Reviews

Leonard H. Babby. *The syntax of argument structure*. Cambridge: Cambridge University Press, 2009, pp. xviii + 307. [*Cambridge Studies in Linguistics*, 120.]

Reviewed by Peter Arkadiev

In the book under review, Leonard Babby,[1] an eminent linguist renowned for his influential work on many aspects of the syntax of Russian, presents an ingenious and sophisticated theory of morphosyntax stemming from his previous studies and in many important ways diverging from the current mainstream of generative grammar. While for most proponents of Government and Binding and Minimalist Program "argument structure" is either read off the semantic representation of predicates (as in, e.g., Levin and Rappaport Hovav 1995, 1998) or reduced to syntactic configurations (e.g., Borer 2005, Ramchand 2008), Babby argues for a view that argument structure is an autonomous module of grammar, and in fact the core one, from which syntactic representations are built, and which cannot be fully reduced to semantics. For Babby, argument structure is not just a static representation, but a dynamic component of language where various operations such as passivization, causativization, etc., apply, and which is crucial for the determination of the initial syntactic representation of clauses. Despite its explicit theory-constructing goals, the book is thoroughly empirically-oriented, presenting a number of in-depth case studies of Russian morphosyntax, such as the structure and syntax of "short" (SF) and "long" (LF) forms of adjectives, control of infinitives, participles and gerunds, and the predicate instrumental construction, each elucidating particular aspects of the theory. A reader, accustomed to associating the term "argument structure" with such issues as "unaccusativity," "dative shift," or "*spray/load* alternations," might be surprised by Babby's choice of subject matter. However, the book shows, and quite con-

[1] I am grateful to Leonard Babby for generously sending me a copy of his book in 2012 and discussing with me some of the issues raised in this review. Needless to say, he bears no responsibility for the views expressed here.

vincingly, that the phenomena Babby investigates can be elegantly and revealingly accounted for from the chosen perspective.

The book consists of an introduction, five chapters, endnotes, references and indices. In the introduction (pp. 1–10) Babby provides the reader with a very useful nutshell presentation of the main theoretical claims of the book and locates his conception of argument structure against the background of current generative theorizing. Importantly, Babby acknowledges from the outset that his theoretical thinking has been largely motivated by his empirical work on Russian, whose morphosyntax, being different from English in many important respects, cannot necessarily be adequately accounted for by "Anglocentric" approaches reducing all grammatical complexity to basic syntactic operations such as Merge and Move.

In chapter 1 "The structure of argument structure" (pp. 11–73) Babby presents the conceptual and technical basics of his theory of argument structure and syntactic projection. The theory rests on the notion of **diathesis** consisting of two "autonomous but related tiers" (p. 13) of theta selection and category selection, in part going back to the corresponding notion developed in the Leningrad school of typology (Xolodovič 1974). Two assumptions about diathesis underlying the whole theory are the following: (i) all predicates and productive predicate affixes in all languages have the same universal diathesis structure (see below); (ii) syntactic operations such as movement cannot alter the predicate's diathesis and, consequently, the basic grammatical relations in the clause. From (ii) it follows that many argument-structure-related operations often assumed to be syntactic, e.g., passivization or subject suppression with infinitives, occur at the level of argument structure and not in syntax proper. Therefore, argument structure is a dynamic morphosyntactic component of grammar where the lexically determined diathesis of the verbal stem is successively combined ("amalgamated") with the diatheses of whatever productive **affixes**[2] the verb attaches, and this interaction between the diatheses of the predicate stem and affixes determines the potential syntactic configurations in which the predicate occurs.

Technically, the diathesis is a 2 x 4 grid where the upper tier represents up to three thematic roles and the lower tier, in turn, the syntactic categories corresponding to them; see (1) below for a tabular no-

[2] This term is used by Babby rather loosely, since the relevant elements include, e.g., copulas.

tation and (2) for the corresponding linear notation of the diathesis of a three-argument ditransitive predicate. The order of theta positions in the upper tier and their mapping to phrase structure is determined by UTAH (Baker 1997): **i** is the external theta role of an agentive subject mapped onto the specifier of *v*P, **j** is the role of the direct object (specifier of VP), and **k** is the theta role of an indirect or oblique object projected in the position of the complement of VP and realized by an NP in an oblique case or an adpositional phrase; the signs | and ^ represent the linking between the elements of the theta and the c-selection tiers.

(1)

i	j	k	–
|	|	|	|
N	N	N	V
1	2	3	4

(2) $\{\{i\text{^}N\}_1\{j\text{^}N\}_2\{k\text{^}N\}_3\{–\text{^}V\}_4\}$

Most importantly for Babby, the two tiers of the diathesis are mutually independent in that predicates with identical theta roles can have different c-selections. In particular, verbs may differ in their **external subcategorization**, i.e., whether a verb lacking an external theta-role projects a subject NP. For instance, monadic verbs in Russian may either project a subject (unaccusative verbs like *korčit'sja* 'writhe') or not (transitive impersonal verbs like *tošnit'* 'nauseate', whose only argument appears as an accusative direct object). This is captured by the diatheses in (3) and (4), respectively (p. 43).

(3) *korčit'sja* $\{\{–\text{^}N\}_1\{j\text{^}–\}_2\{–\text{^}–\}_3\{–\text{^}V(\text{-sja})\}_4\}$

(4) *tošnit'* $\{\{–\text{^}–\}_1\{j\text{^}N\}_2\{–\text{^}–\}_3\{–\text{^}V\}_4\}$

Unaccusative verbs undergo obligatory **externalization** of their internal theta role **j** in order for the arguments to correctly project, while transitive impersonal verbs project to syntax directly (which, however, requires that Chomsky's Extended Projection Principle and Burzio's generalization are abandoned, at least for languages like Russian). The derivation of unaccusative verbs in shown in (5) in order to exemplify one of the numerous diathesis operations Babby proposes (p. 22).

(5) $\{\{–\text{^}N\}_1\{j\text{^}–\}_2\{–\text{^}–\}_3\{–\text{^}V\}_4\} \gg \{\{j\text{^}N\}_1\{–\text{^}–\}_2\{–\text{^}–\}_3\{–\text{^}V\}_4\}$

Thus, contrary to influential proposals to "sever" the external argument from the verb (Kratzer 1996 and much subsequent literature), Babby maintains that external subcategorization is determined in the verb's lexical entry, and that languages (e.g., English vs. Russian) differ as to whether the presence of a subject is a syntactic requirement or not. Babby proposes a four-way typology of external arguments naturally falling out of the two-tier representation of diathesis (pp. 24–25): $\{i\text{^}N\}_1$ is the regular subject of transitive and unergative verbs, $\{–\text{^}N\}_1$ is the external argument of unaccusative verbs, $\{–\text{^}–\}_1$ comes with impersonal verbs, and, finally, $\{j\text{^}–\}_1$ is the external argument of a **secondary predicate** (s-predicate) created by affixation and entering into a theta-binding relation with a locally accessible theta-role. This relation, called **vertical binding** and initially proposed by Williams (1994), is crucial for the correct account of many phenomena of Russian morphosyntax discussed in the subsequent chapters of the book, such as infinitive control, attribute and predicate agreement, etc. Secondary predicates are created by the amalgamation of the verb's initial diathesis with that of particular affixes which may require the deletion of the verb's external N. Cf. the derivation of the Russian gerund (in Babby's terms, "uninflected deverbal hybrid adverbial"), which requires obligatory coreference of its understood subject with the subject of the matrix clause, in (6) (p. 26).

(6)

initial diathesis	$\{\{i\text{^}N\}_1 \ldots \{–\text{^}V\}_4\}$	+
affix diathesis	$\{\{\text{^}–\}_1 \ldots \{\text{^}\text{-vši}\}_4\}$	>
composite diathesis	$\{\{i\text{^}–\}_1 \ldots \{–\text{^}V\text{+vši}\}_4\}$	

A large part of chapter 1 is devoted to presenting various cross-linguistic evidence for the 2 x 4 structure of the diathesis. One might wonder why Babby includes the verb itself (V) in the diathesis, since no theta-role corresponds to it in the lexical representation. The motivation for the fourth cell in the diathesis grid comes from passivization, causativization, and nominalization: in all these constructions, Babby argues, the external theta-role can or must be relinked to the V, which accounts for the presence and/or syntactic behavior of the *by*-phrase in these constructions in such languages as Russian or Turkish. Consider the derivation of passivization of monotransitive verbs in Russian (p. 31) in (7):

(7)	initial diathesis	{{i^N}$_1${j^N}$_2${–^–}$_3${–^V}$_4$} +
	affix diathesis	{{–^ }$_1${ ^–}$_2${ ^ }$_3${ ^-sja}$_4$} > (passivization)
	composite diathesis	{{–^N}$_1${j^–}$_2${–^–}$_3${i^V-sja}$_4$} >> (externalization)
		{{j^N}$_1${–^–}$_2${–^–}$_3${i^V-sja}$_4$}

Besides that, Babby maintains that the number of arguments a verb subcategorizes for in its lexical argument structure cannot exceed three. Arguments for this claim come from causativization of ditransitive verbs in Turkish and French, where a ditransitive verb's external argument, displaced by the external argument introduced by the causative affix or auxiliary, can be relinked only to the V itself and, consequently, is realized by the same oblique *by*-phrase that appears in the passive (pp. 49–50, 52–54), cf. the derivation in (8).

(8)	initial diathesis	{{i^N}$_1${j^N}$_2${k^N}$_3${–^V}$_4$} +
	affix diathesis	{{i$_c^N_1${ ^ }$_2${ ^ }$_3${ ^af$_c$}$_4$} > (causativization)
	composite diathesis	{{i$_c^N_1${j^N}$_2${k^N}$_3${i^[V-af$_c$]}$_4$}

From this and a number of other empirical observations Babby concludes that all argument-affecting operations attested in natural languages are constrained by the 2 x 4 diathesis structure, uniform across predicates, affixes, and languages. In the four subsequent chapters Babby explores how his theory accounts for a rich array of data from Russian.

Chapter 2 "The argument structure of adjectives" (pp. 74–122) deals with the syntax of the so-called SF and LF of Russian adjectives. Babby argues that the two morphosyntactic types of adjectives in Russian differ in the diatheses yielded by the respective affixes: the SF affix has an empty ({ ^ }$_1$) external argument, which does not affect the adjective's own external argument and thus projects a small clause with its own subject further combining with a copula, while the LF affix deletes the initial adjective's external argument by means of its { ^–}$_1$ specification, yielding a subjectless adjectival secondary predicate, whose delinked external theta-role must be vertically bound in syntax. This correctly accounts for the fact that SF adjectives in modern Russian occur only as predicates with a copula, while LF adjectives occur as adjuncts agreeing with their heads (when attributive) or theta-binders (when depic-

tive adjuncts). However, Babby still has to solve the problem of the LF adjectives being also able to occur as predicates with the copula with well-known though hard-to-pin-down semantic differences from the SF (cf. *Vino bylo vkusno* vs. *Vino bylo vkusnoe* 'The wine was tasty'). In order to solve this apparent paradox Babby proposes that LG adjectives combine with the copula not directly but via a null nominal projection. Evidence for such an analysis comes from the fact that such a nominal head can in some cases be overt (as in *Vino—vkusnoe pit'e* 'Wine is a tasty drink'), and even when null can take its own adjectival modifiers, from the obligatory singular ("semantic") agreement of the LF adjectives with the polite second-person singular subject (*Vy krasivaja* 'You (polite) are beautiful (feminine)'), as well as from the behavior of several other constructions, all of which, as Babby argues, naturally fall out from the null-head analysis. The analysis of adjectives is extended to deverbal past-passive participles (*en*-participles), which also have short and long forms. Finally, the fact that the gerund form of the copula *buduči* combines with the SF of the adjective and not with the LF one (as in *Buduči golodna* / **golodnaja, devuška otpravilas' domoj* 'Being hungry, the girl went home', p. 115), is shown to follow from the analysis and the assumption that copulas are introduced at the level of diathesis and not in the syntax: otherwise it would have remained unexplained why the *buduči* + AP lacks a subject. This fact is explained if the composite diathesis of the whole construction is derived as in (9) (pp. 115–19).

(9)	A's initial diathesis	{i^N}$_1$ … {–^Adj}$_4$ +
	the suffix's diathesis	{ ^ }$_1$ … {–^suff}$_4$ >
	short form's diathesis	{i^N}$_1$ … {–^Adj+suff}$_4$ +
	copula's diathesis	{ ^ }$_1$ … {–^bud-}$_4$ >
	adjective + copula	{i^N}$_1$ … {–^bud-[Adj+suff]}$_4$ +
	gerund's diathesis	{ ^–}$_1$ … {–^či}$_4$ >
	gerund + adjective	{i^–}$_1$ … {–^buduči [Adj+suff]}$_4$ +

Chapter 3 "Hybrid verbal adjuncts" (pp. 123–71) deals with the morphosyntax of participles (deverbal adjectives) and gerunds (deverbal adverbials) in Russian. Both types of deverbal formations in Russian affect the verb's initial diathesis by delinking the external theta-role, thus creating secondary predicates vertically bound by a higher predicate, and some space is devoted to the technical issues in the analysis

of the active *šč*-participles and passive *em*-participles and accounting for the fact that they have only long forms (see below for empirical qualifications). The most interesting part of the chapter is devoted to the syntactic distribution of gerunds. It is shown that the secondary predicate analysis of gerunds entails their ability to occur in infinitival clauses with dative subjects, which theta-bind the delinked external theta-role of the gerund. This is evidenced by examples like (10) with a subject-oriented floating modifier *sam* 'oneself' in the dative case (p. 167).

(10) Ščel' v doskax dala mne vozmožnost' [$PRO_{i,DAT}$ vse videt', [$_{<i>}$[$_{<i>}$**samomu**$_{DAT}$] ostavajas' nezamečennym]].
'The crack in the boards gave me the opportunity to see everything, remaining unseen myself.'

In chapter 4 "Derivation and control of infinitives" (pp. 172–227) Babby argues that Russian infinitives can form three types of syntactic constructions: an infinitival small clause with a subject in the dative case, an infinitival secondary predicate with a vertically-bound external theta-role, and a bare infinitive phrase, which occurs only with auxiliaries. Infinitival secondary predicates are restricted in their distribution by the locality conditions on vertical binding; according to Babby, they normally occur only in subject control environments where no projection intervenes between the binder and the bindee, as in (11a) (p. 185); in the latter case, shown in (11b) (p. 185), as well as in most object control environments, as in (11c) (p. 187), infinitival small clauses with antecedent-controlled null subject (PRO_{DAT}) occurs, which is evidenced by the behavior of *sam*, which shows up in the dative in (11b) and (11c), but in the nominative in (11a).

(11) a. My$_{NOM}$ xotim [vyžit' **sami**$_{NOM}$].
'We want to survive ourselves.'
b. My$_{NOM}$ xotim najti [$_{NP}$ sposob [PRO_{DAT} vyžit' **samim**$_{DAT}$]].
'We want to find a way to survive ourselves.'
c. Nužno zastavit' ego$_{ACC}$ [PRO_{DAT} ob"jasnit' vse **samomu**$_{DAT}$].
'It is necessary to make him explain everything himself.'

A tendency is noted to extend infinitival secondary predicates to object control contexts, evidenced by the accusative marking of *sam* in examples like (12), though not done full justice (see more below).

(12) Ja nauču vas$_{ACC}$ [rešat' takie zadači **samix**$_{ACC}$].
'I will teach you$_{PL}$ to solve such problems yourselves.'

A subsection (pp. 208–13) is devoted to the account of the distribution of accusative vs. nominative direct objects of infinitival clauses in the northern dialects of Old Russian: it is claimed that the direct object is assigned nominative case in infinitival small clauses whose (implicit) subject is in the dative, while in the infinitival secondary predicates with vertically bound external theta-role the object retains its accusative marking. A longish (pp. 213–20) subsection deals with the thorn in the side of most syntactic approaches to control, i.e., the verb meaning 'promise' (Russian *obeščat'*); Babby proposes, arguably for the first time, that the addressee object of *obeščat'* encoded by the dative case is not an argument of the verb, but an adjunct, and thus cannot serve as a potential vertical binder of the infinitive's external theta-role. Finally, the behavior of infinitives cooccurring with auxiliaries (e.g., phasal verbs such as *perestat'* 'stop') is accounted for by the already mentioned assumption that the combination of lexical verbs with auxiliaries is a diathetic rather than syntactic operation and that auxiliaries do not alter the initial verb's diathesis, just selecting for the infinitive affix. This correctly predicts that impersonal verbs, which cannot form controlled infinitives, freely occur in auxiliary constructions.

Chapter 5 "Deriving the predicate instrumental" (pp. 228–59) is devoted to the type of predicate nominal in Russian featuring the instrumental case. Starting with a detailed study of the distribution of the predicate instrumental vis-à-vis the LF and SF of adjectives, Babby proposes that the predicate instrumental is not an instantiation of either of the latter two constructions but rather "an independent affixal head with its own diathesis" (p. 228). The crucial property of the diathesis of the predicate instrumental is the optional delinking of the adjective's external theta-role, which allows the predicate instrumental to head both bare adjective phrases with a copula and adjectival secondary predicates with a vertically-bound external theta-role. The argumentation for both kinds of structure again involves case-marking of floating modifiers like *odin* 'alone' and *sam* 'oneself': while in bare

adjective phrases with the predicate instrumental and the copula in the infinitive occurring, e.g., in noun phrases (13a) (p. 236), such modifiers appear in the dative, superficially identical constructions in subject control environments require the modifier to agree with the controller, as in (13b) (p. 247).

(13) a. ego sposobnost' [PRO$_{DAT}$ byt' sčastlivym **samomu**$_{DAT}$]
'his ability to be happy himself'

b. Ona$_{NOM}$ ne umeet [byt' gordoj **sama**$_{NOM}$].
'She does not know how to be proud herself.'

The difference between (13a) and (13b) is accounted for by allowing the predicate instrumental affix to have both { ^ }$_1$ and { ^–}$_1$ as its external argument. The restrictions on the distribution of the predicate instrumental, e.g., its ban from such contexts as preposition phrases or *kak*-predicate phrases, is explained by the stipulation that the predicate instrumental is licensed by an immediately dominating finite or non-finite verbal projection (p. 253). A separate subsection is devoted to the explanation of the fact that depictive adjectives in infinitival clauses can only occur as long forms agreeing with the controller, as in (14a), or the predicate instrumental, as in (14b), but not in the dative in agreement with the PRO, as in (14c) (p. 257). Grammaticality of (14c) would be expected given that in finite clauses depictive adjectives can agree with the subject, as in (14d).

(14) a. Ona poprosila ego$_{ACC}$ [leč' v postel' **odetogo**$_{ACC}$].

b. Ona poprosila ego$_{ACC}$ [leč' v postel' **odetym**$_{INST}$].

c. *Ona poprosila ego$_{ACC}$ [(PRO$_{DAT}$) leč' v postel' **odetomu**$_{DAT}$].
'She asked him to get in bed dressed.'

d. On$_{NOM}$ leg v postel' **odetyj**$_{NOM}$.
'He got to bed dressed.'

The solution to this puzzle proposed by Babby (pp. 258–59) is diachronic rather than structural: the ungrammaticality of (14c) follows from the tendency for the predicate instrumental to gradually replace the LF adjective in all predicative constructions. Though such an intrusion of diachrony into the sophisticated synchronic morphosyntactic

analysis might seem unwarranted, in my view, it shows the inherent limitations of the generative power of Babby's theory, which is an advantage rather than a shortcoming, since a theory which is able to elegantly account for all possible facts loses in explanatory power.

The book has a substantial endnotes section (pp. 260–90) and a list of references and indices (pp. 291–307).

Evaluating *The syntax of argument structure* is not an easy task. On the one hand, Babby's book is beyond any doubt an impressive achievement both as a major contribution to theoretical linguistics and as a rich collection of empirical data from Russian (one should note that many examples come from real Russian texts of the 19th and 20th century fiction and press) provided with ingenious analyses. Babby's theoretical proposals are interesting, sound, fairly intuitively appealing, and, most importantly, fully explicitly formulated and largely well-motivated by empirical data (see, however, below). His model of diathesis provides elegant and natural solutions for many issues which have been problematic for alternative generative proposals, such as transitive impersonal verbs, distribution of SF and LF adjectives, agreement properties of floating modifiers, etc. Last but not least, Babby's theory immediately suggests its application to further empirical data, both from Slavic and other languages with rich morphosyntax, and promises interesting and insightful analyses. One should, however, acknowledge that the book is by no means light reading: one has to carefully study the quite intricate and not always friendly to the eye technical details of the analysis and to follow the sophisticated logic of argumentation, all this in addition to abundant empirical data with often very subtle contrasts leading to important conclusions.

On the other hand, any major contribution to linguistics is vulnerable to criticism, and Babby's book is no exception. The critical remarks I will make relate to two principal aspects of the book: its being a contribution to the theory of Universal Grammar and its dealing with data from Russian. From the former perspective, the theory proposed in the book is both too restrictive in some respects and too permissive in others. First, the whole architecture of Babby's proposal rests on the assumption shared with most current theories that the upper limit of the number of syntactic arguments a predicate—be it a lexical verb's stem or a result of affixal derivation—can have in natural language is three. As already mentioned, empirical evidence for this is given in chapter 1, coming in particular from the behavior of causative constructions in Turkish and French: in these languages, when a three-argument verb

is causativized, its original agent is realized as a *by*-phrase and not as an oblique argument, since all the available argument positions are already filled.

However, there are languages where causativization works in a different way from Turkish, i.e., where causatives from ditransitive verbs do not involve any kind of "by-phrase" but—contrary to Babby's theory—augment the number of the verb's arguments. For example, in the polysynthetic ergative Circassian languages belonging to the North-West Caucasian family, with which the reviewer and his associates have worked for more than ten years (see, e.g., Testelec 2009), all arguments of a verb are expressed by pronominal prefixes and, indeed, there do not seem to exist underived verbs in Circassian with more than three such prefixes. However, Circassian languages possess a rich system of valency-increasing prefixes, including a causative prefix introducing a new $\mathbf{i}_c$ argument, and an array of applicative prefixes introducing various indirect objects (benefactive, malefactive, locative, etc.); see Smeets 1992 and Letučij 2009a, 2009b. Once a ditransitive verb in Circassian is causativized, the result is a verb with **four** pronominal prefixes: one corresponding to the Causer argument and appearing in the position where the transitive subject argument is expressed; one corresponding to the direct object of the base verb and appearing in the position where the absolutive argument is expressed; and **two** indirect object prefixes, one corresponding to the indirect object of the base verb and the other expressing the subject argument of the base verb. In the detailed study of Circassian causative constructions by Letučij (2009b) no empirical evidence has been discovered to suggest that any of the arguments of a causative derivative of a ditransitive verb is in fact not an argument but an adjunct. Any participant expressed by a pronominal prefix in the verb shares the basic properties of morphosyntactic arguments in Circassian, such as ability to undergo reflexivization and relativization; moreover, there is evidence that the former subject of the causativized (di)transitive verb in Circassian retains some of its subject properties, which would be hardly reconcilable with an adjunct analysis. All this means that in Circassian languages (i) a derived verb can have more than three arguments (actually, even verbal forms with five pronominal prefixes are attested) and (ii) that affixation may add positions to the diathesis.

Similar phenomena can be observed in other languages as well, e.g., in Purupecha (Tarascan, Mexico; Maldonado and Nava 2002) all non-subject arguments of monotransitive and ditransitive verbs are

marked by the objective case; when a ditransitive verb is causativized, its subject gets the objective marking, suggesting that it is an argument, not an adjunct; even five-argument constructions derived by recursive causativization are reported (Maldonado and Nava 2002: 181).

All this, in my view, shows that the claim that the 4 x 2 structure of the diathesis universally constrains the argument structure of **both** simple and derived verbs in **all** languages is too strong. Rather, cross-linguistic evidence suggests that the constraint should be split up into two parts: (i) the constraint on argument structure of simple verbs, and (ii) the constraint on diathesis changes produced by affixation. Arguably, (i) indeed holds for all languages, though further empirical research is needed; however, (ii) should be parameterized in order to accommodate languages such as Circassian and Purupecha. In fact, even for Russian, things are not so clear-cut. Consider the beneficiary dative in examples like (15) (p. 70), where the verb to which the optional beneficiary NP is added already has three arguments and, therefore, from Babby's perspective, the extra dative NP can only be an adjunct.

(15) On_1 zaporošil sebe_{DAT} tabakom_3 glaza_2.
'He powdered his eyes with tobacco.'

However, Babby provides no empirical evidence for treating such dative NPs as syntactic adjuncts and not arguments in Russian, rendering his argumentation circular. In fact, similar sentences in Circassian languages would involve an applicative affix introducing the beneficiary as an indirect object without altering the other arguments of the verb. Moreover, it has been proposed in the literature that beneficiaries in less "exotic" languages such as Russian or even English are introduced by silent applicative heads (e.g., Pylkkänen 2002,[3] and Pšexotskaja 2011 specifically on Russian). The applicative analysis of sentences like (15) in terms of Babby's theory would treat the dative as an argument introduced by a null affix rather than an adjunct.

Second, while Babby's theory of diathesis is too restrictive as to the number of arguments a (derived) predicate may have, it seems to be not restrictive enough with respect to monadic verbs. As has already been said above, Babby proposes to treat external subcategorization as a lexical feature of the verb, drawing an empirically motivated distinction

[3] Curiously, Pylkkänen 2002 is included in the bibliography of the book but is never mentioned in the text.

between unaccusative and transitive impersonal diatheses (ch. 1). This, however, immediately raises a question about possible constraints on the cross-linguistic variation in the argument structure of monadic verbs. In particular, why are there no transitive impersonal verbs in so many languages, e.g., as different as English and Japanese? Why, in Russian and other Slavic languages, are transitive impersonal verbs clearly a minority? Are there languages with an opposite distribution of monadic argument structures, i.e., where most monadic verbs which are not unergative would be transitive impersonal (apparently, some of the so-called "active-stative" languages would constitute an example of such systems)? In a similar fashion, one could wonder whether there are any constraints, except the universal 4 x 2 argument structure, on possible affixal diatheses and the ways they interact with the diatheses of verbs. A restrictive theory of argument structure would certainly benefit from a calculus of logically possible diatheses and diathesis operations and an empirical cross-linguistic investigation of which of the theoretically available options are indeed instantiated in natural languages.

Looking at Babby's book as a Russian linguist, I cannot refrain from pointing out a number of empirical shortcomings sometimes affecting the accounts of Russian data. As has already been mentioned, Babby's analyses are based on rich empirical material largely coming from authentic sources. However, this does not necessarily entail that the data used in fact adequately represent the state of affairs in the language. Unfortunately, Babby—for whatever reason—has not availed himself of the possibilities afforded by modern corpus linguistics, in particular of the Russian National Corpus (RNC, www.ruscorpora.ru, launched in 2003), where one can easily find counterexamples to many of his claims. For instance, on pp. 144–46 Babby says that Russian present passive *em*-participles "compose with the LF only, which entails that they are exclusively s-predicates" and that "SF *-em*-participles are no longer used." This is incorrect, since there are numerous examples of SF *em*-participles in the RNC, cf. (16) with a SF *em*-participle with an auxiliary.

(16) Zaderžannyj… **byl** ne raz **sudim** za kraži i grabeži.

'The arrested man has been many times tried for theft and robbery.'

Not unproblematic is the ingenious and otherwise highly appealing analysis of infinitive control in chapter 4. First, an important recent study of control structures in Russian by Landau (2008) is not taken into account, which is unfortunate since Landau provides a rich and up-to-date dataset on the case marking of *sam* and *odin* in infinitival clauses. Notably, the crucial and well-established distinction between obligatory and non-obligatory control amply empirically supported by Landau's analysis is not taken into account by Babby at all (which leads to a rather awkward treatment of example (7) on pp. 175–76, which is a classic instance of an overt dative subject in a non-obligatory control environment). On the empirical side, it is hard to agree with Babby's contention that the accusative marking of floating modifiers in object control structures evidencing the admissibility of infinitival secondary predicates in such contexts is a feature of recent developments in the colloquial language (pp. 194–95). According to Landau (2008: 888–90), speakers allow free variation between the dative and the accusative marking of *sam* in examples like (17) and do not feel any stylistic difference between them. Moreover, examples like this are easy to find in the texts of any register contained in the RNC, including literary texts from mid-19th century, cf. (18).

(17) Ona ugovorila **ego**$_{ACC}$ pogovorit' **samogo**$_{ACC}$/**samomu**$_{DAT}$ s ee roditeljami.

'She convinced him to talk himself to her parents.'

(Landau 2008: 888)

(18) **Ee**$_{ACC}$ prosjat prijti segodnja **odnu**$_{ACC}$.

'She is asked to come alone today.'

(Evdokija Rastopčina, "Palazzo Forli," 1854)

The analysis of *kak*-predicates on pp. 190–94 hinges on example (51) (p. 192) with idiomatic *kak sel'djam*$_{DAT}$ *v bočke* 'as herrings in a barrel', claimed to be dative inside an object-control infinitive with an accusative controller. However, not only is this example clearly ungrammatical for the reviewer (a representative of the "younger Russian speakers" referred to in fn. 26 on p. 285 as finding such examples infelicitous), but similar examples are not to be found in the RNC or on the internet, either; the grammatical and attested version of this example involves an accusative *kak sel'dej*, which undermines Babby's analysis. The same

concerns the data on the case-marking of *sam* in the second of two coordinated subject-controlled infinitives (p. 204), which Babby claims to be dative rather than the expected nominative. None of the examples (99–103) sound better than the variants with the nominative, and the dative *sam* in such constructions seems clearly marginal and most probably a result of processing errors rather that of locality restrictions on vertical binding.

The analysis of reflexive binding as vertical binding on p. 142 is supported by incorrectly analyzed example (ii) in fn. 30 on p. 280, given below as (19). Contrary to Babby, this example is perfectly grammatical and similar examples can be found on the internet in great numbers, cf. (20).

(19) My xranili v tajne unizitel'noe dlja sebja otkrytie.
'We kept the revelation which was humiliating for us in secret.'

(20) Najti interesnyj dlja sebja fil'm bez truda smožet každyj.
'Anyone can find a film interesting for him or her.'[4]

With respect to the predicate instrumental, it is claimed on p. 253 that it never occurs NP-internally, which is not fully correct, since the predicate instrumental can be embedded in NPs headed by deverbal nominals, e.g., *vozvraščenie domoj* ***p'janym*** 'coming back home drunk'. The "unanticipated agreement pattern" of SF adjectives in infinitival clauses embedded into nominals in examples like (58) and (61) on pp. 248–49 (*ego sposobnost' byt'* ***sčastliv*** 'his ability to be happy') is mysterious, since such examples are clearly ungrammatical and do not occur in the corpora, which casts doubt on the idea of the "default nominative case" invoked by Babby to explain these patterns (as well as some others, cf. pp. 194–95).

Finally, there are, unfortunately, numerous typos and minor errors in many examples. In the Japanese example (70) on p. 46, *masu* should be treated as an affix and not a separate word and as a marker of politeness and tense and not of tense/aspect, and the whole sentence means 'Tanaka makes (not 'made') John read the book'. In ex. (86) on p. 53 the Russian personal name should look like *Pavla*, not **Paula*; in ex. (63a) on p. 98 "tall" should be *vysokogo* (as in ex. (63b,c)), and not **viskogo*; in

[4] http://ikomediya.ru/spiski-komedii/165-molodezhnye-komedii-spisok-luchshih-molodezhnyh-komediy.html, accessed 15 August 2014.

the unnumbered Lithuanian example in the first line of p. 124 "rope" should be *Virvė*, not **Virve*; in ex. (40b) on p. 142 *ostavivšej* should be written instead of **ostavšej*; in the paragraph above ex. (90) on p. 166 *ja* should figure instead of *on*; in ex. (86) on p. 202 *odarivat'* should stand instead of **odaryvat'*, etc.

Having expressed my concern with the number of minor and not so minor shortcomings of *The syntax of argument structure*, I would like to reiterate that despite some weaknesses this is beyond any doubt an extremely important and thought-provoking contribution both to linguistic theory and to the study of Russian, and a must read for all who are interested in Slavic morphosyntax. Moreover, I am sure that an "average generativist" with little or no knowledge of Slavic would also benefit quite a lot from a careful reading of Babby's book, which is able to broaden the horizon even of those who know Russian as native speakers.

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