at LF. The examples in (8), involving adjunct control in French, show that object experiencers, but not indirect objects, can control PRO (a property otherwise restricted to surface subjects).

- (8) (a) [PRO<sub>1</sub> admis au gouvernement], son revenu a enchanté admitted to government his income has delighted Pierre<sub>1</sub>. (96, ex. (179a))
  - 'Admitted to the government, his income enriched Pierre.'
  - (b)\* [PRO<sub>1</sub> admis au gouvernement], son revenu a enrichi admitted to government his income has enriched Pierre<sub>1</sub>. (196, ex. (179b))

    Peter

'Admitted to the government, his income enriched Pierre.'

On the assumption that the participial adjuncts attach at the TP-level and that adjunct control is a case of secondary predication, which requires

mutual c-command, only surface subjects and (LF-)raised experiencers will qualify as controllers.

In the final chapter of the book, 'LF quirkiness is LF locative inversion', Landau argues that LF-quirkiness of experiencers reduces to LI. Since both experiencers and locative PPs denote locations, they have to enter into a local relation with T to be properly interpreted; this is why they raise to SpecTP (overtly or covertly). It is well-known that LI is subject to peculiar restrictions not shared by psych constructions. For instance, the inverted theme is non-transparent for extraction, clausal negation is disallowed, and the fronted locative has topic properties in addition to subject properties, which is reflected by the fact that it undergoes further movement to a position above TP. Landau argues that the differences do not call the unification of object experiencers and locative PPs into question because these special properties are related to the discourse function of LI, viz. presentational focus. Since raising of object experiencers is necessarily covert, it cannot be used to convey any particular discourse information (124). Another potential asymmetry concerns the optionality of LI. Landau argues that this is only an apparent optionality, and that non-subject locatives also raise at LF. He does not adduce any empirical evidence for this, claiming that LF-quirkiness cannot be shown for non-subject locatives for independent reasons (126). While these differences between locatives and experiencers may cast doubt on the unification, Landau does provide one striking and new piece of evidence in support of the view that locatives and experiencers should be treated the same. He demonstrates that LI is excluded with change-of-state verbs (a restriction which he shows to be more precise than those found in the literature). It follows from this that only non-agentive psych verbs (which are states or achievements) can undergo LI. Agentive class II verbs, however, which are change-of-state verbs (i.e. accomplishments) cannot. This in turn implies for them that the experiencer cannot be governed by a preposition because otherwise it could not be properly interpreted (locatives having to be in a local relation with T). The experiencer of these verbs must therefore be a regular direct object. This is in accordance with the observation that it does not show any psych effects, and the aspetual nature of agentive psych effects now provides a principled explanation for this. The fact, finally, that an experiencer can be encoded as a direct object (while the preposition seems necessary for the experiencer interpretation in non-agentive contexts) can be made to follow from the fact that in agentive contexts it is an affected argument which undergoes a change of state. The canonical realization of such arguments is the direct object. 'Experiencers' in agentive contexts may therefore be better referred to as patients.

Before giving a general assessment of the book, I will point out two issues that may cause concern. First, while the oblique/PP nature of class III verbs is well supported, given that many languages use dative case or PPs, the PP-nature of class II experiencers appears less intuitively compelling. On the

assumption that their obliqueness is a universal property, it is rather unexpected that there are apparently so few languages (Landau only mentions Irish, 19) that use PPs in that context. Secondly, if experiencers and locatives supposedly pattern alike, one would expect overt LI with class III experiencers to be possible, as in \*To John appealed the proposal about school uniforms. Similarly, if non-subject locatives undergo LI at LF, we expect the same ambiguities in wh-quantifier interactions that are shown by object experiencers (105ff.). While transitive verbs do not allow pair-list readings with subject questions like Who brought everything?, experiencers do, cf. What worries everyone? Consequently, one would expect the same to be possible with LI, as, for example, in Who ran into every barn? Here, too, the (non-representative) judgments I collected from native speakers suggest that the predictions may not be fully borne out.

Notwithstanding these quibbles, I found this monograph both intriguing and impressive because it successfully manages to distill a simple (but by no means trivial) theory from a wide range of complex and often seemingly disparate empirical facts and a very vast and often confusing literature. Perhaps the major virtue of Landau's approach is that it offers a unified explanation for both the oblique/PP-effects as well as the LF-quirkiness. While relating oblique behavior to inherent case and/or underlying prepositionality is quite straightforward (and has precursors in the literature), the link with LI is truly novel and significantly increases the explanatory power of the theory. Landau is as meticulous about the empirical data as he is about the theoretical consequences of his observations, drawing attention to potential problems with his predictions and displaying a refreshing degree of honesty where he does not have a deeper explanation for some generalization. He is also to be commended for relying on solid, observable syntactic facts rather than engaging in speculations about intangible properties that may be related to concepts like mental location. Even though the book is couched in the generative framework, the wealth of empirical data and the clear generalizations clearly make it relevant for a wider readership.

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Author's address: German Department, University of Zurich, Schoenberggasse 9, 8001 Zurich, Switzerland martin.salzmann@ds.uzh.ch

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