## Carl Bache: The Study of Aspect, Tense and Action. Towards a Theory of the Semantics of Grammatical Categories. Frankfurt am Main: Peter Lang, 1995

The main aim of the book is to explore "the problems of establishing tense, aspect and action as universal categories and of devising an adequate general metalanguage for their description in individual languages." (p. 14) This involves three concerns:

1) Theoretical and methodological deliberations on the status of universal grammar (mainly chapters 1-4). This is the most ambitious of the three and also the least successful.

2) A discussion of terminology and descriptive procedures (mainly chapters 5-6). This leads to refinements of the description of categorial distinction in general and of aspect in particular.

3) An application of theory and method to a particularized description of tense, aspect and action in English (chapter 7). This provides a concrete background on which to evaluate the merits of Bache's methodology.

In his introduction Bache finds universal grammar in a sorry state, at least as far as terminology in the description of verbal categories is concerned. He regrets the "extensive terminological imprecision [...] for which there really is little excuse" (p. 13). But his main theoretical concern is to clarify the relationship between the description of individual languages and universal grammar. He introduces a useful distinction between 'object language' and 'source language' as the designations of two different ways of looking at a particular language: as an object of description or as a source of knowledge of language in general.

However, his exploration of the relationship is somewhat inconclusive. On pp. 34-5 he feels "deep frustration" because of the elusiveness of universal categories, and finds that grammatical tradition cannot help because it "can only give us very vague, non-operational ideas about linguistic universals." Yet on p. 41 he asserts that "the influence of tradition [...] should not be undeestimated".

A good deal of chapter 2 is then taken up by a discussion of "analytic directionality", including primarily the problem of whether to define grammatical categories on the basis of form (i.e. Hjelmslev's *udtryk* 'expression') and then settle the question of their meaning (*indhold* 'content'), or to go from meaning to form; but 'directionality' is equally suitable as a term for the problem (discussed in the same chapter) of whether to establish universal categories first and then use them for the description of specific languages, or vice versa.

The two directionality problems are solved in similar ways, when Bache finds (p. 48) that "it does not really make sense to distinguish rigidly between a form-to-meaning approach and a meaning-to-form approach" and (on p. 36) advocates "some sort of inter-level approach where a kind of dialectic interaction between the language-specific level and the universal grammar is possible."

A major reason why Bache's attempt to place the 'grammatical category' between form and meaning and between language-specific and universal grammar is both longwinded and meandering, is, ironically, terminological: he leaves the definition of what exactly is meant by 'grammatical category' implicit. Admittedly, he does provide us with a number of clues to his thinking about this (especially later in the book), enough perhaps to enable us to work out what must be his definition. But it seems to me that if he had stated his understanding explicitly from the start, then – assuming that I have worked it out correctly – he would not have needed his discussion of directionalities. Let me try to clarify this.

First of all, 'category' presupposes distinction. A number of items (things, phenomena, sense impressions, or whatever) form a category if they are distinct from another set of items, which thus form another category. Secondly, simplifying somewhat, we may posit a difference between on the one hand conceptual (cognitive and perceptual) and on the other linguistic categories. We may presume that the latter is a subset of the former (it is difficult to imagine how we can make distinctions when we speak which we cannot also conceptualize).

Of the linguistic categories, some are lexical, in that we have (sets of) words that sum up one category as opposed to another. A simple example is the distinction between 'plants' and 'animals'. A less obvious one (though not less easily used and understood) is the distinction between 'saying' and 'talking', where (prototypically) *say* refers to an activity with both expression and content, whereas *talk* refers mainly to the expression side. There is no similar categorization that applies to other verbs of speech activity, such as *shout, mumble, write*. In other words, the codification of the distinction between 'saying' and 'talking' in English is peculiar to this pair of lexemes. Note that this distinction is independent of the difference in transitivity; and that the distinction can be made non-lexically, without using *say* and *talk*, i.e. syntactically/ textually - this presumably holds for all conceptual distinctions. (Interestingly, the similar distinction in Russian, between *skazat'* and *govorit'*, is usually treated as an instance of the grammatical category of aspect, presumably because Russian aspect is otherwise establishable as grammatical.)

Grammatical categories, on the other hand, are more widely distributed than lexical ones and indeed most often obligatory with large classes of lexemes. An obvious example is the distinction between singular and plural, which obliges us (in English and other Indo-european languages) to decide, whenever we use a referring expression, whether the referent belongs to one or the other category. Less obviously, perhaps, the use of personal pronouns (at least in the third person singular) obliges us to decide whether our referent belongs in either the human (*he, she*) or nonhuman categories (*it*). Bache provides further examples on pp. 109ff.

The wide distribution and obligatoriness of grammatical categories has two (related) consequences, viz., for one thing, that they are generally expressed by small and frequently used linguistic items (or even only structurally or distributionally, rather than morphematically), and, for another, that their meaning (their content side) may be more difficult to pin down than lexical meaning. This further means that for grammatical categories we may have to satisfy ourselves with a (proto)typical definition of their meaning, which can then be modified according to the context in which it is used. For instance, when we talk about 'hay' in English, we place it in the singular category, thus complicating the simple binary distinction with the term of uncountability. Usually what happens is that one term in a categorization is more elastic than the other, which we capture by saying that it is unmarked (or better, less marked) for the distinction in question.

In linguistic terminology a shift has taken place, so that we generally use the term 'grammatical category' to indicate, not the categories defined by the distinction that is their *raison d'être*, but the categorization/distinction itself. Hence we talk of the number category (meaning categorization), with the singular and plural as 'terms' in the category (what Bache calls category members, p. 94).

(Incidentally this shift in terminology is what allows extensions of the concept, as in Halliday's (1961) discussion of the 'categories of the theory of grammar'. It makes the concept much more powerful, but also much more complex.)

However, what emerges from this terminological clarification is, first, that a grammatical category is a linguistic category that finds expression (what Bache calls form) in grammar, defined as above, rather than in lexis; and that not any old expression (form) distinction will do: it has to be a sign distinction, i.e. one that is accompanied by a fairly stable content (meaning) distinction. Since expression and content are two sides of a coin, it does indeed not make sense to distinguish between a form-to-meaning approach and a meaning-toform approach.

As for the question of the other directionality (language-specific vs. universal) it is only a "temptation" to want universal grammar "to provide the constants needed to perform a language-specific analysis" (p. 31): given the definition of grammatical category and the nature of our data, we have no choice but to start with sign distinctions that are ubiquitous and obligatory in one language, define the content side of these distinctions, and then proceed to look for similar sign distinctions (whatever their expression) in other languages, preferably languages that are genetically and geographically unrelated to our initial source language. If this search is successful, i.e. if we find that similar distinctions are ubiquitously and obligatorily made in a number of other languages, then we may be on the way to establishing universal grammatical categories. (As is evidenced in modern typological-universal research, where corpora of several hundred languages are checked, there is a growing tendency towards setting very ambitious goals for the establishment of a category as universal, often resulting instead in typologies of languages, according to which grammatical features they display.)

This procedure is, in principle, simple enough, and is neatly suggested by Bache's concept of 'source language': it is precisely when we conceive of a language as a source of ideas about possible universal grammatical categories that we are able to realize how a specific-language description can help us in the search for universality. Given this simplicity, I do not understand why Bache finds it necessary to posit a "set of humanly conceivable notions" (p. 49), and to further suggest that "if grammatical categories are defined in conceptual terms they can, in principle, be directly examined for psychological plausibility and for universal grammar potentiality." (ibid.) It seems to me that all we need to begin with is an actual categorization in one language, and that its "universal grammar potentiality" then has to be determined empirically, not by any attempt to decide what is 'humanly conceivable' or 'psychologically plausible'.

However, a simple principle does not preclude practical difficulties, a major one being the definition of (the content side of) a sign distinction in one language, so as to make it possible to establish its similarity to a sign distinction in another language. This is well known in lexicography: there is hardly ever a one-to-one correlation between a lexical item in one language and a lexical item in another; in grammar such a correlation is even more difficult to establish, because of the ubiquity of the grammatical distinctions. It is in this area that Bache's methodological deliberations have something to offer.

(There are other practical difficulties but they are not Bache's concern and shall not be mine here either. However, one might mention Bell's (1978) dispassionate discussion of how many languages a corpus must contain in order to be universally representative - the figure he ends with is 478.)

Bache contributes to the discussion of grammatical categories in two major ways: his "sentence typology" (chapter 5) and his explicitation of terms in the category of action (chapter 7).

First of all it has to be noted that Bache's methodology is firmly rooted in the tradition that treats data by introspection and manipulation. The major tool in this connection is the commutation test, i.e. the procedure of making a minimal change in an expression in order to establish a concomitant change in content (Bache calls it a 'substitution test'). The purpose of Hjelmslev's (1966: 66) use of the commutation test was to ensure that there was a sign change at all: if a change in expression caused no content change, it was purely accidental and no part of language structure.

This test is well suited to obtaining a first approximation to the meaning of the type of elements that Bache is after; and it has in fact a long history in pedagogical grammar, because it illustrates, more clearly than any rule explanation can, the meaning difference between, say, the progressive and non-progressive verb forms. However, Bache adds a refinement by suggesting that the results of the commutation test can be classified in four types (Bache calls it a sentence typology, because not only the results, but by necessity also the sentences to which the test is applied, differ).

Bache's sentence typology predicts that when we try to make a minimal change in a sentence (such as changing from non-progressive to progressive) we have four possible outcomes: 1) the operation cannot be performed because of a systemic gap in grammatical structure; 2) the result is an ungrammatical sentence; 3) the result is grammatical, but the new sentence is referentially different, i.e. it has different truth conditions, from the original sentence; and 4) the result is grammatical, and the new sentence is only 'presentationally' different from the original.

The distinction between 'gap' and 'ungrammatical' is theoretically interesting, but Bache has little to say about it, and I agree that it is not of central relevance to his concern. Nor is the distinction between grammatical and ungrammatical: comparing these two is unlikely to give much information about the meaning of the element that makes the difference, however revealing it may be as to the feasibility of certain syntactic operations.

The distinction that interests Bache, and which I think represents an important insight, is the distinction between 'referential' and 'presentational' commutation changes. (These terms are my choice for the distinction - Bache hesitates between these and various other names, finally opting for 'extensional' and 'intensional'.) Let me give Bache's examples to clarify the distinction:

- [1a] The truck stopped for a red light.
- [1b] The truck was stopping for a red light.

- [2a] We celebrated Stephanie's birthday at my uncle's place.
- [2b] We were celebrating Stephanie's birthday at my uncle's place.

Given that it is the same truck (etc.), the truth of [1a] implies the truth of [1b], but not vice versa; that means they are referentially different: I can say [1b] without committing myself to the truth of [1a]. Conversely, [2a] and [2b] mutually imply each other; the difference is that I may choose to present the celebration as either a whole event [2a] or as an event in progress [2b]. In other words, in [1a-b] I choose between *referring* to two different events (however closely related), whereas in [2a-b] I choose between *presenting* my reference to an event in two different ways. (In fact examples like [1] are likely to involve a variation of both reference and presentation.)

Bache's point with this distinction is that when we try to determine the difference between the meanings of two different terms in a category, we should go for the type of commutation that involves a minimal change in both expression and content, in other words we should pay particular attention to commutations of the presentational type (without, as it turns out, ignoring possible referential commutations). This principle is significant when we come to the application of the terms in the category of action.

There are two problems with Bache's typology. The first is, as he carefully points out, that the distinction between his four types is difficult to establish: it is a continuum rather than four discrete types. This is a recurring phenomenon in language, and presents no real problem so long as it is taken into account. The other problem is potentially more serious and not noted by Bache: any linguist who sets out to establish the content of a category (like aspect) in a well-described language such as English, is likely to have fairly well established ideas of this content; hence the consideration of an example like [2] above is apt to be quickly over (the distinction between event and process), even if expanded withexplanatory and terminological embellishments.

It is therefore essential that the commutation test is the basis of only a first approximation to an explanation of these meaning differences (and Bache's refinement can help focussing these first considerations). But what must follow is an investigation of authentic examples in context, with particular attention to those that are not obvious instances of our preconceived notions of aspect in English. However, very few of Bache's examples smack of authenticity, rather they look like the prototypical examples found in pedagogical accounts of aspect; and context is something Bache manipulates (as on pp. 276f), not something that is given and has to be accounted for even if it presents a borderline case. To put it more generally, Bache is being very introspective throughout. The following example [3a] occurred in a recent Newsweek article, featuring Madeline

Albright's appointment to the post of Secretary of State. Applying the commutation test we get [3b]:

- [3a] She held the baby.
- [3b] She was holding the baby.

This looks like a neat parallel to the presentational difference in example [2] in both cases we are able to imagine [a] in a context that presupposes the event as a whole, and [b] in a context where the event in progress situates or backgrounds other events. The only problem is that when the whole context of [3a] is given, it fits better with the context I had imagined for [3b].

[3c] [MA is on a family visit to see her youngest grandchild] As she held the baby, she took a call from the White House.

The point is that even if I can see a particular shade of meaning conveyed by the use of *held* rather than *was holding*, even in this context, my ability to do so is based on past experience with the distinction between the two, not on the application of the commutation test.

However, the other important insight is represented by Bache's description of the terms of the action category and its interrelations with the category of aspect (chapter 7). Briefly, a sentence may express '-actionality' (i.e. either 'stative', cf. example [4] below, or 'habitual' [5]) or '+actionality'. If the latter it may be 'complex' (or 'iterative' [6]) or 'simplex'. If 'simplex' it may be 'punctual' [7] or 'durative'. If 'durative' it may be 'telic' [8] or 'atelic'. If 'atelic' it may be 'directed' [9] or 'self-contained' [10]. Note that only the terms given below are terminal in the system:

- [4] The castle stood on top of a hill. (stative)
- [5] He always brushed his teeth after breakfast. (habitual)
- [6] He jumped up and down for joy. (complex/iterative)
- [7] The balloons burst. (punctual)
- [8] He wrote her a second letter. (telic)
- [9] They approached the building. (directed)
- [10] After dinner they walked along the beach. (self-contained)

These actional values are part of the lexical meanings contained in the predicates: there is no consistent grammatical marker for any of them. For instance, the reason why we know that [5] is 'habitual' and not 'telic', is the adverbial *always*; and [8] is unlikely to be habitual because of the ordinal *second* in the object.

The categories of tense (past-present) and aspect (imperfective-perfective) differ from the category of action in two ways: they are binary, and they are closely (though not exclusively) tied to a specific grammatical marker. What

Bache finds here, is that a change in the grammatical marker for either tense or aspect often causes a change not only in tense or aspect, but also in actionality. Moreover he proposes that actionality changes are predictable on the basis of (in)compatibility relations between the individual terms of the three categories. For instance, he asserts that 'punctual' action is incompatible with 'imperfective' aspect, and predicts that the action value of [7] will therefore change from 'punctual' to either 'directed' or 'complex' if the aspect value is changed from perfective to imperfective, as in *The balloons were bursting*, which, depending on the context, may mean either that they were about to burst ('directed') or bursting all over the place ('complex').

These predictions Bache calls 'implicational rules', formalized (for 'punctual' and 'imperfective') as follows:

[11] The value 'punctual' is incompatible with the value 'imperfective'. Hence if the two co-occur, 'punctual' is replaced with an action value that is compatible with 'imperfective', i.e. 'complex' or 'directed' or 'self-contained'.

Co-occurrence is the result of the commutation test, as in:

[12a]	James died.	(punctual)
[12b]	James was dying.	(directed)
[13a]	The horse jumped.	(punctual)
[13b]	The horse was jumping.	(complex)

As already mentioned, I think that Bache's treatment of the action category, and in particular the implicational rules, represent an important insight. However, the rules also highlight the analytical status of the action category; because while it is quite clear that aspect can be manipulated by making a grammatical change, there is no similar way to establish the other relatum in the incompatibility relation: actionality is determined by the lexical items in the predicate. The commutation test goes from a to b, not the other way, for there is no general incompatibility between the 'perfective' (the non-progressive form) and the action value 'directed' or 'complex', as witness examples [6] and [9].

And so the question arises whether actionality really is a grammatical category. The subtitle of the book suggests that it is Bache's point of departure that it is, but on p. 254 he says

... action is not typically realized as a regular morphosyntactic category in particular verb systems but is rather expressed by means of derivational morphology, lexical periphrasis and grammatical subsystems with restricted scope of application [...] regular variation in actional meaning is often the result of tense and aspect operating on action.

Bache's justification for claiming that action is a grammatical category "is thus mainly its functional relationship with tense and especially aspect." This raises

some doubts as to whether my above definition of a grammatical category really fits with what Bache has in mind. I believe there are two ways in which to clarify the relationship.

One way is to refer to Whorfe's (1972 [1945]) distinction between 'phenotypes', i.e. categories with an obvious systematic expression (like tense and aspect in English); and 'cryptotypes', whose distinctiveness surfaces only in the operation of other categories. This fits with Bache's distinction (pp. 182ff) between 'a definition level of description', where we define "the values of the individual members of the category" (*in casu* tense and aspect); and 'a function level' where we "determine the interaction of the basic meanings of a metacategory with meanings from other categories, i.e. ... categorial interplay" (*in casu* action). It would seem that Bache's 'metacategory' (not otherwise defined) corresponds well with Whorfe's 'cryptotype'.

The other way is somewhat more speculative. For one thing I notice a basic similarity in the makeup of the action and aspect categories. Setting aside the values '-actional' and 'complex' (the latter is repeated punctuality), the essential terms of the action category range from 'punctual' (via 'telic' and 'directed') to 'self-contained'. The end points of this range are remarkably coincident with the terms of the aspect category: perfective and imperfective. Using complete-ness and incompleteness as cover terms for both categories, we find that complete or incomplete action values are realized as part of the complex lexica-lized meaning of verbal (or predicate) expressions, whereas complete or incomplete aspect values have their own grammatical expression. This explanation is supported by the observation made in connection with the discussion of [11-13] above, and is not vitiated by the fact that action value is sensitive to context: that holds for any semantic element.

On this basis one might suggest that our conceptual distinctions between various types of action have been lexicalized (in the diachronic development of the language), *including* their characteristic content of completeness or incompleteness (cp. also the discussion above of *say-talk* and the Russian *skazat'-govorit'*). On top of this some languages (possibly all) have developed a grammatical instrument designed, as it were, to enable language users to distinguish between completeness and incompleteness as an isolated synchronic choice as well. This does not disagree with Bache's conception of the categories, and it adds a further explanation of the similarity and specific correlation between action and aspect which also emerges from Bache's explanation. The correlation is further corroborated by Bache's treatment of categorial interplay: Action & Aspect gets 17 pages (pp. 283-8 & 293-305), whereas Tense & Aspect and Action & Tense get 8 pages in all (pp. 288-91 & 305-10).

It is to Bache's credit that he highlights the superordinate problems of describing the categories of aspect, tense, and action, and brings into play a number of new ideas for it. And in general the presentation is very clear and easy to follow (and occasionally to disagree with). However, I need to record also some of the presentational problems that I find in Bache's book.

The least one of these is terminology, but for someone who starts by deploring the lack of consistency in this area, Bache is remarkably lax, not in the terminology for the categories that are his special concern, but in the basic terms by which he anchors his description in the overall epistemological landscape. For instance, initially (p. 14, and passim, e.g. on p. 74) he uses 'metalanguage' to mean the language (terminology) in which we talk about linguistic categories. Yet later (e.g. pp. 95f & 101) 'metalanguage' is the abstract object language of universal grammar. Another instance is the use of 'conceptual', 'psychological' and 'cognitive' as (near?) synonyms (e.g. pp. 85f); it causes some confusion until one learns to ignore any preconceived idea of a distinction. A third instance is the use of the word 'focus' to cover practically the same meaning as 'aspect' (pp. 269f).

More seriously, it is clear that Bache is more at home with verbal categories than with universality; and one finds oneself regretting that he has no space at the end to test his descriptive procedures, and more particularly his hypothesis that the terms of the category of action and the implicational rules are universally applicable: his empirical perspective is limited to English, with a few Russian examples thrown in, fairly unsystematically, mainly to support the theoretical and methodological framework. But is it possible to make implicational rules work for Russian, say for a series like *kriknut'-krichat'-zakrichat'*?

And how do the categories of action and aspect apply to a language with no generally recognized aspectual category, like Danish? Can the use of expressions like *sidder/står/går og* or *være ved at / være i færd med* be explained by means of an interplay between aspect and action? Are these really grammatical categories in Danish?

A good deal of Bache's considerations of the principles of the search for universals, which take up chapters 1-6, would have been much more easily accessible if he had revealed from the outset his system of the categories, their use, and the categorial interplay between them, which is set out in chapter 7. I cannot help feeling that the order of his thinking must have been the other way round, and could profitably have been reflected in the order of presentation.

Another perspective: if the book is not just about aspect, tense, and action, but an essay "towards a theory of the semantics of grammatical categories", it would have been nice to know why Bache has singled out these three for special treatment: whether they form a distinct set, are considered particularly illustrative, or have been chosen at random. Further, to know what, if any, is their relationship to other verbal categories, such as modality, passivity, and perfect-pluperfect; how their universality is reflected in their diachronic development; and whether Bache believes that similar principles are likely to hold for other types of grammatical categories (the interplay between nominal number and countability suggests itself as a testing ground). A tall order perhaps; but within the scope of the title these issues at least deserve mention.

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