

REVIEW ARTICLE

Italian syntax: A government-binding approach. By LUIGI BURZIO. Dordrecht: Reidel, 1986. Pp. xiii, 468. f 185.00.

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This is as comprehensive a study of Italian syntax as I've seen in modern linguistics: it deals with verb classes, cliticization, impersonal *si* sentences, causatives, restructuring sentences (i.e. those which allow the phenomenon commonly known as 'Clitic Climbing'), perception verb complements, and the analysis of reflexive clitics, all in great detail. It also deals with innumerable other matters, sometimes rapidly, but always intelligently—including impersonal passives, *there* sentences, criticisms of VP analyses which allow a variety of projections of V, reconstruction in LF, theta role assignment, and Case assignment. The data, despite the title, are drawn from English as well as Italian, with interesting sections on Piedmontese and French.

The major impact of Burzio's book was actually felt in 1981, with his doctoral dissertation; the book is an extension of the earlier work. I recommend it to all scholars of Romance studies and all syntacticians, including those who have read the original. But the greatest contribution of this book, I reiterate, has already been recognized; and it is that to which I now turn.

B argues at great length for two classes of intransitive verbs: those that are lexically as well as syntactically intransitive, and those that are syntactically intransitive but lexically transitive. The latter group is called the ergatives. In particular, he argues that a verb like *arrivare* 'arrive' takes an object complement in its lexical structure, realized at [Dcep] [Structure] as a Direct[O]bject[1]. Then movement applies—yielding a structure at [Surface] [Structure] which has a filled Grammatical [Function] subject slot, coindexed with a trace in the DO slot. The arguments for this analysis are copious and well fortified. I came away from this book completely convinced that recognizing a class of ergative verbs in Italian which have an object at DS, but not at SS, allows us great insight into the grammar of Italian.

B does not stop with Italian, however, nor have many of the linguists who have read his work. Many today take as a given that ergative verbs in many (all?) configurational languages involve a movement rule which takes an object and places it in GF subject position. This is where I take issue, and I will argue below that one of the foundations for the ergative hypothesis is unsound.

1. I contend, for example, that there is no evidence for movement with ergative verbs in English. To see this, let us consider the relevant data. Keyser & Roeper 1984 have gone to great lengths to distinguish ergative from middle verbs in English. They argue that 1a-b, below, is an ergative pair (where 1b has the ergative verb), while 2a-b is a middle pair (where 2b has the middle

verb):

- (1) a. *The sun melted the ice.*
 b. *The ice melted.*
 (2) a. *Someone bribed the bureaucrats.*
 b. *Bureaucrats bribe easily.*

K&R go on to argue that middle sentences, like 2b, are formed via movement in the syntax—whereas ergative sentences, like 1b, are formed via movement in the lexicon. Their arguments that ergatives must be intransitive throughout the syntactic component of the grammar are solid; e.g., ergatives feed lexical rules in ways that would be possible only if they were already intransitive in the lexicon. And ergatives behave in the syntax as though they are intransitive.

K&R's arguments that middles must be transitive in DS also seem solid at first, although later work suggests that they are not. The reader might consider criticism of them irrelevant to this review, anyway—since B, like K&R, sees ergative formation as distinct from middle formation. However, more recent work by Hale & Keyser (1986, 1987) shows that both processes are the same thing grammatically. That is, so-called middles and so-called ergatives are two subclasses of a larger group, using a single grammatical mechanism. For the purposes of this review, I will look primarily at ergatives in B's sense, and will remark on middles only briefly.

A major part of K&R's article is their arguments that ergatives must start out as transitive in the lexicon. These arguments are the weakest point of an otherwise elegant article. Of course, this is the crucial point with respect to whether B is right that languages like English involve ergative movement (whether in the syntax or the lexicon).

The immediate question, given K&R's clear conclusion that ergatives in English are syntactically intransitive at all points in the syntactic component of the grammar, is this: what is the evidence that ergatives are ever transitive? That is, if we're going to turn them into intransitives in the lexicon, why not start with them as intransitives in the lexicon in the first place? K&R give five arguments that ergatives are originally transitive in the lexicon, and undergo a movement rule in the lexicon to produce an intransitive:

- (a) The putative Ergative Rule is productive.
 (b) The suffix *-er* cannot attach to an ergative verb to yield the sense of a *there* argument, but only of an agent argument. Therefore, *-er* attachment must apply in the lexicon before the Ergative Rule.
 (c) The trace of lexical movement in an ergative structure prevents lexical insertion of a cognate object.
 (d) *There* insertion can apply with ergative intransitives, but not other intransitives, because the NP following the ergative verb in a *there* sentence appears where it is generated in the lexicon.
 (e) The prefix *re-* can occur with ergative verbs, but not other intransitives, because it requires linking to an object NP (this requirement is satisfied for ergatives by the trace of the lexical movement).

* I thank Ken Hale and Barry Miller for comments on an earlier version of this review.

I argue that none of these arguments holds up under close scrutiny. I will take them up in the order listed above (which is not K&R's order, but turns out to be useful).

1.1. First, K&R assume that the demonstration of productivity is enough to demonstrate the existence of a rule. Thus the fact that English forms new words which exhibit ergative pairs is evidence of a productive Ergative Rule. An example would be a pair like this:

- (3) a. *The Republicans want to Reorganize the country.*
b. *The country refuses to Reorganize.*

However, K&R point out that many verbs do not exhibit ergative pairs:

- (4) a. *John visualized the town.*
b. **The town visualized.*

They conclude that 'the intransitive member of an ergative pair must be generated by rule for each new lexical entry' (390). But so long as the rule applies to only some lexical entries that fit the bill, but not to others, the rule is not productive in the sense required of syntactic rules (cf. Chomsky 1970, Wasow 1977). Why should the criteria for lexical productivity be any looser than the criteria for syntactic productivity, if there really is a lexical rule involved? I contend that no lexical movement rule is operative here. Instead, the variability by individual lexical items in 3-4 is what we should expect if the possibility of the ergativity alternation results from the Primitive[Conceptual] Structure] (as developed in Guessed 1986) of the lexical entries. That is, the PCS represents information which is prelexical, perhaps even prelinguistic (see Hale & Keyser 1987), about the real-life relationships of the entities that eventually get spelled out as the arguments of lexical entries. Thus I claim that the meaning of a lexical entry is quite simply the determining factor as to whether the speaker will use it in an ergative alternation. In this claim I am following Hale & Keyser 1987 (who state the claim explicitly for middles—but for whom the same claim must hold for ergatives, given their analysis).

1.2. The second argument of K&R is also attackable, but this time on empirical rather than theoretical grounds. Consider the verb *stick*, which exhibits an ergative pair:

- (5) a. *I stuck the note on the refrigerator.*
b. *The note stuck fast to the refrigerator.*

The fact that 5b is an ergative rather than a middle, in the sense of B and of K&R, is evidenced by the fact that the tense here is past rather than generic present. (K&R claim that middles require generic tense interpretations. Actually they do not, as shown by Hale & Keyser 1987:18. The fact remains, however, that B and K&R would admit 5a-b as an ergative pair.). *Stick* also passes other tests for ergatives that K&R set up. For example, *out* can be prefixed to it, whereas *out* cannot be prefixed to non-ergative intransitives:

- (6) *My note will outstick yours (because I use superior glue).*

Stick can occur with *away*, which is resisted by middles. Thus, though ex. 7 may not be beautiful, it is just as good as K&R's 38 with ergative verbs, and much better than their 37 with middles:

- (7) *Hey, look! My note's still sticking away, but yours fell off an hour ago.*

Stick can form compounds with first-sister adverbs, whereas a middle verb can't:

- (8) *This sure is a tight-sticking note. (CC. This note sticks tight.)*

Stick can be used as a pronominal adjective, whereas a middle verb can't, again, see 8.

The crucial property of *stick* is that it can take -*er* attachment, yielding either a theme sense (as in 9) or an agent sense (as in 10):

- (9) *Seeds that stick are called stickers.*
What good little stickers these notes of yours are!
(10) *Okay, let's divide up the jobs. I write the notes, you stick them up. So I'm the writer and you're the sticker/sticker-upper. Right?*

In fact, K&R themselves state that *sticker* has a theme sense to it; but they do not note that *stick* must be an ergative verb according to their criteria. The point of 9-10 is that -*er* attachment can take place with either member of the ergative pair. Therefore, we cannot conclude that -*er* at-

tachment must follow the putative Ergative Rule. Rather, 9-10 are what we should expect if both the transitive and the intransitive senses of *stick* are available to -*er* attachment. Certainly, both would be available to lexical rules if each were the direct result of the PCS associated with *stick*, as discussed above. Other examples like *stick* are *grow* (as in *These new sugar snap peas sure are good growers*) and, at least for some speakers, *shine* (as in *Those newly polished shoes sure are good shiners, aren't they?*)

Another example of an ergative verb that allows -*er* attachment, yielding a sense corresponding to that of the intransitive subject of the ergative pair, is *grieve*. Unlike *stick*, however, there is no agentive sense for *grieve* (i.e., there is no sense corresponding to that of the transitive subject of the ergative pair):

- (11) *Mary's behavior grieves her mother.*
Her mother grieved.
(12) *Mary's in the bathroom grieving away.*
(13) *Mary can outgrieve anyone—she's the queen of widows.*
(14) *She sure is a loud-grieving woman.*
(15) *Mary is a griever if there ever was one.*

Why do most ergative verbs not allow -*er* attachment, yielding a sense corresponding to that of the intransitive subject of the ergative pair? This is another question and an interesting one; but clearly, it is not pertinent to the question of whether an Ergative Rule exists. I suggest, without having investigated the matter fully, that the attachment of -*er* has to do with our perception of the achievement of a GF subject as a participator in an event, rather than with theta roles. Thus people take a relatively active role in whether or not they grieve over something; so *grieve* (as in 15) can have a sense corresponding to that of the subject of an intransitive. But pots, for example, do not typically take an active role in whether or not they break; so *breaker* cannot have a sense corresponding to that of the subject of an intransitive (?**This pot sure is a breaker*.) Note that being considered an active participator does not entail being an agent. Furthermore, many ergative verbs do not enter into an ergative pair, but exhibit only the intransitive member of the pair, e.g., *arrive*. (These are the verbs called 'unaccusatives' by Belletti 1986, Hale & Keyser 1986, 1987.) We do not easily attach -*er* to these verbs; but if we attempt it, the only sense we get corresponds to the person who arrives, not to someone who causes the arrival (as in, *Who's the new arriver?*) Again, this follows from the active nature of the participation of the person who arrives.

1.3. K&R's third argument involves the possibility of lexical insertion of an object at DS. The fact that verbs like *sing* can have what I call cognate objects (what they call 'derivative nominals'), but ergative verbs cannot, shows—they argue—that ergative verbs are followed by a trace (resulting from the putative lexical movement rule) which blocks lexical insertion of a cognate object:

- (16) a. *The man sang a song.*
b. **The ship sank a sinking.*

But K&R themselves follow Carlson & Roeper 1980 in saying that a verb like *sing* has an optional unmarked object position in its lexical structure. Thus *sing* has an NP object which can be optionally filled with a cognate object. But if *stick*, with a theme in GF subject position, is intransitive in its lexical structure, then it cannot have any kind of object, whether cognate or otherwise. That is, the ungrammaticality of 16b is easily explained if *sink*, with a theme in GF subject position, is strictly intransitive.

Note that cognate objects do not in fact occur with strictly intransitive verbs, but only with verbs that can take non-cognate objects as well. Thus 17a is not acceptable with a cognate object, because *elapse* is a strictly intransitive verb; but 17b-c are all right with either a cognate object or some other object:

- (17) a. *The required span of time elapsed (*a month).*
b. *The man sang (a song / The National Anthem).*
c. *He dreamed (a dream / his future).*
d. *He smiled (a strange smile / his welcome).*
e. *He ran (a good run / the hell out of his shoes).*

A supporter of K&R's position might argue that *elapse* is an ergative verb itself. But *elapse* seems

to be the most intransigent kind of intransitive that exists, and it contrasts with ergative verbs on many of the criteria set up by H&R for detecting ergativity. For one, it does not allow the prefix *re-* which occurs with so many ergative verbs:

(18) **The required span of time re-elapses.*

Ken Hale (p.c.) has pointed out that 18 is inappropriate for pragmatic reasons, regardless of grammar. But *elapse* cannot be transitivized via *out-* prefixation, whereas many ergative verbs can: **out-elapse*. And, unlike intransitives that can take cognate objects and ergatives, *elapse* cannot easily appear with *away*—although Hale has suggested 19b, which doesn't sound terrible to me:

(19) a. **The month elapsed away.*
b. *Months were elapsing away.*

The arguments are not conclusive, taken individually, but they are certainly suggestive when taken together. If *elapse* is not a strictly intransitive verb, I am unconvinced that there are any in English. I will, then, assume that *elapse* is a non-ergative intransitive verb; I conclude that strict intransitives do not allow cognate objects. Thus, if the ergative *sink* is a strict intransitive, we have accounted for the fact that it cannot take cognate objects (as in 16b).

Furthermore, contrary to what K&R or B would predict, we find ergative pairs where the ergative member can indeed take an object (20a-b are adapted for English from the French examples in Ruwet 1987):

- (20) a. *The man (rang/sounded) the bell.*
The bell (rang/sounded) the hour of the Mass.
b. *The butcher bled the cow.*
The cow bled.
The cow bled (all her blood / her guts out).
c. *Grief aged Mary.*
Mary aged.
Mary aged five years overnight.

Examples like 20 are simply anomalies for B. They are totally incompatible with an analysis that derives the ergative member of an ergative pair via movement, whether in the syntax (alla B) or in the lexicon (alla K&R).

A similar anomaly for middles is found in the middle reflexive, as noted in Lakoff 1977:

(21) *This bread virtually cuts itself.*

We again see that middles, like ergatives, must be analysed without a trace in DO position. Thus 16b offers no evidence for a trace in object position of ergative verbs. And 20 offers clear evidence against such a trace.

1.4. K&R's fourth argument involves *there* sentences. They argue that only ergative verbs, but no other intransitives, can appear in *there* sentences; they account for this by saying that the NP following the ergative verb is located in the surface, where it originates in the lexicon. That is, the Ergative Rule will have failed to operate in a sentence like

(22) *There appeared a settlement.*

With this analysis of *there* sentences, K&R are forced to claim that the NP following *appeared* in 22 gets its case from the GF subject position, since they follow Burzio 1981 in claiming that the intransitive member of an ergative pair cannot assign Case. (Of course, *appear* is an example of an ergative with only an intransitive counterpart.) They point to the following as evidence for this claim:

(23) *There go I.*

The problems with this argument are empirical. Consider again *elapse*, which I argued above to be a non-ergative intransitive. It easily occurs in *there* sentences. Thus 24 is from McCawley 1981:

(24) *There elapsed a period of several seconds.*

Of course, 24 is only as indicative as the analysis of it as a non-ergative is strong. *Elapse*, however, is not an isolated example. Other intransitive verbs which do not pass K&R's *re-*prefix test for ergativity, but which occur on McCawley's list of *there* sentences, include these:

(25) *There began a new era.*

Breathes there a man with soul so dead ...

There burst in five policemen.

In these hills there cascade many great waterfalls.

There comes a time when one must face the facts.

At the beginning of the Pleistocene era there came into being a new species of mammal.

There came to light a gross error in his calculations.

To every action there corresponds an equal and opposite reaction.

There dawned yet another morning.

From an asylum for the insane near Providence, Rhode Island, there recently disappeared

an exceedingly singular person. (H. P. Lovecraft, *The strange case of Charles Dexter*

Ward, first sentence)

(Note, however, that B classifies *begin* as an ergative verb, p. 160.) There are many others on McCawley's list that are not ergatives by K&R's criteria. K&R specifically argue that *rise* is not an ergative verb, but a straight intransitive. Yet we find 26a on McCawley's list of attested examples, and everyone I've asked finds 26b also acceptable:

(26) a. *There rose a star.*

b. *There rose a thin spiral of black smoke into the innocent air.*

In Chap. II, B makes a distinction between two types of *there* sentences—a distinction traditionally labeled as 'existential' vs. 'presentational' *there*. In the presentational type we have two situations: ergative verbs and no NP movement, or intransitive verbs and NP movement. (B argues that the instances of intransitive verbs with NP movement are 'outside of the core system', 162.) Surface position of the relevant NP allows us to distinguish whether we have a base-generated *there* sentence, or a transformationally generated *there* sentence. That is, in an ergative (i.e., base-generated) *there* sentence, the NP immediately follows the verb; but in a non-ergative (i.e., transformational) *there* sentence, the NP will be in S-final position, typically after a locative or time phrase:

(27) *There arose many trivial objections during the meeting.*

(28) *There walked into the bedroom a unicorn.*

B sees no NP movement in the ergative 27, but sees NP movement in the non-ergative 28.

One might look at McCawley's list, then try to salvage K&R's argument by taking B's position—arguing that all the examples in 25 have the relevant NP in S-final position. Thus one could argue that only ergatives allow an NP in post-V, but at the same time not S-final position. However, a close look at McCawley's list reveals several examples of non-ergative *there* sentences with the relevant NP in immediate post-V position, followed by a locative or time phrase:

(29) *There crept a band of thieves into the building.*

There fell a silence over the crowd.

Suddenly there flared a light in the distance.

There glowed two eyes in the shadows.

There lacks organization in this company.

There reigned a wise queen in earlier times.

Again, this is just a sampling. In taking the verbs of 25 and 29 to be non-ergative, I am using the fact that they exhibit none of the other properties that K&R show most ergatives to share. Thus they cannot have *re-*prefixation. Most of them cannot have *out-*prefixation (although we do find *outglow*, *outreign*, *outcreep*). Many of them cannot appear with the relevant use of *away* (although I can accept *creeping away*, *glowing away*, *cascading away*, *breathing away*, *faring away*, *reigning away*). Some of them can take the affix *-er* with the sense that corresponds to the GF subject of an intransitive sentence with that verb (*creeper*, *glower*, *beginner*, *breather*). In sum, these are classical non-ergative intransitive verbs, by the K&R criteria.

We can see, then, that the presence of ergative verbs in *there* sentences can be explained simply by analysing them as intransitives. The fact that the relevant NP can fall in immediate post-V position with ergative *there* sentences will be accounted for in the same way as non-ergative *there* sentences like those in 29. No appeal need be made to an underlying lexical level with an object NP for ergative verbs.

With this analysis, we will attribute the failure of *there* sentences with verbs like *sing* (noted by K&R and attributed to the fact that *sing* is not an ergative verb)—even when they have no object realized at DS—to the fact that *sing* is not a verb that functions primarily to establish the existence or presentation of its GF subject in the discourse or in some location (spatial or temporal). That is, we will avail ourselves of the traditional analysis of *there* sentences, which recognizes a semantic class of verbs as crucial to the appropriateness of *there*. *Sing* does not belong to the requisite semantic class (nor does *cry*, or many other verbs.) The ergatives and many other strict intransitives do, however.

We now have the welcome result that we do not have to claim that the NP following the verb in a *there* sentence gets its Case from GF subject position. I myself find K&R's 23 ungrammatical, as do all the native speakers of English that I've asked. By contrast, 30 is perfectly grammatical:

(30) *Who knows about this? Well, there's me and there's you. That's all.*

No one blinks at 30 (but everyone I asked made a face at 23). Certainly, *me* is superior to *I* in 30. (Furthermore, *there* in 30 is clearly non-detictic—while in 23 it may well be detictic, and thus not the relevant use of *there* after all.) If K&R were to maintain that Case on the post-V NP comes from GF subject position in their ergative *there* sentences, then they'd have to have a different rule for Case assignment in *be* sentences with *there*. It is not impossible that there should be different mechanisms for Case assignment in different types of *there* sentences; however, it's certainly a complication that calls for justification. My analysis—in which intransitives can occur in *there* sentences, regardless of whether they are ergatives, and regardless of whether the relevant NP is in S-final position—calls for no such complication of Case assignment.

Note that 30 also offers evidence against Belletti's claim, for English at least, that ergative verbs assign partitive case to their DO. This is Belletti's explanation for the fact that the NP argument in a *there* sentence is usually indefinite (the so-called Definiteness Effect): the postverbal NP in a *there* sentence is indefinite because the verb assigns it partitive Case. But *me* and *you* are not indefinite in 30, and thus cannot have partitive Case. Rather, the restriction on postverbal NP's in *there* sentences has its base in discourse, as pointed out by Rando & Napoli (1978): the postverbal argument must be new. If that argument is a list, the items on it may themselves be definite: the information of which items are on the list (not the items themselves) is the new information to the discourse. Ex. 30 is an example of a 'list' *there* sentence; hence the definite NP's *me* and *you* are permissible. In support of this analysis, Rando & Napoli point out morphologically definite NP's which can be used as new information in the discourse, and which easily appear as the relevant argument in *there* sentences. (*There's this weird guy hanging from a tree outside; come look.*) No explanation of the Definiteness Effect based on Case assignment—a phonological process which must see an NP like *this guy* in DO position as a definite and not as a partitive, regardless of its discourse value—can be empirically adequate. I leave open the possibility that Belletti's analysis may work for other languages—particularly Italian, which offers independent evidence that partitivity may well be a Case, e.g. in the contrast between the clitic *ne* and the accusative and dative clitics. But in English, so far as I can see, there is no evidence that indefiniteness is a reflex of Case.

1.5. K&R's fifth argument is that ergative verbs must have a trace in object position at the point in the lexicon where *re-*prefixation occurs, since *re-*prefixation requires linking with an object. (K&R do not distinguish between different types of *re-*'s; I follow them here, although such a differentiation might have led them to a more perspicuous analysis.) K&R are correct in noting that no non-ergative intransitives allow *re-*prefixation. However, not all ergative verbs can take *re-*. In 31, I give just a few examples, with sentences in parentheses which K&R would take as either suggestive or indicative of the ergativity of each verb (some of the sentences are K&R's, some are McCawley's, and some are mine):

- (31) **respill* (I spilled the milk. / The milk spilled.)
 **rearrive* (There arrived a wizard at the door. / The guests are arriving away.)
 **reatop* (We dropped the leaves. / The leaves are dropping away like flies.)
 **re-ensue* (There ensued a skirmish between the police and the demonstrators.)

Likewise, not all transitive verbs can occur with *re-*:

(32) **I rebribed the politician.*

**No one reknows anything.*

**Mary reburned her hand, can you believe it?*

Again, 32 is just a small sampling.

Certainly, the fact that non-ergative intransitives cannot take *re-* is indicative of something; but of what? The part of K&R's argument that calls for justification is the claim that *re-* requires linking to an object. Since *re-* has other requirements on its appearance, as 31–32 show, perhaps these other requirements—once properly understood—will naturally explain why non-ergative intransitives cannot occur with *re-*. I leave the question open, noting that it cannot be answered without a complete investigation of the requirements on the appearance of *re-*.

2. I conclude that ergative verbs in English are intransitive in both the lexicon and the syntax. They definitely act together as a class for certain kinds of rules, but they always behave as intransitive verbs. There is no evidence whatsoever that they are transitive at any point in the lexicon or syntax. With this analysis we can preserve some very important principles that K&R were forced to abandon.

First, and to my mind foremost, we can maintain the principle that syntactic structures must be established by syntactic arguments. Thus the thematic similarities between ergative pairs must be captured, not by a movement rule in the lexicon that leaves a trace (and hence affects syntactic structure), but rather by an investigation of PCS (cf. Guerssel).

Second, we can maintain the claim of Roeper 1984 that the Projection Principle of GB, first stated in Chomsky 1981, holds for both the lexicon and the syntax. The relevant point here is that no rules of the lexicon or syntax can change thematic relations. But the putative Ergative Rule, since it required the deletion of the Agent argument slot, would have been a violation of the Projection Principle. (See Hale & Keyser 1986, however, who argue that implicit agents need not be present at any grammatical level.) K&R are forced to suggest that only lexical rules that 'have specific affixes' obey the Projection Principle. Instead, if ergatives are simply intransitive at all points in the grammar, the Projection Principle can hold in the lexicon without restrictions, as well as in the syntax.

Third, we can maintain a clean distinction between the PF component and the Lexicon, where K&R were forced to do some messy mixing. K&R claim that middle verbs do not allow movement to form compounds as in 33a, but ergatives do, as in 33b:

- (33) a. *bride* [NP] *fast* → **fast-briding*
 b. *sink* [V] *fast* → *fast-sinking*

K&R claim that the subcategorization frame of middle verbs, since it calls for an NP in object position, is responsible for the failure of compound formation with an adverbial right sister. However, the putative lexical trace in ergatives does not block this compound formation, because the lexical trace gets no Case. But surely word formation is in the lexicon and the syntax only (see Baker 1985), while Case assignment is in the [Phonological] Form]. Therefore, lexical rules should not be sensitive to the Case properties of the items involved. However, if ergatives are intransitive at all points in the grammar, then 33b is no problem: no trace is present to block compound formation, regardless of Case assignment.

Also, as Ken Hale (p.c.) has pointed out, K&R's claim is not true for middles. Thus he and I both accept:

- (34) *smooth-cutting bread*

This offers evidence, of course, for the claims that middles are, after all, indistinct from ergatives grammatically (as in Hale & Keyser 1987), and that middles do not involve grammatical movement.

With an intransitive analysis of ergatives, we can limit the movement rules of the lexicon to word-formation rules, as in compound formation. These rules apply to words rather than to phrases (see Aronoff 1976). Rules like the putative

Ergative Rule should be disallowed on theoretical grounds, then, since such a rule moves a phrase rather than a word. I conclude not only that ergative verbs are intransitive at all points of the grammar in English, but also that it is theoretically unsound to analyse them as transitive at the lexical level.

3. We can now return to B's claim (28) that his ergative analysis, which involves movement, should hold for all languages. But Ergative movement is not found in English, in contrast to Italian. Thus we need to see where B went wrong. I believe the problem lies in what he proposes as a lexical principle (p. 182):

(35) $-\theta_s \rightarrow -A$

This means that, if a given verb does not assign a theta role to its GF subject slot, then it will not assign Accusative Case to its object. This lexical rule is a cornerstone for B's work. Let us see how.

3.1. To begin, we know from well-established principles that all NP's with a phonetic matrix must have Case. Therefore, if an NP is in a position where it will not receive Case, it must move to a position where it will receive Case; otherwise, the sentence will be ruled out by the Case Filter. This is the explanation for the obligatory nature of movement both in passive sentences and in Italian ergative sentences, and it is a well supported explanation.

However, as B notes, many (most?) ergative verbs come in pairs, where one member of the pair is transitive and thus assigns accusative Case to its object:

(36) a. *L'artiglieria affondò due navi.* 'The artillery sank two ships.'
b. *Due navi affondarono [è].* 'Two ships sank.'

If *affondare* 'to sink' can assign Case to its object in 36a, why can't it assign Case to its object in 36b, and take some sort of dummy subject, with a result like 37?

(37) **Dumary affondò due navi.*

The reading of 37 that is ungrammatical is that in which the ships sank, but no sense of an agent or instrument of that sinking is expressed. (Of course, 37 is good with the irrelevant reading 'She sank two ships'.)

It is because of the failure of sentences like 37 that B proposed the lexical principle of 35. That is, no theta role is assigned to the GF subject in the DS in 38; hence, by virtue of 35, the object will not receive Case:

(38) [$_$] *affondare* [*due navi*].

But if the object in 38 does not receive Case, then it must either move, to yield 36b—or else the sentence fails, as in 37.

3.2. B himself seems uncomfortable with the lack of independent motivation for 35. He calls it a lexical principle, but he is careful to point out that it does not follow from any other principles of the grammar. However, I suggest that, though 35 often matches the data, it should not be admitted as a principle of grammar—not in Italian, English, or any other language.

One may think at first that 35 is indeed a principle of English. With such a principle, we can explain data like the following:

(39) *John proved the problem to be unsolvable.*

(40) *The problem proved [è] to be unsolvable.*

(41) **It proved the problem to be unsolvable.*

Here 39–40 is an ergative pair. Following B, ex. 41 is bad because, while English allows a dummy subject, the NP *the problem* will not receive Case: the GF subject position is not theta-marked. That is, 41 seems to be ruled out by the lexical principle of 35.

This explanation of 41, which involves the crucial use of the lexical principle, presents problems of inconsistency for the work by B—and of K&R, for that matter. That is, they account for the fact that 42 is good by saying that the NP following the ergative verb receives (nominative) Case

from the GF subject position:

(42) *There arrived three new guests at John's party.*

But if an NP in immediate post-V position in an ergative sentence like 42 can get Case from the GF subject position when that position is filled with the dummy *there*, then we'd expect that the same mechanism (whatever it is) would also allow *the problem* in 41 to get Case. Thus we have no explanation, after all, for the failure of 41.

One might object that the mechanism which allows Case to pass from GF subject position to the object in 42 cannot operate in 41 because this mechanism is somehow limited to *there* sentences, and cannot apply with the dummy *it* of 41. But if that were true, we'd expect that the *there* counterpart to 41 would be good. It isn't:

(43) **There proved the problem to be unsolvable.*

One might also object to my claim that we'd expect 43 to be good, by counterclaiming that the verb *prove* does not belong to the semantic class which makes *there* appropriate. But it is the more traditional analysis of *there* sentences which appeals to a semantic class of appropriate verbs (a class not limited to ergatives at all, as we saw in 25 and 29). In contrast, with B's and K&R's approach, the very fact that *prove* is ergative should make it a candidate for a *there* sentence which has an immediate post-V NP. That is, I put forth 43 because it is evidence of internal inconsistency in B's and K&R's systems, not because I believe (which I don't!) that this verb should occur with *there*. With B's analysis of *there* sentences, we expect 43 to be good. Since 43 and 41 are both bad, B's explanation for the failure of 41 is called into question.

Furthermore, as seen above, there are other problems with claiming that the NP in immediate post-V position in a *there* sentence gets Case by way of the GF subject position. Few *there* sentences exist in which a pronoun in immediate post-V position sounds good, but these few favor an accusative over a nominative pronoun. I repeat the relevant example (30): *Who knows about this? Well, there's me and there's you. That's all.*

The scarcity of pronouns in *there* sentences results, of course, from the Definiteness Effect mentioned above. The one place we readily find definites in *there* sentences is with a 'list' interpretation. It is difficult to find 'list' *there* sentences which involve verbs other than *be*; however, some can be found. Everyone I have asked prefers the accusative to the nominative pronoun in 44, where *appear* is an ergative verb according to B (and K&R):

(44) —*What happened next?*
—*Suddenly there appeared a little boy, a bigger boy, and me!*

I conclude that the NP following the ergative verb is getting accusative case from the ergative verb. Thus the lexical principle of 35 is falsified by sentences like 44.

3.3. Another problem for 35 is found in this French construction:

(45) *Il arrive trois femmes.* 'There arrive three women.'

In 45 we have a dummy subject, *il*, a 3sg. verb agreeing with that dummy subject, and an NP in immediate post-V position—which would be in GF subject position if this were an ordinary intransitive sentence. B argues that, in this construction, we again find only ergative verbs: thus the NP in immediate post-V position has failed to undergo ergative movement. Going back to B's book and looking for specific mention of the Case question for this construction, I am unable to find it (and I apologize to Burzio if it is there); but I presume that B would argue that the NP in immediate post-V position receives Case from the GF subject position (as K&R argue for the relevant NP in *there* sentences).

It is, unfortunately, impossible to determine, by looking only at the NP in post-V position in 45, whether it is nominative (as I assume B would claim) or accusative—because this construction, like the *there* construction of English, exhibits the Definiteness Effect. Thus pronouns, being definite, could not occur in immediate post-V position in such a sentence unless we had the list interpretation. But even with the list interpretation, we could not determine whether the pronouns on such a list were nominative or accusative, since they would be non-clitics (since only non-clitics can conjoin, as on a list)—and such pronouns in French are not audibly distinguishable for Case. Other data, however, are problematic for B's analysis—and might, depending on the proper analysis of this French construction, be evidence that the NP in immediate post-V position receives

accusative Case. Consider:

- (46) *Il sera arrêté beaucoup de criminels.*
 (47) **Il le sera beaucoup de criminels.*

There will be [arrested/*it] a lot of criminals.'

These sentences are from Kayne (1975:299, fn.) In 46, we see what looks like a passive sentence. In 47, we see that the passive participle of 46 cannot correspond to the pro-form *le*. However, in French the passive participle typically CAN correspond to the pro-form *le*:

- (48) *Jean sera arrêté.*
 (49) *Jean le sera.*

'Jean will be [arrested/it].'

We need to explain why the passive participle in 46 cannot correspond to *le*. One might try arguing that *le* corresponds to a whole VP, therefore 47 is bad because the NP *beaucoup de criminels* appears. However, this analysis will not work. *Le* cannot be analysed as a pro-VP, since the auxiliary (which is part of the VP) can co-occur with it (as we see above in 49), and since other elements inside the VP can co-occur with it:

- (50) *Jean sera arrêté par les gendarmes.*
 (51) *Jean le sera par les gendarmes.*

'Jean will be [arrested/it] by the police.'

In 51 we see that *le* can co-occur with the passive *par* 'by' phrase. *Le* is a pro-predicate, as Kayne doubts it: it can correspond to a variety of predicates, including AP's and NP's as well as passive participles. However, it cannot correspond to past participles:

- (52) *J'ai vu Marie.*
 (53) **Je l'ai Marie.*

'I have [seen/*it] Marie.'

In general, the pro-predicate *le* never co-occurs with an accusative NP, although it can co-occur with nominative NP's (like *Jean* in 51) and with PP's (like *par les gendarmes* in 51). This is true even when we try to let *le* correspond to an AP:

- (54) *Jean est fou. Jean l'est.*
 (55) *Je considère Jean fou. *Je le considère Jean.*

'I consider Jean crazy. 'I consider him it.'

I am assuming here an analysis for 55 in which *consider* has two right sisters, the NP and the AP (see Williams 1980 for justification). The NP *Jean* is accusative, and it can correspond to an accusative clitic (the accusative clitic here is *le*, homophonous with the pro-predicate clitic *le*):

- (56) *Je le considère fou. 'I consider him crazy.'*

But the pro-predicate *le* cannot correspond to an AP in 55. We see that the pro-predicate *le* simply never co-occurs with accusative NP's.

If the NP *beaucoup de criminels* in 46 is accusative, then the failure of 47 is explained by the restriction just stated. In contrast, an analysis of 46 that takes this NP to be nominative calls for otherwise unwarranted complications of the explanation of 47.

There are other problems with B's analysis of this French construction, and he himself notes them (143). One is that non-ergative verbs without an object can occur in this construction:

- (57) *Il mange beaucoup de linguistes dans ce restaurant. 'A lot of linguists eat in this restaurant.'* (Grimshaw 1980)

Manger 'to eat', being a non-ergative, should be barred from this construction. Are we to deny *manger* in 57 the ability to assign accusative Case?

Another problem is that transitive verbs with an object present can occur in this construction:

- (58) *Il prend corps dans ce pays une grande espérance. 'There is taking shape in this country a great hope.'* (Kayne 1979)

I see no alternative to allowing *prend* to assign accusative Case to *corps* in 58. Thus the *il* construction of French discussed here is another counter-example to B's lexical principle of 35.

3.4. A different type of counter-example to the lexical principle is offered by transitive idioms that involve GF subjects which do not receive a theta role. Chomsky 1981 claims that an NP which is part of an idiom does not receive a theta role. I argue that Chomsky's claim must be refined: in particular, an NP that is part of an unanalysable idiom does not receive a theta role. A test for analysability is whether such an NP can be metaphorically extended to participle grammatically in some structure outside the idiom. Thus, for many people, the idiom in 59 is analysable, as seen in 60 with an idiomatic reading:

- (59) *The shit hit the fan.*
 (60) *The shit hit the fan and fouled up my day.*

With the idiomatic reading in 60, we have extended the metaphor of the idiom: co-ordination of the VP's is possible. Thus the NP *the shit* in 59 does receive a theta role for those speakers who can extend the idiom, getting sentences like 60 with the idiomatic reading. But not all speakers can do this; some speakers reject any playing around with extensions, and accordingly assign 60 only a literal reading. For such speakers, *the shit* in 59 does not get a theta role. If the lexical principle in 35 were part of the grammar of English (or of any other language that had unanalysable idioms which involved NP's in GF subject position), we'd be led to the regrettable conclusion that *the fan* in 59 is not accusative in Case for those speakers who reject 60 on the idiomatic reading. But then 59 would have a very different kind of Case structure (and I can't imagine what) from 61:

- (61) *The book hit the fan.*

A proponent of B's lexical principle might object to the above discussion, claiming that the speakers who don't get an idiomatic reading for 60 are aberrant: i.e., that all speakers should get an idiomatic reading for 60. Such a proponent might predict that unanalysable idioms must always be intransitive: the GF subject will not be theta-marked, no NP can call for accusative Case. This is false, however. The idiom in 62 is unanalysable, but it is clearly transitive:

- (62) *Little pitchers have big ears.*

Thus we must see the lack of theta-marking on a GF subject as divorced from Case-assigning properties of the relevant verb.

It is necessary, then, to reject the lexical principle in 35 on empirical grounds. But this lexical principle seems theoretically unsound in any case, because theta assignment and Case assignment are independent mechanisms which should not be linked in any way. (See also Davis 1966, who shows that making theta assignment dependent on Case creates several serious problems.)

4. B has written an encyclopedic and insightful book on Italian syntax, and has successfully argued for a syntactic class of ergative verbs in Italian. However, it is clear that ergative verbs in at least some languages (such as English) form a semantic rather than syntactic class: in particular, they are not transitive at any point in their lexical or syntactic analysis. Thus B's work should not be taken as applying automatically to the analysis of verbs in other languages. It seems we are back to an old problem, but in a new form. There was a time when many linguists thoughtlessly extended syntactic analyses of English constructions to other languages. We seem to have finally learned not to do that. But now, perhaps, we are too ready to extend analyses of constructions in other languages to English (or whatever other languages we are looking at), without carefully considering the reverberations of those analyses, and without strong syntactic motivation.

I urge all syntacticians to follow B's example with respect to the work he has done on Italian—his arguments are clear and copious—and I applaud the goal of finding general principles that will hold for language after language. Unfortunately, B's lexical principle in 35 does not hold even for Italian. Ac-

cordingly, Burzio's analysis of ergatives should not be extended to other languages without clear grammatical motivation in those languages, but should instead be considered an important step in the proper analysis of Italian grammar.

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[Received 13 April 1987.]