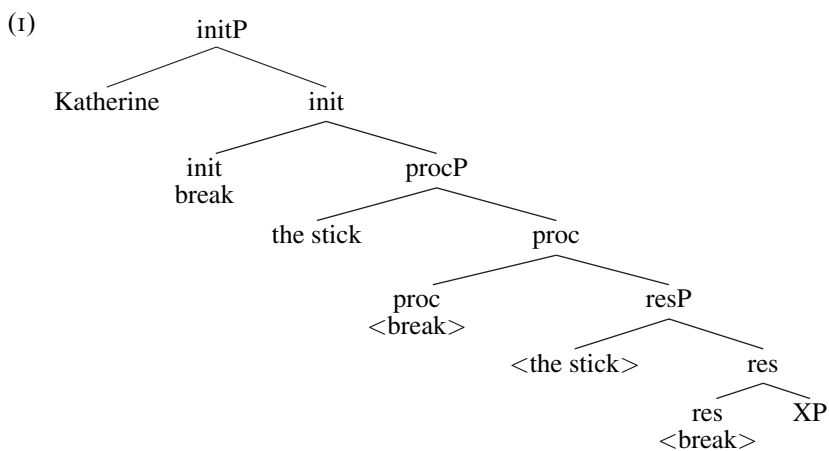


Gillian Catriona Ramchand, *Verb meaning and the lexicon: A first-phase syntax* (Cambridge Studies in Linguistics 116). Cambridge: Cambridge University Press, 2008. Pp. x + 217.

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In this book, Gillian Catriona Ramchand attempts to decompose verbs into three syntactic heads, *init*(iation), *proc*(ess) and *res*(ult), each of which projects a syntactic phrase. A verb may consist of all three heads (as, for example, *break*, as in (1)) or may have some subset of them, with its arguments projected as specifiers of the three syntactic heads.



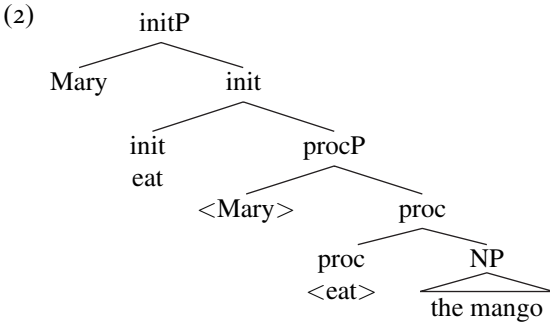
(75, ex. (29))

Ramchand defines each of these three heads as follows: *init* denotes an initial state that causally implicates another eventuality, and its subject is the initiator of that eventuality; *proc* is a dynamic event, and its subject is an undergoer of the process; and *res* is a final state that is causally implicated by the process event, and its subject is a resultee, something that attains a final state. An argument can occupy more than one specifier and hence bear more than one role, e.g. the object of *break* in (1) is both the undergoer of the process and the resultee. Verbs specify in their lexical entries which heads they consist of, and whether two specifiers will be occupied by the same argument.

Ramchand's theory is squarely within the family of theories that deny the existence of a generative lexicon and locate all combinatorial operations in the syntax. However, it differs from 'radically constructionalist' views (Marantz 1997, Borer 2005) since it assumes category information to be

stored with lexical items in the lexicon. Moreover, Ramchand does without thematic roles as primitives, instead deriving thematic interpretation from syntactic position (akin to Hale & Keyser 1993).

In addition to the participant roles of initiator, undergoer and resultee, Ramchand proposes a further category, *RHEMES*, which are complements of *proc* or *res* and can be Determiner Phrases (DPs), Adjectival Phrases (APs) or Prepositional Phrases (PPs). Rhemes are part of the description of the predicate and include path complements. For example, in *Mary ate the mango*, the DP *mango* is not an undergoer but is instead the path that maps out the course of the event, cf. (2).



(66, ex. (4))

Ramchand treats as paths the objects of consumption and creation verbs, where ‘quantizedness’ (in the sense of Krifka 1992) induces telicity:

- (3) (a) Michael ate apples/ice cream for an hour/??in an hour. (29, ex. (24))
 (b) Michael ate the apple/five apples for an hour/in an hour.

As Ramchand shows convincingly, quantizedness makes no difference for other classes of verbs, where in her theory the object occurs as specifier of one of the verbal heads. A predicate can be telic without there being a quantized internal argument (cf. (4)), and, conversely, the existence of a quantized internal argument does not imply telicity (cf. (5)).

- (4) (a) John stood up in a second. (no internal argument) (25, ex. (16))
 (b) They found gold in three hours. (mass term internal argument)
 (5) John pushed the cart for hours. (26, ex. (17))

The treatment of telicity as not being derived from a uniform source is one of most convincing parts of this book. In Ramchand’s approach, telicity can be derived in several ways: (i) the verb inherently specifies the attainment of a final result (e.g. *John broke the stick*); (ii) a final result is added by a resultative phrase (e.g. *Mary dried the cocoa beans bone dry*); or

(iii) a path specifies a final endpoint (*John pushed the cart to the end of the garden*).

The rest of this review will go into further details of some of Ramchand's proposals, picking those topics that seem to me to be the most significant and interesting or the ones most in need of improvement. While what follows is fairly critical, I am very sympathetic to Ramchand's overall approach: not only does it attempt to treat differences among verb classes as structural differences and make do without a generative lexicon, it is also attractive in its treatment of telicity and thematic roles and is full of interesting observations and insights. Unfortunately, I find its specific syntactic proposals lacking in important respects, some of which I will point out below.

Let us first consider Ramchand's proposals concerning the notion of thematic role. As is well known, labels like Agent, Patient and Theme do not pick out any significant classes of grammatical phenomena, and Ramchand's alternative set (initiator, undergoer, etc.) is a welcome replacement. However, one question that occurred to me was whether, once we have the definitions of thematic roles proposed here (such as, for example, '[a]n initiator is an entity whose properties/behaviour are responsible for the eventuality coming into existence'; 24), we need the structures that Ramchand assigns. Why not take the thematic roles to be primitives and specify for each verb which roles it assigns? For instance, *push* would specify that it takes an undergoer object, while *eat* would take a path object, and both would project the object as the sister of the verb. It is to be noted that Ramchand offers very little evidence for the posited syntactic structures; the differences that she claims exist between, for example, undergoer and path objects are all semantic. The dearth of syntactic evidence in support of the verbal projections is one of the weakest points of this book.

A second point of criticism concerns Ramchand's distinction between undergoer and path objects. The role of undergoer is not terribly well defined, and it is not always easy to see whether an object should be considered an undergoer or a path, because both can be understood to undergo a change in state/material properties. As discussed above, Ramchand motivates her distinction by adducing evidence that only the quantizedness of objects of consumption and creation verbs has an impact on telicity. Moreover, she argues that the subject of a creation or consumption verb is both the initiator and the undergoer. This means that the subject must be affected in some way by the process of, for example, eating or reading, which in turn predicts that these types of verbs require sentient subjects and will not allow pure causes. Ramchand offers the data in (6) to support her claim.

- (6) (a) John ate the apple. (67, ex. (5))
 (b) *Rust ate the drainpipe.

I am doubtful as to whether this argument stands up. Is it not the case that rust undergoes a change when it ‘eats’ metal? It certainly grows in size. In other words, it is not at all clear to me why (6b) would be ungrammatical on Ramchand’s account (and indeed whether it is in fact ungrammatical). Moreover, other verbs that Ramchand treats as having path objects do allow non-sentient subjects (cf. *The scanner read the bar code*; *The autodialer rang the number*).

Ramchand gives several other arguments for treating certain objects as paths. One is that their presence will bar an adjunct path PP, as in (7), which follows if both rhemes and adjunct path PPs occur as complements of *proc*.

- (7) (a) I read through the book. (67, ex. (6))
 (b) I saw (*Mary) into the window.
 (c) I rang (*the number) through to her.

Again, I wonder if this is really the case, given the grammaticality of *I read the book (through) to the end*.

Another reason for treating undergoer and path objects differently is that, according to Ramchand, undergoer objects allow resultative secondary predicates, but path objects do not. Accordingly, creation verbs, which are ambiguous between the two (allowing either a completive reading with a path object or a process reading with an undergoer object, as is shown in (8)) become unambiguous when a resultative secondary predicate is present, as seen in (9).

- (8) (a) John painted a picture (from memory). (68, ex. (11))
 (b) John painted a wall (with beautiful designs).
 (9) (a) *John painted a picture red. (69, ex. (14))
 (b) John painted a wall red.

The fact that only DP undergoers allow resultative secondary predication follows in a structural account in which path objects occupy the complement position of *proc* – there will be no room for any other phrase, including a resultative. However, the restriction could also be a semantic one.

Ramchand also claims that the addition of a benefactive to a creation verb is felicitous only under the path (completive) interpretation, not the undergoer (process) interpretation:

- (10) (a) John painted me a picture. (69, ex. (15))
 (b) ??John painted me a wall.

This does not seem to be correct: *John baked me a potato* is perfectly fine, but can only have the process interpretation because potatoes do not come into existence through baking. Moreover, Ramchand does not provide a syntactic structure for the benefactive, so it is hard to see why her theory predicts the claimed incompatibility.

Finally, Ramchand points out that adverbs like *a little* are fine with undergoer objects but odd with path objects, as illustrated in (11).

- (11) (a) John painted the wall a little. (70, ex. (16b))
 (b) ??John painted the picture a little. (70, ex. (16a))

As Ramchand would predict, *a little* is similarly odd with consumption verbs (cf. ??*John ate the apple a little*), but it also seems strange with many of the verbs that Ramchand treats as having undergoer objects, e.g. ??*Katherine broke the stick a little*, although it is possible that this anomaly somehow derives from the object also being a resultee.

To sum up, there do seem to be semantic differences between the objects that Ramchand treats as undergoers and those that she treats as paths: compatibility with resultatives and with *a little*. A question not addressed in this book is why we should treat these differences as structural rather than purely semantic. I am unaware of any clearly syntactic phenomenon that treats the two classes of objects differently. For example, we might expect that an ambiguous creation verb like *bake*, as in *John baked a cake/the potato*, should allow different readings with the adverb *again*, which appears to be sensitive to sub-eventualities within the main verbal event (see von Stechow 1996). Given the two postulated structures, where the object is either a path or a specifier (undergoer) of process, we expect that ‘creation’ *bake* (where the DP object *a cake* comes into being and hence originates as the complement of *proc*), should have no subjectless reading, because the subject is the specifier of both *init* and *proc*. The presupposition of *again* attaching to *procP* should be that there was a previous process event with path *a cake* and undergoer *John*. In contrast, attaching *again* to *procP* with ‘process’ *bake* (where the DP object *a potato* is already in existence and hence occupies the specifier of *proc*) should give rise only to the presupposition that there was a previous baking process with *the potato* as undergoer and no mention of *John*. This prediction is borne out (see (12)), but, contrary to expectation, I think this second reading also exists with verbs that express a creation event, as can be seen in (13).

- (12) Mary baked the potato, then John came along and baked it again.
 (presupposition: the potato was baked before)
 (13) Yesterday, Mary painted my portrait. I didn’t like it, so today I had
 John paint my portrait (over) again (and now I have two portraits).

The existence of a completive reading where there is no presupposition that the previous process had the same subject should not exist on Ramchand’s account since the completive reading derives from a structure in which the subject originates in the specifier of *procP*. The problem for Ramchand’s

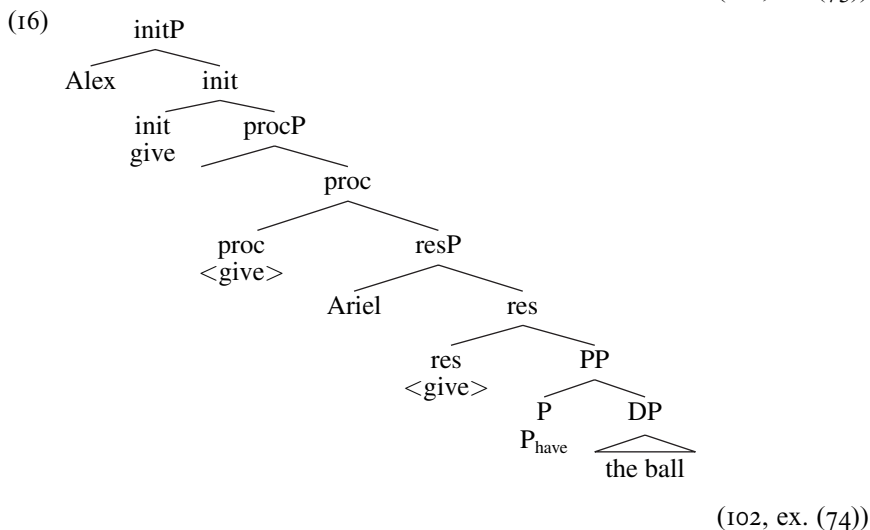
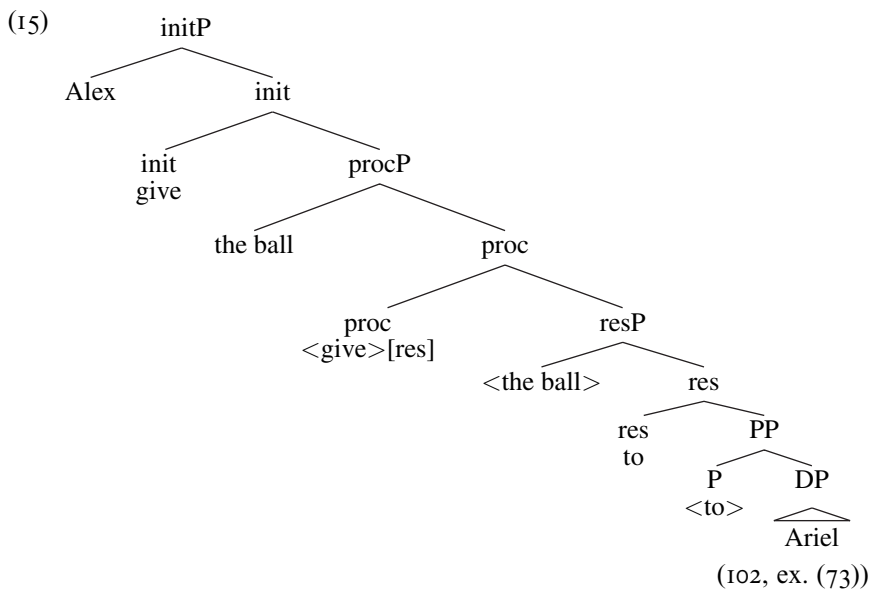
theory here is not her claimed difference between undergoer and path objects, but rather that she has the subject of verbs with path objects as an undergoer as well as an initiator, which, as the above data suggest, requires revision (as, for example, leaving *SpecprocP* empty).

Perhaps the most obviously problematic part of the book is its treatment of ditransitives. Ramchand introduces the notion of UNDERASSOCIATION in order to account for Hale & Keyser's (1993) 'conflation' verbs, viz. denominal and deadjectival verbs supposedly derived by incorporation into the verbal head. For Ramchand, lexical items specify features of syntactic heads. Verbs can associate fully with these features (as in (1) above, where *break* inserts to spell out both *proc* and *res*), or they can underassociate by spelling out only a subset of their category features. Underassociation is constrained as follows:

- (14) *Underassociation* (98, ex. (67))
 If a lexical item contains an underassociated category feature,
 (i) that feature must be independently identified within the phase and linked to the underassociated feature, by Agree;
 (ii) the two category features so linked must unify their lexical-encyclopedic content.

Accordingly, if a verb underassociates with one of its features in the syntax, it must still Agree with the head carrying that feature, although some other lexical item will then typically associate with that feature. Condition (ii) is meant to ensure that the two lexical items so connected are suitably compatible (with the intention to explain cognate and hyponymous objects, see 91–99).

Ramchand proposes the structures in (15) and (16) for prepositional datives and double object constructions, respectively.



Thus, she adopts a non-derivational approach to ditransitives (essentially that of Harley 2002), assuming two different underlying structures. One thing to notice in these structures is that *the ball* is the undergoer in the prepositional dative (it occupies the specifier of *procP*) but not in the double object construction (where the specifier of *procP* is empty). As Ramchand rightly notes, the semantics of the double object construction are not consistent with the indirect object *Ariel* being the undergoer; rather, like in the prepositional dative, it should be *the ball* that is the undergoer. Ramchand

suggests that there is an ‘implicit’ undergoer, whose content is identified by *the bottle*, acknowledging that this is ‘not an entirely satisfactory solution’ (104), which appears to me to be a huge understatement. The direct object of a ditransitive verb acts in every way like the direct object of the corresponding prepositional dative; any analysis has to treat them the same. I also do not understand what would prevent the direct object from moving into the specifier of *procP* – a possibility Ramchand seems to discount, although nowhere in the book is there a principle that would rule it out.

In addition, to account for the well-known restriction against modifying the first object of a double object construction with a depictive secondary predicate (Williams 1980), Ramchand stipulates that the specifier of *res* cannot be modified with a secondary predicate. However, this makes an incorrect prediction regarding the object in sentences like *Michael walked the files to the head office* (117, ex. (24b)), which Ramchand also treats as the specifier of *res*: *the files* should be unable to take a secondary depictive predicate, but this is false, cf. *Michael walked the files to the head office unread*. Ramchand also claims that no Applicative head can occur between *init* and *proc*. However, her theory cannot rule out the lexical verb underassociating and Agreeing with a higher *init* across an intervening Applicative head, which calls attention to the fact that underassociation need to be more tightly constrained.

Following much of the literature on resultatives, Ramchand distinguishes those that occur with selected objects from those that occur with unselected objects, as exemplified below.

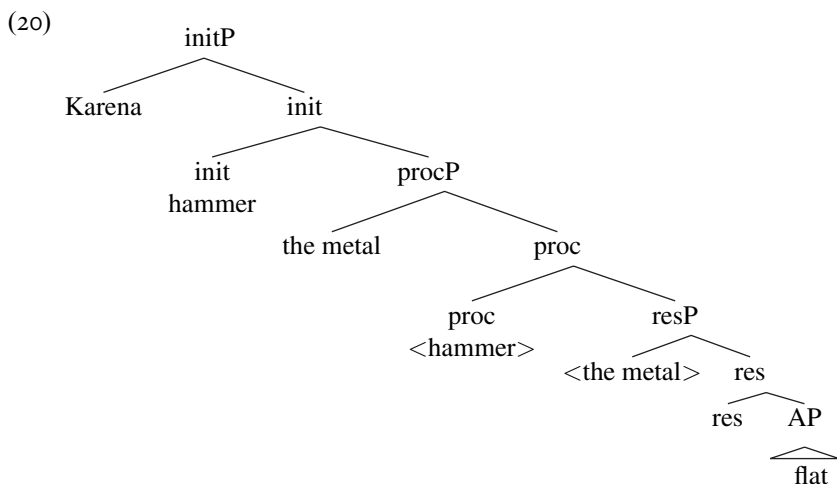
- (17) *AP results with selected objects* (121, ex. (30))
 (a) John hammered the metal flat.
 (b) Mary broke the safe open.
 (c) Bill painted the door red.
- (18) *AP results with unselected objects* (121–122, ex. (31a–c))
 (a) John ran his shoes ragged.
 (b) Mary sang the baby asleep.
 (c) Bill coughed himself hoarse.

According to Wechsler’s (2005) generalization, resultatives with selected objects are always formed from adjectives that are gradable and closed-scale; resultatives with unselected objects, on the other hand, are not subject to the same requirement (cf. *John worried himself sick*). Ramchand derives Wechsler’s generalization by analyzing adjectives that appear in the resultative construction with a selected object as paths that map out the process and hence occur as complement of *proc*. Adjectives that appear in the resultative construction with an unselected object are the complement of *res* (which is realized as a null lexical item in English); *res* creates the entailment of the result, so that the scalar structure of the adjective is irrelevant,

provided the adjective refers to a static property. Ramchand proposes that, where no extra predicational position is introduced, resultatives will always have to be the complement of *proc* and hence they will always need to be closed-scale. However, Ramchand provides no further explanation for this stipulation. I fail to see why the null head *res* cannot be merged with a verb that selects an object, in which case the adjective would not be required to be closed-scale.

This absence of a satisfactory explanation for Wechsler's generalization becomes even starker when Ramchand suggests that there are selected objects that take on the additional role of resultee when a resultative is added. An example is the sentence in (19), for which Ramchand provides the phrase structure in (20).

(19) Karena hammered the metal flat. (126, ex. (36a))



(127, ex. (38))

Given the analysis of resultative constructions with unselected objects, we expect that the adjective in a structure such as (20) would not need to be closed-scale, contrary to fact. In short, the proposed analysis has various limitations (and clarity is not assisted by the fact that Ramchand classifies the secondary predicate in *hammer flat* first as a complement of *res* (127, ex. (38)) and later as a path resultative (129, ex. (42b))).

Verbs that already specify *res* can also take a secondary predicate, further specifying the result state, e.g. (21).

(21) (a) John broke the box open. (128, ex. (40))

(b) John broke the vase in pieces.

Given that the adjective is the complement of *res*, we expect it to be able to be open-scale. However, this is false: Wechsler included *break* and *hammer* in

the class of verbs that require a closed-scale adjective in the resultative construction. In general, the book's section on resultatives is woefully short. It also never addresses the question of why there is a direct object restriction on resultatives (but note Wechsler's claims to the contrary) and why fake reflexives have to appear with unergatives.

Finally, let me consider verb–particle combinations. According to Ramchand, particles are intransitive prepositions and specify a result. The difference between particles and other resultatives is that the particle can identify *res* in the syntactic structure, so that there is no need for a null *res* head. The intransitive preposition obligatorily moves to *res*, while the object DP can be pronounced either in Spec-*res*P (giving the V–NP–Part order, as in *Alex handed her homework in*) or in Spec-PP (giving the V–Part–NP order, as in *Alex handed in her homework*). Unfortunately, Ramchand never explains why only verb–particle combinations give rise to multiple pronunciation options. In many of her postulated structures, we find multiple copies of DPs without the possibility of pronouncing different copies. The question of which copy must be pronounced might be related to Case, but this is not discussed in the book.

A more general problem for Ramchand's treatment of particles is that there is a fairly large class of particle verbs that are creation verbs and for which the quantizedness of the object makes a difference for telicity, e.g. (22).

- (22) (a) I thought up plans for an hour/??in an hour.
 (b) I thought up a plan in an hour/??for an hour.

In Ramchand's account, objects of creation verbs are treated as path objects, which occupy the complement of *proc*, thus disallowing resultative secondary predicates. On the other hand, she assumes that particles involve a resultative predication and that *res*P occurs as complement to *proc*. It should be completely impossible in Ramchand's framework for a particle verb to be a creation or a consumption verb, which is not borne out by the facts: not only are there clearly many creation particle verbs (e.g. *whip out/up*, *cook up*, *print out*, *churn out*), but there are also plausible cases of consumption particle verbs (e.g. *eat up*, *drink down*, *lap up*, *wolf down*, *knock back*, *suck down*, *toss back*). For all these verbs, the quantizedness of the object does affect telicity. This means that either path objects are not the sole complement of *proc* or particles are not always *res* (or indeed that both of these hypotheses are wrong).

In summary, Ramchand's book offers insights with respect to the distinction between path objects and other types of objects (although it is not clear whether this is a structural or a semantic difference). It is undoubtedly on the right track in recognizing telicity as a non-uniform phenomenon as well as in redefining the set of thematic roles. However, there is next to no syntactic motivation for the structures that are proposed, and the analyses of ditransitives, particle verbs, and resultatives make a number of incorrect

predictions. Underassociation and the pronunciation of multiple copies are not sufficiently constrained, and no principles are offered for constraining movement from specifier to specifier (or even from complement to specifier). While the system as a whole seems to me to be in need of considerable revision, Ramchand's book is still a must read for anyone interested in the topic of argument structure.

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