Empirical Approaches to Language Typology

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Viewpoint operators in European languages

1. Introduction

1.1. Purposes

The present contribution is a survey of viewpoint operators in European languages. These operators are conceived of as representing different concepts of terminality and operating on different actional contents in order to produce meanings within the semantic space of aspectotemporality. It is assumed that they constitute the cores of the European aspectotemporal systems and that it is possible to establish, by generalization from semantic values signalled by the language-specific categories concerned, a restricted set of basic crosslinguistic distinctions sufficient to determine these cores.

It is the intent of this study to present a model for differentiated interlingual comparison in viewpoint dimensions, the main questions being how certain basic categories within the aspectual-actional-temporal field are interrelated and by virtue of what values they contribute to aspectotemporal meanings in different languages. Looking at these questions in a way rather different from traditional approaches, I hope to be able to detect essential regularities in the interaction of linguistic values, to understand major similarities and differences between aspectotemporal systems, and to discriminate between certain properties covered by general typological terms such as "perfective" (PFV), "imperfective" (IPFV), "progressive" (PROG) and "perfect" (PF). The approach is in many respects compatible with the semantic tradition represented by Comrie (1976), though it tries to put more accent on properties of formal coding and on system comparison. While differing from genuinely substantialist proposals (Section 3.2), the study also aims at relating the findings to certain results of more ontologically oriented research in aspectology. The foundations of the model were laid in Johanson (1971), a study of Turkish "verbal aspect" in comparison with similar categories of other languages with special attention to the problem of finding a suitable framework in which aspectotemporal systems can be studied from a typological point of view.

The present survey is limited to viewpoint characterization of events as expressed by predications based on finite verb forms, disregarding similar notions represented in non-finite items such as converses and participles. Rather than dealing with a
handful of well-known representatives of "Standard Average European"; it aims at covering Europe in a broad geographical sense. On the other hand, it does not go into greater detail, does not take dialectal and social variation into account and largely disregards categories outside the core systems. As European aspectotemporal systems are the best studied in the world, there is abundant material available for comparison. The survey is based on extensive materials, data from grammatical studies of different kinds, my own text analyses, and questionnaires testing the use of categories in certain types of situations. However, it cites a limited number of examples – as far as possible condensed to subjectless forms of the third person singular – and gives relatively few explicit references to individual contributions. Existing descriptions are not always quoted in the traditional grammatical or typological terminology they are couched in. If my interpretations deviate from those offered in some of the sources, the reason is that my questions require partly different answers, since the goal lies beyond the scope of language-specific grammar, in an integrated theory of aspectotemporality. The sole purpose of the discussion is to sketch a general framework in which detailed typological descriptive work can be carried out. As this framework is also meant to elucidate how aspectotemporal structures come to function the way they do, the present paper should also be seen as a contribution to a typology of grammatical change.

A well-known problem resides in traditional terminological practices, according to which both viewpoint and actional categories represent "verbal aspect" in some sense. It is the contention of the present study that the two types do not represent semantic distinctions of the same kind. Without engaging in nonsensical discussions of "what aspect is" – as if a term should be protected from heretic definitions – it might be claimed that more precise and less idiosyncratic terms are needed to distinguish viewpoint categories from the actional contents they operate on. In the following discussion, however, viewpoint categories will frequently be referred to by the simple term "aspect", rather than by the tautological expression "viewpoint aspect" introduced in Smith (1991). While not incompatible with pre-Slavistic aspectual theory, this use of "aspect" is partly at variance with the Slavistic tradition. Given the long-standing privilege of Slavistics to define "verbal aspect", it may, for example, seem provocative to deal, as I shall venture to do here, with the Bulgarian perfective vs. imperfective duality as an actional rather than an aspectual opposition.

1.2. Three dimensions of aspectual terminality

To begin with, it might be useful to comment briefly on certain key notions, which will then be discussed at length in the relevant sections. The basic assumption is that a limited set of distinctions is needed to describe the aspectotemporal cores of European languages. The material available contains a great number of verbal categories representing different ways of conceptualizing and envisaging events in three dimensions of aspectual terminality. The distinctions are based on the following three notions:

Intraterminality, envisaging the event within its limits, intra terminum.
Postterminality, envisaging the event after the transgression of its relevant limit, post terminum.
Adterminality, envisaging the event in the attainment of its relevant limit, ad terminum.

Preliminary examples of these notions are Irish bhí ag scríobh 'was writing' (intraterminal), Albanian ka shkruar 'has written' (postterminal), and Czech napsal 'wrote, has written, had written' (adterminal). There is affinity, though by no means identity, between the three terminality notions and the categories "imperfective" (IPFV), "perfect" (PF), "perfective" (PFV) in current typological work on verbal aspect. The notion of relevant limit will be discussed in Section 5.

Aspects pertaining to the three dimensions impose different perspectives on events as described by predications. They do not describe an actional content as such, but express how it is conceptualized as occurrence (or negated occurrence). An event, abbreviated E, is an action conceived of as something being or becoming the case in some world. The term is thus used in a broad sense for a realized portion of an action. It includes both transitional events, which change situations, and non-transitional events, which do not. In many modern studies, the term "event" is restricted to the former category. A non-transitional event characterized by internal dynamics will be referred to as a processual one. The terms "state of affairs" and "situation" will be avoided, since they are too easily understood as a general situation described in a text.

An event has three main internal phases: a beginning (first limit, terminus initialis, initium), a course (cursus) and an end (second limit, terminus finalis, finis). A global event consists of one or more single basic events. A basic event may thus be a subevent of a global one. A global event may, even if it consists of a set of subevents, be uni-occasional, taking place on one single occasion, at one undivided time interval. A pluri-occasional global event is a set of identical subevents, distributed over several occasions, at clearly separated intervals along the time axis. Thus, in French écrivait chaque jour 'wrote every day', the aspect, an intraterminal viewpoint operator, characterizes a pluri-occasional global event consisting of a set of basic events.

Aspects are relational in the sense that they present events by relating their limits to some point of view, an orientation point, abbreviated O. Expressed in localistic terms, such points of view can be situated inside or outside the global event. The viewpoint notions are, however, not defined in dependence of time reference or of
2. Viewpoint operators

2.1. Characteristics of viewpoint categories

As has been stressed above, the difference between the operators and their operands, the objects of aspectual perspectivization, is basic to my approach. The distinction between viewpoint values and internal phase structure meanings inherent in actional content enables us to observe and understand their systematic interactions, affinities, and roles in forming central aspectotemporal systems, and the diachronic shifts among them. It was argued in Johanson (1971) that their interactional meanings are unintelligible unless they are taken to belong to different semantic levels. Sells accepts these considerations as "arguments décisifs" (1993: 24). Similarly, Bertinetto & Delfitto (this volume) stress the theoretical need to separate aspectual and actional content in order to grasp the intricate interplay of notions belonging to different conceptual domains. The task of aspect is thus not to transfer phase structures to actional contents that lack them as inherent properties. The fact that some phase structures prefer or avoid certain viewpoint operators is a matter of semantic fertility and infertility of the combinations in question and does not prove any equality of actional and aspectual meanings.

Viewpoint operators offer different choices for envisaging and presenting events as such, for opening perspectives on them and their internal phase structure, for viewing them in relation to their limits. They cannot specify the kind of event described, contribute to its definition, express ontological characteristics, or change the actional content they are chosen to operate on. What is conceived of as one and the same event is presented in different dimensions of terminality. The actional content is left intact and remains identical under different aspects, different ways of viewing the internal constituency of an event (cf. Comrie 1976: 3). Phases not highlighted by ad-, intra- or postterminality are only latent, "concealed", but not necessarily left unrealized in an objective sense.

The traditional description of actionality and aspect as "objective" vs. "subjective" is misleading. Even the choice of the actional content relies upon the encoder's conceptualization of the event and does not reflect the real world objectively. Events can be presented in subjective ways by actional categories as well. On the other hand, the choice of viewpoint operators is not subjective in terms of expressing the encoder's attitude or being primarily subject to stylistic aims. The optionality of aspectual choice is often misunderstood. If the viewpoint is determined by context and situation, the view cannot be totally free: there may then be one natural choice only. The operators are used in various discourse types to present events as related to each other and to certain occasions, as successive or overlapping, as cursus- or limit-oriented, etc. The restrictions found in coherent narratives are rather systematic and rather similar in different European languages. As is well known, there is usually
more freedom of choice if the event is presented as being isolated from a setting, without direct connection to other events. However, claiming that the aspect choice is not independent of what kind of situation is referred to is not equal to maintaining that aspeutal meanings are directly related to extralinguistic reality. Aspects do not signal that events themselves have properties that can be described as “imperfective”, “intratinal”, etc. Objectivism in this sense is as erroneous as the subjectivism it reacts against. It is necessary to find a viable path between the two extreme simplistic positions, the Scylla of “subjectivism” and the Charybdis of “realism”.

2.2. Viewpoint markers and values

Viewpoint operators are expressed by viewpoint markers. Most markers are combined aspectotemporal markers that determine events with respect to both aspeutal and temporal coordinates (Section 2.3). The following types of expression may be discerned with respect to interaction with actionality categories:

(i) A given viewpoint operator may have a special marker. This type, represented by the French Imparfait écrivait ‘wrote, was writing’, produces clear-cut form-meaning correspondecnes with respect to interaction with actionality categories.

(ii) A combined (portmanteau) marker may combine a viewpoint operator with a meaning component of actionality, thus expressing a certain interactional meaning. Two features that behave independently in one language may be fused in another language. Seen from the viewpoint of the latter, the fusion may look like a single feature. This morphological fusion of two categories, represented by the Russian perfective Past написал ‘wrote’, produces indistinct form-meaning correspondences.

Where no morphosyntactic viewpoint marker is available, there is of course no form-meaning correspondence and no systematic way of conveying a viewpoint content.

Adterminality (+AD), intratinality (+INTRA) and posttinality (+POST) will be dealt with as three different semantic values that aspect items may be marked for, if they enter into corresponding language-specific actional oppositions based on the features ±AD, ±INTRA and ±POST. The following conceptual and terminological distinctions are needed for the marked and unmarked categories:

intraatitude vs. nonintratinality
posttinality vs. nonposttinality
adterminality vs. nonadterminality

Compared with the traditional system going back to the Stoa, +INTRA and +POST items might be said to correspond to the so-called “definite tenses” (εὐθείας διάσωλος). +INTRA items are basically “paratatic” (paratíktos) and +POST items “syntelic” (syntéktos), whereas −INTRA and −POST items broadly correspond to the so-called “indefinite tenses” (εὐθείας διάσωλος); see Pohlenz (1959: 45–46).

Cooccurrence and competition of items is the basis for the formal coding of values within the oppositions and thus for the comparison of systems. Marked members of the oppositions are items with the values intratinality (+INTRA), posttinality (+POST), and adterminality (+AD), implying the positive notion. Unmarked members are items with the values nonintratinality (−INTRA), nonposttinality (−POST), and nonadterminality (−AD), implying negation of, or neutrality towards, the positive notion on a common basis of comparison (Johnsson 1971: 32–34). Items that are not members of such oppositions are indifferent to the values in question. However, an item may also be naturally characterized by a certain value though lacking a competing item in the same temporal stratum (Sections 2.3, 2.4). This kind of neutralization will be marked with the sign — e.g., +INTRA, +POST.

Viewpoint values serve as ingredients in processes of semantic composition, representing notions on the basis of which complex values are created. Note, however, that they are not conceived of as freely combinable minimal semantic building blocks. A notional system consisting of three oppositions involving three possible values each as basic parameters would indeed be overgenerating. The definitions of the values are generalizations based on different distinctions that may be empirically recognized in existing European languages. The interrelations of the values and the constraints on their combinability will be empirically determined and discussed below. Particular attention will be paid to the pitfalls of naive compositional morpheme-by-morpheme analysis (cf. Johanson 1973a).

Numerous European languages are equipped with both ±INTRA and ±POST categories, e.g., Romance, Turkic, Iranian, Modern Greek, Bulgarian, Albanian, Cauca- sian, eastern Finno-Ugrian. ±POST categories are also present in several Germanic and western Finno-Ugrian languages, etc. On the other hand, ±AD categories are only found in certain Slavic languages such as Russian, Polish, and Czech. The following examples demonstrate some possibilities of characterizing a past event expressed by a verb with the lexical meaning ‘write’. (Note that all items have complex values that are not fully specified here.)

+INTRA items marked for intratinality, e.g., Armenian գրում էր, English was writing
−INTRA items opposed to intratinality, e.g., Latin scripsit
+POST items marked for posttinality, e.g., Norwegian har skrevet, Finnish on kirjoittanut, Komi гизис
−POST items opposed to posttinality, e.g., Norwegian skrev, Finnish kirjoitti, Lithuanian raše, Latvian rakstīja, Komi гизис
+AD items marked for adterminality, e.g., Russian написал
−AD items opposed to adterminality, e.g., Russian писал
2.3. Viewpoint and tense

Aspectual and temporal meanings may coexist in one and the same item. The analysis of aspectual relations that will be proposed here differs considerably from certain temporalist and relational approaches which first establish "tenses" in Reichenbach's sense and then try to explain the inexplicable rest of the system in terms of some "as- 
ceptual" concept. The results of such analyses often seem to allege unmotivated differences in parts of the core systems where European languages are indeed astonishingly similar. The analysis suggested in the present paper takes the viewpoint 
perspectives to be primary forms of perceiving and envisaging events, and their temporalization to be a second step. Tense has no natural priority over viewpoint, 
temporalization being just one possible way of determining events. Viewpoint 
notions generally seem to be older than temporal ones, and some systems, e.g., those of Romance creoles, function entirely on non-temporalized viewpoint distinctions. 
My analysis is based on the contention that contemporary European languages give 
predominance to aspects and relations over temporal ones, the so-called tenses being the 
result of determination of aspectual values in different temporal strata. Thus, what 
a tense situates is the perspective on the event rather than the event itself (Johanson 1994).

The temporal order relation of anteriority holds between two points of time. One 
of them is the orientation point O, a primary or secondary deictic centre, typically 
referred to by adverbs such as English just. The second point is the localization 
point L. The anteriority relation implies that L is not necessarily the whole 
event as such is prior to O. Temporal and aspectual values combine in hierarchic 
structures, in which one value has scope over the other. Such structures will be 
represented by means of bracketing, e.g., +PAST (+INTRA) Italian scribes 'wrote', 
−PAST (+POST) Lithuanian yra parašęs 'has written', +PAST (+AD) Belarusian 
parši 'wrote, was writing'.

2.3.1. Orientation

The primary O, abbreviated O° (where S = 'speech act') is the primary deictic cen-
tre, the "present world" or "nunc", the core of which is the moment of encoding. In 
general, O will by default be interpreted as O°, if there are no contextual indications 
to the contrary. Relatedness to O will be referred to as primary orientation. 
Primarily oriented anteriority implies that L is temporally situated before O° ("absolute 
past reference") and thus indicates the situation of the encoder in relation to L. Pri-
marily oriented anteriority and nonanteriority are typically, though not exclusively, 
expressed by explicit ±PAST distinctions. The temporal notion involved has scope 
over the whole predication and situates aspectual and other perspectives on the event 
expressed.

The value +PAST signals remoteness in the sense of dissociation of L from the 
deictic centre O, e.g., wrote, was writing, had written. Many +PAST items may even 
express non-temporal remoteness in a counterfactual sense (Johanson 1971: 51– 
52). +PAST items that are not intraterminal and operate on transformative actional 
contexts may also be used to express a fictive accomplishment of an event, e.g., 
Modern Greek æghéa, Albanian ika, Turkish gittim, Hungarian már el is mentem ('I 
have already gone' = 'I am going now').

−PAST implies that no temporal order between O and an L is signalled, which 
does not, however, mean temporal indiscernible. Present tenses are typically un-
marked nonanterior. In many languages, absence of the normal +PAST marker, 
e.g., Turkish idi, Kalmyk bilâ, Maltese kien 'was', is understood as −PAST by de-
fault. Primary orientation produces present time readings. −PAST can also have 
future time reference, "futurate meaning", often with contextual support of a future 
time expression, e.g., German morgen an 'will call tomorrow'. Such uses convey 
relatively strong certainty regarding the actual occurrence, for example, according to some 
schedule, without the modal shades of meaning often present in prospective 
items (see below).

If the time established by the −PAST tense is O⁰, the given aspectual perspective 
is presented as valid at this point. The event referred to may be envisaged intrater-
minally, postterminally, or adterminally:

−PAST (+INTRA) "intraterminal-in-present" (with present time reference), e.g., 
French écrivit 'writes, is writing'
−PAST (+POST) "postterminal-in-present" (with past time reference), e.g., 
English has written
−PAST (+AD) "adterminal-in-present" (with future time reference), e.g., Russian 
napiset 'will write'

Temporal relatedness to a secondary deictic centre, O°, will be referred to as sec-
ondary orientation. O° is a contextually relevant temporal point, independent of O's, 
subjectively chosen or conditioned by the topic ("topic time", deictic centre of the 
"text world"), usually localizable by means of time expressions or dependent 
taxis, i.e. relatedness to other events denoted (Jakobson 1957: 8). It is established by any 
given item subject to linear successivity. If it is conceived of as a time axis situated 
in the past ("tune"), it coincides with the localization point: L = O°. The anteriority 
relation establishes a secondary point of view, at which viewpoint perspectives may 
be presented as valid. The three main aspects may thus be projected into the past as 
follows:

+PAST (+INTRA) "intraterminal-in-past", e.g., French écrivait 'was writing'
+PAST (+POST) "postterminal-in-past", e.g., Modern Greek exi ghrápsi 'had 
written'
+PAST (+AD) "adterminal-in-past", e.g., Russian napisat 'wrote'
European languages differ a great deal from each other with respect to anteriority marking. Many mark +PAST rather strictly, which means a high degree of grammaticalization in the sense of generalization. (Events located prior to O\(^2\) can, however, be referred to by -PAST items as "historical presents"). Less temporalized systems, particularly at historically earlier stages of development, dispense with marking intra- and postterminals for +PAST. Numerous Indo-European, Finno-Ugrian, Caucasian, Turkic, Mongolian and other languages possessing +PAST items may facultatively employ corresponding -PAST items in past narratives, i.e., use simple intra- and postterminals instead of intra- and postterminals-in-past, e.g., Turkish öldüyordu instead of öldüyüş "was dying" or öldüyüş instead of öldüyüş "had died". This is, for example, the case in those Slavic languages which have preserved a pluperfect (Makosov 1980: 54, 58–59). There are also reduced systems in which one single item represents the past and pre-past strata. No special +PAST (+POST\(^2\)) item is available, but only one general +POST\(^2\) item that is used to cover the pre-past stratum as well. Thus, the Hungarian item írt or the Polish item napisał covers the meanings 'has written / wrote / had written' etc. by means of one single anteriority marker; cf. Czech viděl 'saw / has seen / had seen', etc. The Irish Past tense is normally used in a similar way as a general anterior item, e.g., teigh sé an leabhar 'has read / read / had read the book'.

Some languages possess special devices to mark a remote past, e.g., the Kabardian suffix -ya-, added to the stem of the Simple Past: txa-ya-šë 'wrote long ago / once'.

Another possible perspective to be mentioned in connection with temporal interpretations is that of prospectivity, +PRO. It presents a non-realized event as foreseen (expected, intended, predicted, etc.) at some O. This projection into the future can be interpreted as relative posteriority ("conceived time"), though many +PRO items have modal (epistemic) shades of meaning, presenting the occurring as less certain. -PAST (+PRO) items, "prospectives-in-present", with readings such as 'shall, will, is supposed to, is expected to write', are, e.g., Turkish yazacak, German wird schreiben, Bulgarian še čete. With primary orientation, such items denote events foreseen to take place after O\(^2\). +PAST (+PRO) items, "prospectives-in-past", imply that the event is foreseen at an O\(^2\) prior to O\(^4\) (past future, futurum praetertitum), e.g., Turkish yazacak, Modern Greek tha éghráfe, Bulgarian šeše đa čete, Swedish skulle skriva 'would, should, was to, was going to write'. The event may just have been likely to happen at O\(^2\), or it may be known at O\(^2\) that it has actually taken place.

### 2.3.2. Temporal interpretations of viewpoint categories

Temporal interpretations may also be suggested by aspectual categories. +INTRA and -AD have a natural affinity with present time reference, +POST, +AD, -INTRA to past time reference. Intraterminality may be interpreted as simultaneity, postterminality as anteriority, etc. Thus, in Maltese, the postterminality of the Perfect and the intraterminality of the Imperfect are interpreted as relative past and non-past reference, respectively (cf. Comrie's discussion of literary Arabic 1976: 78–81).

+PAST (+POST) items, "postterminals-in-past", relate a postterrenal perspective to a past L = O\(^2\) and are thus temporally interpretable in terms of two anteriority relations ("past-in-past"). -PAST (+PRO (+POST)) items, "postterminals-in-future", imply that an O\(^2\) is foreseen, at which the relevant limit of the event is transgressed, and may thus be interpretable as posteriority + anteriority (perfectum futuri), e.g., will have written. +PAST (+PRO (+POST)) items, prospective "postterminals-in-past", imply that, at a past O\(^2\), a later O\(^3\) is foreseen, at which the relevant limit of the event is transgressed. It may be interpreted to the effect that the L of an anteriority relation also serves as the L of a posteriority relation (perfectum futuri praetertitum), e.g., Modern Greek tha khe ghrápsi 'would have written'.

Temporal interpretations of aspects are partly misleading, since the semantic functions are more complex and never strictly temporal (for Turkish, see Johanson 1994). Thus, a -PAST (+POST) item known as PF is not a simple past tense. On the other hand, it may develop diachronically into a general past. Many European languages possess generalized pasts going back to -PAST (+POST) items and used for both primarily and secondarily oriented anteriority, e.g., Hungarian írt, Maltese kteb 'has written, wrote'. A common meaning of such anterior items is that at least the relevant limit of the event is anterior to O.

The following discussions of viewpoint categories will focus on +PAST and -PAST items and largely disregard prospective items. With respect to the localization of events, three temporal reference strata will be assumed: a present (non-past) stratum, a simple past stratum, and a pre-past stratum. Among competing items in the simple past stratum are +PAST items such as wrote and was writing, but also primarily oriented -PAST (+POST) items such as has written. Items covering the present and pre-past strata are, due to lack of competition, mostly +INTRA\(^6\) and +POST\(^6\) items.

### 2.4. Combination of values

Combinations of values will be given in hierarchical notations which indicate the scope that the values have over each other. The formulae do not indicate indifference to values of other items. Examples:

+PAST (+INTRA)

-PAST (+INTRA\(^6\))

items marked for anteriority and intraterminality, e.g., Turkish yaziyor 'wrote, was writing', nonanterior, naturally intraterminal items lacking competing items in the same temporal stratum, e.g., French écrit 'writes, is writing'.
2.5. Degrees of focality

Another concept needed in order to capture the main distinctions observed within the aspectotemporal field is focality, of which intra- and postterminals may display higher or lower degrees. Both categories originate in the narrow ‘nunc’ perspective of the primary deictic 0, the common starting point of aspectotemporal developments (Johanson 1971: chapter 4, 8; 1993). Events that are current or (at least partly) past at 0 are naturally represented by intra- and postterminals respectively. Analogous perspectives applied at secondary orientation points ontogenetically derive from this primary “nunc” situation.

Now, psychological interest may focus more or less on the situation prevailing at 0. Focality is a scalar notion. Intra- and postterminals show higher or lower focality degrees depending on the relative narrowness of the range of vision determined by “nunc”. A rather rough division of the focality scales will suffice for the purposes of the present overview. I shall first distinguish focality (F) from nonfocality (NF), and then assume two degrees, relatively high (HF) vs. relatively low focality (LF). This yields the following subtypes with respect to intra- and postterminal focality:

- +INTRA^F (+INTRA^HF : +INTRA^LF) : +INTRA^NF
- +POST^F (+POST^HF : +POST^LF) : +POST^NF
- +INTRA^HF (high-focal intraterminality), e.g., English was writing.
- +INTRA^LF (low-focal intraterminality), e.g., French écrivais ‘was writing, wrote’.
- +INTRA^NF (nonfocal intraterminality), e.g., Turkish yaz突发事件 ‘wrote, would write, used to write’.
- +POST^HF (high-focal postterminality), e.g., East Armenian երեկոյ ‘has written’.
- +POST^LF (low-focal postterminality), e.g., Norwegian har skrevet ‘has written’.
- +POST^NF (nonfocal postterminality), e.g., South German hat geschrieben ‘has written, wrote’.

It should be stressed that the definitions given for +INTRA and +POST apply, in their full sense, to focal items only. Nonfocals are atrophic items that do not do full justice to the original terminal notions but represent them in a weak or diluted way. In a strict sense, we might rather consider them ex-postterminals and ex-intraterminals. Since they are not opposites, items competing with corresponding minus items, +INTRA^NF and +POST^NF items might also be written +INTRA^0 and +POST^0.

Though the degrees indicated above should not be conceived of as absolute positions, +INTRA^HF roughly corresponds to “progressives”, +INTRA^LF to “continuous” and “habitual” items, and +INTRA^NF to more general items. Similarly, +POST^HF may be said to correspond to “statives” and “resultatives”, +POST^LF to “perfects” and “constatives”, and +POST^NF to more general items. Focal +INTRA and +POST items imply “dwelling” in a given intra- or postterminal state. Intra- and postterminals items permanently move on the gliding focality scale: their history is characterized by a successive decrease in focality, defocalization processes. +INTRA^LF and +POST^LF items are frequently replaced by former high-focals. There are also language-specific oppositions with respect to the degree of focality, ±FOC. Note that if a +INTRA or +POST item is high-focal, the corresponding −INTRA or −POST item has a broader use than one opposed to a low-focal. A +INTRA^HF and a +INTRA^LF item may fuse into an undifferentiated +INTRA^F item; a +POST^HF and a +POST^LF item may fuse into a +POST^F item. On the other hand, undifferentiated +INTRA^F or +POST^F items may split into high- and low-focals. The high-focals that tend to replace the low-focals are derived items, frequently of an analytical nature.

Focality degrees do not determine whether a given item is more or less “aspectual” or “temporal”. All intra- and postterminals are temporally interpretable viewpoint operators. The scalar nature of focality means that if an intra- or postterminal in language A has a more restricted range of uses than a corresponding item in language B, it may have a higher degree of focality. The functional difference does not necessarily imply that A has a specific feature absent in B, but only that the given common feature is represented to a higher degree in A than in B. Note that covering – being used for – situations that allow characterization by higher focality is not equal to expressing a higher degree. Lower items on the scales often cover ontological situation types represented by higher ones. A lower item in language A may be used for situation types that require a higher item in B. Thus, general presents and pasts such as German schreibt and hat geschrieben may cover, without being focal themselves, situations requiring an English is writing and has written respectively. Even within one and the same language, a lower item X may occasionally be used instead of a higher item Y for one and the same situation, without signifying the higher degree.

2.6. Actional content

As we have noted, one of the parameters of aspectotemporality is the actional content. Interaction with actional categories is crucial for the semantic and pragmatic
realization of viewpoint operators. The event referred to is expressed by a predicative, the nominals of which refer to entities and whose predicate core denotes properties of, and relations between, these entities. The predication is assigned an actional content, which concerns the lexical semantics of the predication and includes various qualitative-quantitative properties as objective content restrictions. The actional content will also be referred to as actionality and actional properties. Actional notions are dealt with in the literature under various headings such as "aspect", "aspectuality", "aspectual character", or "Aktionsart" in the classical sense of "die Art und Weise, wie die Handlung des Verbums vor sich geht" (Bringmann 1904: 493). Note again that, in the present framework, the actional content is not taken to include viewpoint distinctions or to represent "aspectual character" of the kind claimed to "rest ultimately upon the same ontological distinctions" as aspect (Lyons 1977: 706).

The actional parameters most relevant for viewpoint distinctions are those of the internal phase structure. Whether explicit (overtly signalled) or implicit (covert), they serve as criteria for dividing actional phrases into aspect-sensitive semantic classes (Section 5) and are thus fundamental to a precise understanding of aspecual realizations. Phase structure properties are not, as viewpoint operators, relational in the sense of presenting events in relation to orientation points. They display a good deal of language-specific variation, but also strong crosslinguistic correspondences. As already mentioned, an aspect may be more or less fertile in combination with a given actional content. Aspectoactional combinations will be written with the sign ×. Thus, the formula +PAST (+INTRA) × [+t] denotes 'intraterminality-in-past operating on an actional phrase of a transformative phase structure'.

Several European languages make systematic use of special modes of action expressing phase structure properties. The explicit marking of transformativity and nontransformativity will be referred to as +T-marking and -T-marking (Sections 6.3, 6.5). Russian-type perfectives will be dealt with as combined +AD- and +T-markers.

### 2.7. Core systems, peripheries, preaspectuals

The systems of viewpoint operators hold central positions in the grammars of European languages. However, formal elements found in the cores frequently also take a productive part in more or less comprehensive peripheral systems of periphrastic constructions. The high expandability of some systems (Turkish, Estonian, etc.) may even cause difficulties in delimiting the basic inventories of regular grammatical items. In spite of such difficulties, it seems necessary to distinguish, in principle, between more central items and more peripheral ones.

One important criterion of aspect grammaticalization is the degree of generalization of the use, often inadequately referred to as the degree of "obligatoriness".

Relevant questions are whether a given item only applies to certain parts of the lexicon, to what extent it rules out alternative items or can be replaced by other items, etc. Peripheral items have a less generalized use than central ones. For example, several French aspect-like periphrases are still peripheral, preaspectual items outside "la conjagation française orthodoxe" (Kurylowicz 1956: 27). Thus, est en train d'écrire 'is writing' is not yet a full-fledged -PAST (+INTRA) item of the core system. The same is true of vient d'écrire, venait d'écrire, a été en train d'écrire, and avait été en train d'écrire, corresponding to the English core item -PAST (+POST) 'has written', +PAST (+POST) 'had written', -PAST (+POST (+INTRA)) 'has been writing' and +PAST (+POST (+INTRA)) 'had been writing'.

Peripheral items often prefer to operate on actional contents of certain types. On the other hand, they may combine with different tense and mood categories. They may be semantically more specific, but even if they express similar notions of terminality as the grammaticalized aspects, they are usually non-oppositional, not taking part in firmly established aspecual oppositions of the kind mentioned. Central, genuine viewpoint items have a highly generalized use, a wider applicability to actional contents, and possess an aspecto-temporally determining force, referring exclusively to events, notably global events. Aspectual characterization typically concerns the global event. For example, adterminality does not operate at the subevent level, whereas actional transformativity does.

Since there are diachronic developments leading from peripheral constructions without aspecto-temporally determining force to highly grammaticalized viewpoint operators, we may in many cases speak of preaspectual items. They do not reach the degree of generalization expected from aspectoteneses. When actional concepts are further grammaticalized to express viewpoint, the development typically includes generalization, compatibility with more actional contents. The more limited the applicability of a preaspectual marker is, the longer its way is to the status of a viewpoint operator. For example, certain items originating in completive modes of action pass through limit-specifying stages before becoming +AD operators. Other preaspectual items, cursus-specifying statals and items specifying a posttransformational phase, may develop into high-focal +INTRA and +POST operators. Thus, Turkic postverb constructions convert + auxiliary tur- 'stand' are confined to certain lexeme types as markers of actionality, but are freely combinable as intraterminals (p-tur-o) and postterminals (p-tur-ur), e.g., Nogai yazip tura 'writes', Karachi fajibdi 'has written' (Johanson 1995).

It may be difficult to distinguish a preaspectual stage from an early aspecual stage, for example, when a +T-marker has just become a +AD marker, or while an intraterminal or postterminal is still high-focal ("progressive", "resultative"). Whereas aspecual characterization typically concerns the global event, there are high-focal intraterminals that also operate on subevents. There are also preaspectual constructions expressing high-focal terminality notions without taking part in aspecual op-
positions, and lexicalizations based on the notions of intra- and postterminality, e.g., English *interesting, interested*. In some cases it may even be difficult to distinguish preaspectual stages from stages of subsequent defocalization processes.

2.8. Set and non-set events, linear successivity

A few further notions relevant to the use of aspects should be added at this point. First, past items can be interpreted more or less *diagnostically or historically*, as focusing the attention more on the O (orientation point) or on the L (localization point) of the temporal relation. A central discourse function of historical items is to carry the main row of events in narratives subject to linear successivity. Historical-diagnostic items represent both the event as related to L and its validity at O.

In the historical dimension, an event can be presented as more or less *set*, occurring in a particular setting, or *non-set*. A temporally set event is conceived of as taking place on a specific occasion, a sequentially set event as part of a chain of events. In a particular setting defined by a narrative, an event may be presented as linked to a preceding and/or a following event. The principle of linear successivity (Johanson 1971: 246–247) implies that several events presented one after another are most naturally interpreted as proceeding in linear time as a temporal sequence in the sense of ‘did x and [then] did y’. This linkage does not, however, imply that the end of one event necessarily coincides with the beginning of the next one. Though not signalled explicitly, the order of events is suggested iconically by the order of the items. Aspecto-temporal items are called *propulsive* if they allow this interpretation, i.e., produce progression in a narrative, and non-propulsive or *rheumatic* if they are unable to advance the plot and thus disrupt the successivity (‘in sequence’ vs. ‘out of sequence’). However, it is often difficult to decide whether linearity suggests a strict temporal sequence or another kind of ordering of events.

An event can also be thought of as isolated from a sequential setting, without direct connection to other events. Events outside strict temporal and sequential settings are often relatively open to aspecto-temporal conceptualization and display more variation in this respect than set events. Unlike many aspectologists, I do not consider the aspectual oppositions neutralized when their members are applied to such situations.

2.9. Textual behaviour

My analysis differs from attempts at equating viewpoint values with discourse functions, reducing them to certain features of the textual behaviour of the items concerned.

Oppositions in the viewpoint dimensions serve to express dynamics in discourse structure, for example, to relate events to each other. None seems to be restricted to presenting individual events in particular contexts, to expressing “aspect in the narrow sense” as distinguished from “syntactic aspect” (Galton 1962: 18–21). Viewpoint distinctions are basic to the organization of narrative discourse and contribute to assigning aspecto-temporal orientations to series of events, to presenting them as non-transitional or transitional, as temporally successive or overlapping, etc. +AD, −INTRA and −POST past items are typically propulsive, used for narration of sequences of events. +INTRA, −AD and +POST items are typically rheumatic. The former often fulfill “foregrounding” functions, forming sequences that carry the main narrative line. The latter are often used as “backgrounding” descriptive or commenting devices (Johanson 1971: 234–254; cf. Weinrich 1964; Hopper 1979). High-focal +INTRA and +POST items are particularly incompatible with narrative sequence.

Aspectual-actional-temporal items of different kinds meet similar discourse exigencies in different languages. Though actionality, aspect and tense are categorically distinct, their interactions contribute to textual functions of essentially the same nature. Descriptions of discourse structure thus give indispensable insights into the functioning of viewpoint categories. Aspectuotional combinations produce more or less cursus-oriented or limit-oriented readings and may suggest, without being modes of action, a dwelling in an event, an entry into it, an exit from it, or its mere occurrence. Members of ±INTRA and ±AD oppositions are known to fulfill similar textual functions. For analogies between the Turkish and Russian past tense oppositions *yayordu* ‘wrote, was writing’ vs. *yazdı* ‘wrote’ and *pisal* ‘wrote, was writing’ vs. *napisal* ‘wrote’, see Johanson (1971: 93). These oppositions constitute what was referred to as the “main aspect opposition” (“Hauptaspektgegensatz”), used for situation description and situation change, for example, within the so-called “incidental schema” ("Inzidenzschema"); Pollak 1960: 132–133; cf. Bertinetto, Ebert & De Groot, this volume, fn. 8). It is thus clear that essential functions of viewpoint categories are related to the discourse and cannot be described without discourse analysis. It is of utmost importance to describe the connections of viewpoint distinctions with lexical and propositional meanings, notably with the temporal sequence of phases of the actional content.

On the other hand, the uses just mentioned do not cover all cases of aspectual relevance and are not sufficient to determine the values of the items in the sense of the pertinent semantic features involved. Viewpoint operators do not just serve the organization of narrative discourse and cannot, as linguistic categories, be assigned meaning in terms of context-dependent functions only. Though they do contribute to the textual functions mentioned, their semantics cannot be equated with their functions within the textual loom of situations, i.e., they cannot be defined in exclusively discourse-pragmatic terms as a means of expressing phases of actions, situation and situation change, succession and parallelity of events. In spite of all affinities between aspects and textual function types, no precise correspondences have been demonstrated. For example, it has not been possible to set up well-defined
aspects on the basis of "foregrounding" and "backgrounding" in narrative discourse. Such distinctions seem too vague to define aspeical values.

It is thus necessary to detect and define the semantic values that make the textual behaviour possible (Johanson 1971: 246). The typologist should not only register "broadly similar" functions at the textual level, but also try to determine, interpret and explain the similarities and differences observed. Textual functions are not identical to, but fulfilled by virtue of, specific perspectival values, which should therefore be pinpointed as precisely as possible.

2.10. Relations to traditional categories and terms

The specific terminality notions suggested within the present framework are intended to cover the aspectotemporal field in a more precise way than typological categories such as IPFV, PFV, PF, PROG seem to do. This, naturally, does not exclude similarities between the two kinds of notions. For example, it is possible to assume basic IPFV vs. PFV correlations offering the option of presenting or viewing an event as 'a single whole' or not, i.e. enabling the encoder to describe it, according to what he or she is concerned with, as a totality or as something unfolding, with specific attention to its internal structure (Comrie 1976: 3, 16). It may then be said that PFV and IPFV items are typically used to characterize events textually in an integral ("bounded") and non-integral ("non-bounded") way, respectively. However, the somewhat different idea that aspect is characterizable in terms of completion and non-completion often leads to misinterpretations of the aspectual content. Many so-called PFV items capable of conveying complete single events are aspectually unqualified or less qualified (nonpostterminal and/or nonintraterminal) items. With transformative actional contents, even items void of viewpoint content may imply completion.

The present framework differs from traditional approaches by distinguishing types of IPFV and PFV items. It also connects certain isolated traditional categories with each other on the focality scales. Thus, statics and resultatives, which are usually not classified as PFV or IPFV (cf. the "y" items in Kuryłowicz 1956: 27), appear as high-focal postterminals. PROG items are similarly connected with other intraterminals as high-focal variants. Note that the allegedly typical aspectuality 'progressivity' vs. 'totality' is not realized explicitly in any language-specific opposition, since the value +INTRA, which is needed for progressivity, and the value +AD, needed for explicit totality, do not occur in the same aspect systems.

In traditional aspectological literature, the terms "perfective" and "imperfective" are used in various meanings, corresponding to different notions as distinguished in the present framework:

(i) Morphological categories of the Slavic type (Russian, Bulgarian, etc.), in the following referred to as perfective (pf.) and imperfective (ipf.).

(ii) Crosslinguistic aspect types, in the following referred to as PFV and IPFV.

(iii) Viewpoint operators of the Russian type, in the following referred to as adterminal (+AD) and nonadterminal (−AD).

(iv) Viewpoint operators of the Romance type, in the following referred to as intraterminal (+INTRA) and nonintraterminal (−INTRA).

(v) Actional markers, in the following referred to as T-markers and −T-markers.

The terms "bounded" and "non-bounded" will not be employed here, since they are also used in various meanings, sometimes indiscriminately for integral vs. non-integral textual representation, transformative vs. nontransformative actional content, and telic vs. atelic properties of the events referred to. More terminological precision is needed if we are to avoid talking of "bounded" and "non-bounded" situations expressed by "bounded" and "non-bounded" sentences containing "bounded" and "non-bounded" grammatical categories, etc.

3. Crosslinguistic types of categories

3.1. An external tertium comparationis

A few comments are necessary on the problem of setting up crosslinguistic types of categories in the conceptual space of aspectotemporality. Languages obviously delimit and divide this space differently, and there is no universally valid viewpoint system. As no two categories occupy exactly the same position, all analogies will prove approximate. How can one determine the types of distinctions suited for interlingual functional comparison? On the one hand, since grammatical meaning is language-specific, the point of departure must be empirical observations on concrete languages, system-based analyses of meaning and use (semantics, pragmatics), relying on linguistic reality. On the other hand, since linguistic values determined within differently structured systems cannot be compared with each other in a direct way, an external tertium comparationis is required for crosslinguistic research on assignment of aspectotemporal functions.

3.2. Notional and situational classifications

To arrive at the necessary generalizations, empirical methods are obviously required. One danger potentially threatening all approaches is that preconceived semantic notions are imputed to a given material, so that linguistic facts are violated and adjusted to a foreign scheme. This may be done by aprioristic application of distinctions peculiar to the linguist's mother-tongue or some well-known language such as Latin, English, or, as frequently in aspectology, a Slavic language. There have been strong
tendencies towards hyposatizing members of specific Slavic oppositions as if they represented fixed values and transferring them to other systems (Rundgren 1963: 55–56). Needless to say, no individual language can be taken as the standard of comparison or as the point of departure for generalization. No aspectual category of Irish, Bulgarian, Albanian, or Tatar is identical to any category of English or Russian. But inductive attempts at establishing, by abstraction, general concepts based on language-specific ones may also be dangerous. Language-specific concepts known under labels such as “imperfective”, “perfect”, etc. are not generalizable beyond particular stages of development of individual languages. Empirical bases of comparison that are too narrow may yield types such as the “perfect” (PF), which has few clear representatives in the whole set of languages compared and often a peculiarly vague status even in languages where it does occur. Typically enough, it has sometimes been characterized as a “free-floating gram”.

Numerous attempts at defining crosslinguistic types proceed from the question how certain general types of referential meaning are encoded language-specifically, trying to arrive at generalizations anchored outside language, in some ontological, psychological or logical “reality”.

One kind of solution is offered by purely notional systems with intentionally defined distinctive features. Even if there may be reasons to assume, behind the diversity of languages, cognitive categories common to all humans, such assumptions do not legitimate aprioristic approaches. The claim that basically the same linguistic features are common to all languages still lacks substantiation. In default of such evidence, interlingual comparison cannot be used to prove, for example, that an autonomous linguistic feature present in languages A and B must also be present in language C, though not formally signalled there. Preconceived metalinguistic schemes based on the application of notions from logical semantics, on one hand, often predict meanings that are not systematically reflected in natural languages, and, on the other hand, fail to predict meanings that are actually expressed.

Many typologists operate with ontological classifications, grouping together language-specific grammatical devices in types and subtypes according to the referential range of their applications, i.e., their use to represent certain types of extralinguistic situations. Such approaches are onomasiological, starting from situation types and trying to systematize the possibilities of expressing them. The problem addressed in our case is: “What devices do speakers of European languages use when verbalizing certain types of “aspectual” situations?” This may even result in certain situations being defined as “PF situations”, “IPFV situations”, etc., something which consequently motivates questions such as “How does language X behave when it needs to express PF, IPFV, etc.?”. A general problem – seldom dealt with explicitly, and mostly solved intuitively – is how to establish the types in question. A well-argued taxonomy of situational contexts is needed if such substantalist approaches are to yield more than trivial results. Statements to the effect that IPFV items denote “IPFV situations”, etc., are of course useless unless clear-cut criteria are given for associating the given grammatical devices with extralinguistic types.

Purely ontological classifications may lead far from what is actually coded by the devices in question and fail to capture essential differences between the linguistic categories lumped together. It may even turn out that aspectually relevant language-specific categories do not fit into any of the types unless some of their essential semantic properties are disregarded. Some are only marginally correlated to the type they are claimed to represent, their main language-specific functions being irrelevant to the definition. Some typologists working in the field of aspect and tense operate with “prototypical uses” that only determine semantic foci and leave the peripheries unspecified. Similarly used language-specific items are subsumed under crosslinguistic types (e.g., the “gram-types” in Bybee & Dahl 1989), the semantic structure of which is conceived of as a “radial structure” with a prototype focus and extensions. Needless to say, such approaches require clear criteria both for “similar uses” and for identifying certain uses as central as compared to the rest.

If such clear criteria are really available, we may observe cases in which a given item A displays a broad similarity with an item B in the sense that both are used in very much the same set of situational contexts. On the other hand, less adequate criteria may lead us to ignore semantically important uses outside the foci and thus also essential differences between the broadly similar items. The observation that an item A is similar to an item B with respect to certain uses may prove relatively unessential for the semantics of A. The latter may play a clear-cut language-specific role, but still prove to be just marginally correlated to the type it is supposed to instantiate. If A does not exhibit the similarity required, it may be classified as a “default” category, not correlated to any type at all, without prototypical characterization. This may even befall items that have clear semantic profiles in their specific systems, e.g., the Turkic so-called Aorists (e.g., Turkish yaz Hacker as “to will”). Such cases may indicate that the focal uses postulated are insufficient as a basis of classification and that the crosslinguistic types proposed should be reconsidered and defined in a more differentiated way.

The use of items in certain types of situations is no doubt an important part of the study of viewpoint operators. However, the expression-function correspondences remain unclear unless the results are put into a semantic framework where they can be compared to the linguistic values of the items involved. The analysis must be supplemented by a further analysis that makes the semantic connections between interrelated categories visible and intelligible. Bybee & Dahl talk of a “gram” as having inherent semantic substance reflecting the history of its development as much as the place it occupies in a synchronic system (1989: 97). A clear consequence of this is that the “substance” must be defined properly. In order to determine the place of a given item in a synchronic system, it is not sufficient to observe its use in certain types of extralinguistic situations and broadly similar uses of items in
other languages. However, arguing that contextual uses should be distinguished from grammatical meaning is not tantamount to objecting to situational classifications as such. Two points should be stressed to make this standpoint clear: (i) the place an item occupies in its system is certainly not a sufficient basis for typological research, and (ii) there is certainly no contradiction between grammatical meaning and use, if the latter is captured adequately. I assume that "gram-type" approaches and system-based ones yield complementary results and consider both necessary for the typological description of European languages (cf. Csató 1992).

### 3.3. A flexible framework connecting conceptual content with language-specific structures

In much contemporary work on aspect, category types are defined in absolute terms and established as fixed functional stations – PFV, IPFV, PROG, PF, etc. – to which aspectual realizations in different languages are linked. The positions are usually not clearly ordered in relation to one another and, if interconnected at all, are connected not clear-cut categories. Thus, according to current definitions, Turkish lacks both a PF and a PROG, though it obviously possesses closely related categories. The range of variation within the space of aspectotemporality rather calls for approaches that account more properly for differences and similarities and make the category types comparable to each other, intra- and interlingually, rather than representing them as isolated, unconnected points in the space. The kind of framework argued for here should be a more flexible one: a pluri-dimensional space of viewpoint values with definitions formulated in relational and partly scalar terms. In such a framework, Turkish might, for example, possess postterminals with a clear affinity with the PF type and intraterminals that differ from the PROG type by a lower focality degree.

For a typology within the space of aspectotemporality, general cognitive-conceptual reference is the necessary tertium comparisonis on the basis of which language-specific categories can be evaluated and compared. A typologist dealing with European viewpoint categories should compare their reference fields, determine which language-specific categories are "broadly similar" with respect to these fields, and set up possible reference types. A linguistically based conceptual network is needed that not only covers certain fixed points in the space of aspectotemporality but can also capture intermediate positions whose relevance is obvious, for example, from diachronic developments of viewpoint operators.

Deductive typological analyses should make use of results gained in inductive research, in detailed system-based descriptive work. Attempts at setting up basic types will yield better results if more attention is paid to immanent structures, concepts systematically expressed in languages by overtly marked or formally detectable covert categories. The basis should be linguistic rather than extralinguistic reality in the sense that the elements constituting the types are the ones typically found in natural languages. Statements on functional similarities and differences between categories should rest on what they actually signal in their systems. It should be asked by virtue of what structural qualities they are similar and / or different.

The claim that each language, as a first step, be described in its own terms does not represent a relativist view incompatible with crosslinguistic comparison. Only this procedure will enable us to show that both the conceptual space of aspectotemporality and its structuring are largely common to languages of different types, that the connections of cognitive-conceptual content with language-specific structures are far from random, that the number of connection types is not unlimited, that the relevant language-specific content categories form – on the basis of considerable similarities with respect to their reference fields – a restricted set of grammeme types, and that it might thus be possible to find prototypical connections of cognitive categories with language-specific structures. The obviously strong constraints upon the structures of central aspectotemporal systems of European languages seem rather promising in this respect.

An approach of the kind suggested here should avoid common typological fallacies such as equating crosslinguistic and language-specific categories and reducing the levels of description to the effect that important typological features of the languages compared cannot be captured (Csató 1992: 31–32). It should use variation in order to recognize invariants, pertinent common functional denominators. It should establish linguistic values without a conceptual realism that hypostatizes them. The values themselves, however, should be capable of being projected on extralinguistic reality. The goal would be a system of relevant conceptual coordinates determined by different configurations of values. Classifications of categories according to this coordinate system would yield different crosslinguistic types. No such type would be semantically identical to any individual category belonging to it. The values established would by definition be too general to predict the exact uses of the items.

### 3.4. Viewpoint values

The functions of the items studied are products of interacting aspeuctual, actional and temporal values but also of other factors involved in the communication. The values are conceived of as unique combinatory potentials, relatively context-independent meanings, unifying different uses at a higher level of abstraction. In order to spec-
ify values, the linguist must try to subtract *determining factors*, identify meanings common to the majority of uses and formulate them as adequately as possible. The combinatory variants produced by determining factors are instantiations of the relatively invariant meaning. Thus, context-dependent readings of intraterinals such as ‘simultaneity’, ‘inherence’, ‘manner’, and ‘instrumentality’ are all submeanings derivable from the value \(+\text{INTRA}\). Values in this sense have little in common with caricature pictures of “near structuralist meanings” of a simplistic kind. They are determined by observing and describing systematic interactional processes. When establishing them, the linguist must neglect certain differences in favour of overall resemblances, but this does not imply that the differences might be overlooked in the total description.

The precise language-specific functions and their distribution depend on the number of items and their oppositional configurations. The differences show up in the clearest way in discourse types that allow for maximal competition of the items involved. In contexts where one particular viewpoint operator is the only natural choice, its central meaning is most readily discerned. There may also be marginal uses in which the value seems weak or absent. If a common feature posited fails to unify the uses, prototype semantics, with as adequately defined foci as possible, may prove useful.

The values of the items arise within the oppositions they enter into. Since the interaction of values is crucial, no item can be treated “in its own right”. The individual category as such, without connections to others, is not a relevant entity for the study of grammatical meaning. The distinction between semantically marked and unmarked categories is also necessary; see Johanson (1971: 28–36) and Conrie’s remarks on the effects of the functioning of a category as the marked or the unmarked member of a binary aspect opposition (1976: 21, 112). The asymmetry arising from this distinction will have important consequences for the analysis. The marked member, e.g., a \(+\text{INTRA}\) item, represents a *differentia specifica* on the basis of a common genus proximum, while the unmarked member, e.g., a \(-\text{INTRA}\) item, takes up the space left over by the marked one, representing the absence of the positive concept and thus both a negative and a neutral value (Johanson 1971: 32–35). The marked item signals the plus value, whereas the opposing item lacks this value and gets its weaker values by default. All values derive their precise meanings from the context, but the values of unmarked categories are more dependent on the context than those of the marked ones. Unmarkedness of this kind is a well-known linguistic phenomenon. If, to cite a simple example, the values \(\text{[young]}\) and \(\text{[male]}\) are assigned to English *duckling* and German *Entenich* ‘drake’ respectively, *duck* and *Ente* may be assigned both negative values – \(\text{[-young]}\) ‘old’ and \(\text{[-male]}\) ‘female’ respectively – and the corresponding neutral values, i.e., ‘duck’ regardless of age or sex. There is nothing circular about an analysis reckoning with a neutral value in this systematic and predictable sense. The neutral value is expected to realize itself

in contexts where the feature in question is less relevant or irrelevant. It does not artificially eliminate contradictions to any rule, since it is itself part of the rule.

Functions and their distribution thus depend on the number of items interacting. A semantic feature of an item A may depend on the existence of a contrasting item B, so that A cannot be described adequately without regard to B. It is, as we have seen, important whether a \(+\text{PAST}\) item contrasts with other \(+\text{PAST}\) items, e.g., with an adtermal (Russian *pisat*), with an intraterminal (Turkish *yazdi*), with a posterminal (Norwegian *skrev*), with both an intra- and a posterminal (English *wrote*), or with none at all (South German *hat geschrieben*). But we have also noted that it is sometimes difficult to decide on questions of competition and contrast with other items, since many categories are less grammaticalized in the sense of having a less generalized use. This is often the case with high-focal intra- and posterminals on the threshold of aspectual function, e.g., German *war am Schreiben* ‘was writing’.

Another case already mentioned is the neutralization arising when an item is naturally characterized by a certain value but lacks competition in the same temporal stratum \(\text{(ADP, INTRA, POST)}\). Thus, the natural viewpoint of 0*-oriented non-pasts is intraterminality, a perspective derived from the primary deictic “nunc” situation, but a contrastive value \(+\text{INTRA}\) can only arise with a competing \(-\text{INTRA}\) item in the present stratum. Similarly, an item covering the simple past or pre-past stratum has a natural affinity with posterminality but lacks a competitor there, it does not signal \(+\text{POST}\) as a contrastive value.

The relationship between aspectotemporal items and the situation types they may cover, i.e., be used for, presents interesting problems. The following sections will include some discussion on possible generalizations concerning the ways of expressing objective situations by means of items signalling certain features. Most of the many unsolved problems concerning “broadly similar” categories cannot, however, be discussed at length here, e.g., questions such as “How does language A, void of category X, express what is typically denoted by X in language B?” Remember that *covering* situations that allow characterization by a certain feature is not equal to *expressing* that very feature. Language A may use Y for situation types that require X in language B. Y may well cover situational areas represented by X without possessing the same value. Thus, in languages lacking \(+\text{INTRA}\) aspect markers, items indifferent to this value may refer to ongoing situations. Y may be semantically more general than the “broadly similar” X, i.e., also be used in cases where B requires Z. This is possible even if Y does not signal any of the values connected with X and Z and is indifferent to both of them. Similarly, within one single language, several items may be used for one and the same situation without possessing the same values. My position thus differs essentially from approaches in which items are, regardless of questions of distinctiveness, assigned FFV, IPFV or PF values if only they occur in certain “perfective”, “imperfective” or “perfect” contexts.
3.5. Diachronic developments

Within various current hypotheses of grammaticalization, functions of grammatical categories are defined in terms of the dynamics of their development. This procedure does not, of course, contradict an analysis in terms of synchronic functional oppositions: the two approaches are indeed complementary to each other. The synchronic part of the task cannot be left out, since pointing to certain positions along diachronic paths naturally requires clear criteria for determining the respective functions. In Bybee & Dahl (1989: 97), the “inherent semantic substance” of the individual “gram” is thought to reflect the history of its development. This may be a correct observation, but it should also be emphasized that the examination of an item in terms of the dynamics of its development presupposes proper synchronic analyses at the relevant stages. Needless to say, in order to decide whether or not it has left the function ‘x’ and is on the path of becoming a ‘y’ item, the linguist must first have defined both ‘x’ and ‘y’. As the functions along a path may be subject to essential changes, it is not uninteresting to determine if a given item is used as ‘tense’, ‘aspect’, ‘mood’, etc. Bybee & Dahl do not consider it necessary to define what “overarching categories” of this kind a given “gram” belongs to. This statement should rightly be interpreted to the effect that it is not always possible to classify a given item unequivocally as belonging to one single category. It does not, however, exclude the necessity of analyzing the meaning of the item in terms of temporal, aspectual and modal elements.

The history of European viewpoint operators involves different and often complicated grammaticalization processes. Most of them can be shown to have undergone substantial diachronic changes of different kinds during their careers. The functional developments in the aspectual-actional-temporal field tend to proceed along rather similar lines. Observations of the development of various aspect-temporal systems have led linguists to assume panchronic chains of functional shifts, which will be commented on below. All items tend to extend their uses, losing specific meaning features and assuming more general functions to cover more situational contexts. New items are often introduced to take over the more specific former functions of the old ones. New items entering the dimensions of intra- and postterminality are mostly observed to start their careers as high-focals. The expressions of these functions are more often renewed than others, and, though all European languages possess the necessary material resources, some of them carry out such renewals more often than others.

Precise semantic criteria are needed to judge the degree of grammaticalization of individual items. One task is to distinguish between the operators and their actional sources. As is well known, concepts from the wide field of actionality (descriptive, phasal moods of action) are frequently abstracted und grammaticalized to express viewpoint notions. These gradual processes involve intermediary stages that are sometimes difficult to determine adequately. The boundary between actional and aspectual function may even be blurred by formal fusion (Section 2.2). In general, however, the stages exhibit unmistakable characteristics.

The different values within the aspectual-actional-temporal field may be encoded by many various morphosyntactic means. The modes of expression include complex predicates, auxiliaries, adverbs, case marking, flexion, derivation, and merger with the verb stem (Seiler 1993: 21). Morphology often plays an undeservedly central part in the discussions on functions. Since formal items change their functions, no values are tied to specific modes of expression, and statements on allegedly typical expressions of aspect and actionality do not always correspond to the facts. However, the formal development of viewpoint markers typically goes from lexical constructions via periphrastic constructions to inflectional ones. New items emerge from the lexical potential — transformative, frequentative, iterative, completive, stative, and other items — and existent verb forms. If the points of departure are known, the itineraries leading to viewpoint operators are also largely predictable. Such processes will also be briefly commented on in the following sections.

4. Actional content

4.1. Ontological classification of events

Viewpoint operators apply to actional contents of different types and do not themselves signal any ontological properties of events. Aspectual values should not be hypothesized and interpreted in terms of actionality. For example, though IPFV – in the sense of +INTRA or –AD – is often taken to express durativity, iterativity, habituality, habituality, continuativity, etc., such readings depend on the actional content itself and not on the view applied to the event. Events of different ontological types may, with certain restrictions that will be discussed below, be envisaged intratermially, postterminally or adverbially.

Iterative and pluri-occasional (“habitual”) readings of aspectual items must thus be distinguished from explicit means of signalling such meanings. Repetition is neither a viewpoint value itself, nor systematically linked to any such value. A set of repeated events can be envisaged as +INTRA, –INTRA, +AD, –AD, +POST, –POST, or represented without any aspectual characterization. Serial readings, henceforth indicated by [+ser], are suggested implicitly, or signalled explicitly by modes of action or by contextual elements such as adverbial modifiers denoting cyclic time (daily, every year), frequency (often, seldom) and habituality (usually, always). Whether the number of occurrences is undetermined or overtly quantified (X times) may have consequences for the choice of aspect; for example, Russian +AD may be used in the latter case. A pluri-occasional global event may be conceived of as a state in the sense of a habit with an undetermined number of occurrences. This habituality
is compatible with different aspects, and the fact that +INTRA and −AD are often preferred to express it does not mean that it is part of the IPFV semantics. In French lisait chaque jour, Turkish her gün okuyordu, Bulgarian векът den кетел ‘read every day’, a global event, consisting of repeated portions of ‘reading’ distributed over separated intervals, is envisaged intraterminal at an O2. However, habits can also be envisaged in other ways. Thus, in the sentence just cited, English prefers the Simple Past *read*, because its intraterminal item was *reading* signals high fecality. (For fecality degrees and pluri-occasionality, see 7.3.)

Type-referring, potential, or dispositive readings of aspectual items must also be distinguished from explicit signals of such meanings. Viewpoint operators do not themselves signal such distinctions, e.g., differences between generic and non-generic referent, events conceived of as types and as tokens. It is difficult to follow Hedin’s proposal (this volume) that IPFV in the sense of our +INTRA and −AD categories is type-referring and thus not used to envisage particular instantiations of events in time. However, strong defocalization of +INTRA items may produce dispositive and other similar modal readings (7.8).

It is often claimed that PFV in the sense of +AD and −INTRA expresses transitional (situation-changing) events (“achievements”, “accomplishments”), whereas IPFV in the sense of +INTRA and −AD expresses non-transitional events (“processes”, “states”). However, it is not a pertinent function of viewpoint operators to signal such ontological categories. Something that might be conceivably as a “state” or a “change” can be viewed in various aspectual perspectives. Definitions of the kind mentioned follow from equating aspect values with discourse functions. Narrative settings suggest sequences of transitional and non-transitional events. A transitional event leads to a change in the state of affairs, a leap into a new situation in the relevant text world. A non-transitional event occurs without producing such a change. Though it is a typical discourse function of IPFV items such as the Russian imperfective Past or the Romance Imperfect to stand for non-transitional events, they may also be used for transitional ones. If PFV is taken to signal transition, many linguistic facts become difficult to account for. Though +AD is dynamic and tends to express changes on the basis of a given state, this is not always the case with −INTRA items. The latter not only indicate that something ‘becomes the case’, but also refer to non-transitional events, to something that ‘remains the case’ or simply ‘is the case’. They may well express ‘states’ or ‘processes’ prevailing for a certain time, e.g., French a dormi deux heures, Modern Greek kimithike diá óres, Turkish iki saat uyudu, Bulgarian prospa dva časa ‘slept for two hours’. The conflation of aspactical and ontological meaning may lead to confusing classifications. A consequence of Lyons’ analysis (1977: 709–710) is that the French passé simple régné ‘reigned’ in régné pendant trente ans ‘reigned for thirty years’ could be characterized as a “process verb” with respect to “aspectsual character”, since it is “durative”, but as an “event verb” with respect to “aspectsual proper”, since it is “punctual” (cf. Bache’s justified critique 1982: 63). With −INTRA items, the main factor is not ‘change’ or ‘transition’, but absence of the intraterminal perspective.

4.2. Modes of action

Modes of action, expressed by periphrastic or derivational markers, have functions similar to adverbial elements. They modify the meaning of the basic actional phrase, deriving new actional contents from more basic ones. The markers may be preverbs, as in Indo-European languages, or, as in Turkic and Mongolian, postverbs, consisting of a converb suffix and a desemanticized auxiliary verb, e.g., Kalmyk бишев ‘copy’ (‘take writing’). They prefer actional contents of certain semantic types, not displaying the degree of generalization typical of aspectotenses.

The actional properties signalled are of a qualitative or quantitative nature. Descriptive and procedural markers specify the kind or manner of development, e.g., a certain kind of ‘writing’ such as ‘rewrite, copy’: Norwegian skrive om, English re-write, Russian пере-писать, Lithuanian per-rašyti. Quantiﬁcational markers signal properties of frequency, duration and degree of accomplishment such as iterative, frequentative, semelfactive, durative, deﬁmitive, perdurative, attenuative, comple
tive. Some are of particular relevance for the realizations of aspect.

Iteratives signal that the action consists of repeated acts and are often used to express pluri-occasionality, e.g., Lithuanian per-rašišęti ← per-rašyti ‘rewrite’, Chechen miyala ← mala ‘drink’. Special devices for signalling pluri-occasionality (habituality, nonactuality, etc.) should be distinguished from pluri-occasional readings of low- or nonfocal intraterminals, which may also cover the referential areas of higher items (7.3.2). Slavic languages use secondary imperfective formations such as Russian читать ‘read repeatedly’ ← ipf. čitat ‘reads’, e.g., čitat’ etu knigu ‘has (on several occasions) read in this book’. Such explicit [+ser] markers may also combine with other modes of action, e.g., počítat’ ‘read repeatedly reads a little’ ← počítat’ ‘reads a little’. Certain Slavic languages make systematic use of iteratives derived from imperfectives, e.g., Czech pěstovat ← ipf. pěstí ‘write’. Bulgarian possesses one such verb, which may function as a specialized pluri-occasionality marker, biva ‘(usually) is’.

Some devices, e.g., the Lithuanian -davė- frequentatives of the type rašdydavo ‘used to write’, are clearly pluri-occasional and not ‘habitual’ in a sense that would include events without separated localization intervals, e.g., used to live there. Some other devices, e.g., the English used to periphrasis, may also cover events which are not pluri-occasional, do not qualify as habits in any normal sense of the word, but rather represent permanent properties of the subject referent, e.g., The Temple of Diana used to stand at Ephesus (Comrie 1976: 28, cf. Macaulay 1978). Among similar actional devices are the Irish constructions with bionn ‘is usually’ and bionn
be specified than others. Note that a phasal mode of action picks out a part of the potential content of a given actional phrase and that this part can be conceived of as denoting an action of its own, to which, for example, new phasal modes of action can also apply.

The dynamic initial phase of an actional content may be distinguished from the subsequent statal phase by means of ingestive, initium-specifying markers meaning 'enter, begin, come to perform the action' ('start V-ing', 'begin to V'), e.g., Lithuanian imti rašyti 'begin writing'. Pre- and postverb constructions are often found with actional contents of a cognitively salient initium. Thus, Serbian do-znati specifies the entrance into the state of 'knowing': 'get to know, come to know, learn, acquire knowledge'. Other examples: Russian u-videt' 'catch sight of', po-ljubit' 'take a liking to', za-plakat' 'start to cry', Hungarian e-ül 'sit down', Tatar tot-üp al- 'seize'. Egressive, finis-specifying meanings may be expressed by phasal verbs meaning 'finish', etc. There are, however, few if any egressive pre- or postverb constructions specifying the dynamic end phase of an actional content in the sense of 'conclude, leave the action'. Egressives differ from completives, which do not just specify a final phase: 'finish writing' does not denote the same action as 'write to completion'.

Statal or progressive, cursus-specifying modes of action operate on actional contents conceived of as having a salient cursus and exclude limit-oriented readings. They often go back to iteratives or duratives and may combine such functions with statal functions, 'be busy V-ing', e.g., Swedish hälla på och skriva 'keep writing, be writing'. Some also allow perfunctive, continuative, or habitual interpretations. Some are based on locative metaphors, using elements meaning 'at' or 'in', e.g., German an Schreiben sein, Danish være ved at skrive. Others are locotive constructions based on metaphors of movement (move, run, come V-ing), e.g., Italian periphrases with andare 'go', venire 'come' or Tatar complexes with yör-k 'move, run, go'. Some are postural verb constructions based on body position metaphors ('stand', 'sit', 'lie', etc.), e.g., Italian periphrases with stare 'be' (situated), Swedish sitta (och) 'sit (and)', Tatar tör- 'stand', irt- 'sit', yat- 'lie', Kalmyk kovt- 'lie'. The auxiliaries either preserve some of their lexical meanings, delimiting the action to certain body positions, or they are desemanticized and thus interchangeable. Statal play important parts as –T-markers (Section 6.5).

Poststatal markers express an evolutionary stage following upon the basic action, 'just have V-ed', e.g., French venir de, Catalán acabar de, Icelandic vera [vera] býrnan að, signifying that the event is immediately prior to an O. Such actional items are often based on locative or movement metaphors (be after doing, 'come from doing') and may be observed as preaspecutals developing diachronically into +POST operators, e.g., Welsh maen wedi ym daerlen 'is after being in reading' > 'has read', Irish tá tar eis a scríbh 'is after writing' > 'has written'. Prestatal markers express a stage prior to the basic action, 'be about to V', 'tend to V', etc.
5. Internal phase structure

5.1. Aspect-sensitive actional categories

Actional content parameters of particular relevance for viewpoint realizations are subsumed under the internal phase structure (IPS). They do not concern the perspective applied to an event, but constitute aspect-sensitive actional categories basic to the use of viewpoint operators as terminality categories. In their interaction with aspect grammar, they clearly show their categorial independence within the field of aspectuality. Phase structure properties such as \([\pm t], [\pm tf]\) and \([\pm mom]\) are implicit or explicit features of the internal constituency of the actional content. The following is an attempt to determine basic phase structure values in European languages and to distinguish overt as well as covert actional categories on the basis of their way of reacting to aspects. The resulting categories show strong similarities across the languages under study. Though distributed in different ways, the distinctions mirror important differences with respect to the cognitive relevance of the phases of actions.

5.2. Categorization

The following categorization covers relevant phase distinctions in a variety of European languages.

**IPS category**

<table>
<thead>
<tr>
<th>Category</th>
<th>Actional content</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformative ([+t])</td>
<td>The actional content is conceptualized as implying transformation</td>
<td>as implying final transformation without a salient cursus</td>
</tr>
<tr>
<td>Finitransformative ([-mom])</td>
<td>as implying final transformation</td>
<td>with a salient cursus</td>
</tr>
<tr>
<td>([-mom])</td>
<td>as implying initial transformation</td>
<td>without transformation</td>
</tr>
<tr>
<td>Initiotransformative ([-t])</td>
<td>as dynamic</td>
<td>as static</td>
</tr>
<tr>
<td>Non-transformative ([-t])</td>
<td>as dynamic</td>
<td>as static</td>
</tr>
</tbody>
</table>

The classification allows five basic categories to be distinguished: (i) momentaneous finitransformatives, (ii) non-momentaneous finitransformatives, (iii) initiotransformatives, (iv) dynamic nontransformatives, and (v) non-dynamic nontransformatives. The five classes may be ordered according to their degree of limit-orientation: \([+tf, +mom, [+t, -mom, [+t, [t, +dyn, [-t, -dyn]]]

The classification goes back to a categorization of Turkish actional phrases based on formal tests (Johnson 1971: 194–233). It differs considerably from the classifications proposed by Vendler (1967) and Dowty (1972), which concern situation types conveyed by the whole sentence context and do not distinguish between viewpoint and actionality. Breu's and Sasse's division of aspectually relevant actions into five classes (Breu 1984, Sasse 1991a, 1991b) starts from processual, stative and terminative actions and divides the last two classes further into two subclasses each. My basic distinction is the one between transformativity \([+t]\), divided into \([+tf]\) and \([+t, \pm mom]\), and nontransformativity. The main difference from most other approaches is that I classify linguistic units expressing actions rather than actions as such. The units classified are not verbs, but actional phrases, consisting minimally of a verbal lexeme, which may change their phase structure by way of recategorization (Section 6).

The three possible phases – the two limits (initium, finis) and the intermediate cursus – show different degrees of saliency in the types mentioned. For example, each actional content has a relevant limit \((\times)\), which varies according to the phase structure type. With nontransformatives, it is identical to the initial limit of the action. With transformatives, it is the crucial limit \((\otimes)\), at which the transformation takes place. Graphically:

\[
[+t] \equiv \quad \otimes \\
[+t] \equiv \quad \otimes \quad \otimes \\
[-t] \equiv \quad \times \equiv \quad \times \equiv \quad \times
\]

5.2.1. \([\pm t]\)

The features will now be discussed in some detail. The basic classificatory criterion in natural languages of different types is transformativity. An actional phrase is transformativo \([+t]\) if the action designated by it has a natural evolutionary turning point, a crucial initial or final limit \((\otimes)\). Depending on the actional phrase, this limit may be the end or beginning of the action or even constitute the whole action. A nontransformative \([-t]\) actional phrase does not imply any such limit.

Transformativity is not a vague notion of "some change in the world" and does not simply mean 'containing an endpoint', which might apply to any event. The actional content of transformatives comprises a culmination point at which a transformation takes place. They typically refer to telic ("desinent", "bounded", "cyclic", "terminative") actions, which by nature contain an inherent final limit indicating an evolutionary minimum-maximum, and, if fully achieved, reach this built-in endpoint. Non-momentaneous transformatives thus have a heterogeneous and dynamic actional content. Note, however, that telic actions may be referred to by both initio- and finitransformatives. The crucial limit may be the "left" or "right" boundary of the actional content expressed by the actional phrase. On the other hand, transformativity is not tantamount to telicity. The terms transformativo and nontransformativo refer to properties of the actional phrases, whereas the terms telic and atelic will be reserved for properties of the actions themselves. For example, an initio-transformative actional phrase denotes both an initial telic and a following atelic action.
Since viewpoint operators present limits of the events as attained (+AD), transgressed (+POST), or concealed (+INTRA), information concerning the presence of a crucial limit in the actional content is important for the interpretation. However, this presence does not necessarily mean that the crucial limit is focused upon and that the cursus is less important. Whether the crucial limit is highlighted or not, is a strictly aspectual matter. The complete representation of a telic event may produce a change leading to new states of affairs, but the use of a transformative actional phrase to describe an event does not necessarily imply that the transformation takes place. Even if the action expressed is not considered to be fully carried out unless the crucial limit is reached, this does not mean that it is conceived of as non-occurring. Even combined with an element meaning ‘almost’, transformative do not necessarily imply – as nontransformatives do – that the action does not take place at all. The ‘almost’ element refers to the attainment of the crucial limit and does not exclude the occurrence of possible portions of action preceding that limit. Reference to telic events does not necessarily include the endpoint. Any event can be presented from within, so that the finis is not envisaged. Transformativity is not identical to PFV in the sense of +AD or −INTRA. It should be stressed that even items completely void of aspectual meaning may suggest completion if the actional content is transformative.

An implicit [+t] distinction underlies the old Indo-European actional classification of Aorist and Present stems, originally without any special markers. Both stem types were indifferent towards intraterminality and constituted the nonpostterminal member of an opposition with the postterminal Perfect. Languages may possess items that are indifferent towards intraterminality but typically interpreted as ‘ongoing’ with [−t] actional contents and as ‘accomplished’ with [+t] actional contents. For example, Nonets exhibits a neutral item with this natural differentiation. (For pidgin and creolic items of this kind, see Bickerton 1975.)

5.2.1.1. [+TF, +MOM]

Transformatives may differ from each other with respect to which phase constitutes the crucial limit. With finitransformatives [+tf], the end of the actional content is conceptualized as the inherent evolutive turning point, with whose attainment a leap into a new state occurs. A [+tf] content as expressed by actional phrases such as reach or die is conceived of as moving towards a natural conclusion. Though it is heading for completion, it is not necessarily envisaged as completed. The inner goal of the action must be distinguished from the endpoint of the event. The use of a [+tf] actional phrase that signals full achievement does not necessarily imply that the corresponding event is fully achieved. The action is not fully carried out unless the final limit is reached, but it can be conceived of as going on before this point, e.g., viewed during the cursus leading up to it. Note that ingressive verbs signalling an entering phase, e.g., Russian za-igrat ‘start playing’, are also [+tf] actional phrases.

If a past tense is used for an event described with a [+tf] item, it means that its finis does not occur later than at O. If the action has already been carried out, it cannot go on any more. Thus, [+tf] items do not occur in constructions such as ‘has V-ed, and is still V-ing’ (Johanson 1971: 198) or with continuative expressions such as ‘go on V-ing’. Due to the inherent culmination point, the feature [+tf] may be less fertile with +INTRA (Section 10.2.1.5).

Finitransformatives normally react negatively in tests concerning gradual realization. The indivisible, ‘all-or-nothing’ content is mostly incompatible with adverbials implying occurrence in portions. Even if the action may take up a certain amount of time, they also reject temporally delimiting duration adverbials of the type ‘for X time’, e.g., *reach the house for two hours. This criterion distinguishes finitransformatives from nontransformatives and initiotransformatives. However, they readily combine with mensural expressions of the type ‘in X time’, expressing the total indivisible action including its crucial limit, e.g., reach the house in two hours. This criterion distinguishes them from nontransformatives.

The feature [+tf] is relevant in all European languages, e.g., Classical Greek ἀκτονορμαί ‘acquire, gain’, Lithuanian įėiti ‘enter’, German gewinnen ‘win’, Tatar үл ‘die’. In earlier literature, Indo-European [+tf] distinctions were mostly discussed as ‘perfective’ vs. ‘imperfective’ distinctions. Their presence in the German verb system was first discussed by Jacob Grimm and Hermann Paul.

5.2.1.1.1. [+TF, +MOM]

The cursus of finitransformatives may be more or less relevant. The telic events they refer to may be conceived of as momentaneous [+mom] or temporally extended [−mom]. In the first case, only the transforming final limit is salient. In the second case, the cursus is thought of as a process leading up to that limit. Terms such as “punctual” and “durative” will be avoided, since these are easily misleading; cf. Comrie’s clarifying discussion of ‘punctuality’ (1976: 41–44). “Durativity” is often used for a considerable temporal extension, and sometimes even for +INTRA.

Momentaneous finitransformatives [+tf, +mom] imply abrupt transformation without preliminaries, without any salience of the cursus leading to it. The action is conceived of as absolutely indivisible. Though even events of very short duration have an extension in time, initiium and cursus seem irrelevant and appear to merge with the transforming finis, e.g., drop, explode, sneeze, Icelandic byrja ‘begin’, Bulgarian skokha ‘jump’, Modern Greek vrisko ‘find’ (in the concrete sense), anakalipto ‘discover’, East Armenian tatahet ‘occur’. Such actions typically correspond to Vendler’s “achievements” or to actions expressed by Breu’s and Sasse’s “totally terminative” verb class.

It is highly dubious whether the actions denoted by these actional phrases might be regarded as telic, since their three phases practically coincide. As has been empha-
sized above, however, transformativity is not equal to telicity. The actional phrases in question signal a transformation and are thus transformative. They do not behave like initiotransformatives, but are clearly finitransformative according to the criterion that they cannot occur in ‘has V-ed and is still V-ing’.

All [+tf, +mom] actional phrases are naturally compatible with momentaneous time adverbials, e.g., reached the house two hours ago. In default of a salient course, they do not combine with ingressive or egressive (‘begin / stop V-ing’). Due to the same fact, the +INTRA perspective is of limited use with them. The interaction usually results in imminent and proinquitive meanings (10.2.1.3). In a ±AD language, the only natural operator is +AD. Formally corresponding — AD partners lack or imply repetition, [+ser]. For quantitative reinterpretation, see 6.4.

5.2.1.2. [+TF, - MOM]

The feature combination [+tf, -mom] refers to actions of some duration, the cursive of which is cognitively relevant and may be conceptualized as preliminaries leading up to the transforming finis, e.g., English die, Modern Greek ποιγνόνο ‘freeze’, Russian razbudit ‘wake’, East Armenian kaτuĉel ‘build’. The actional content may be more or less processual, implying successive transformations, e.g., grow, improve. The actions expressed typically correspond to Vendler’s “accomplishments” or to those denoted by Breu’s and Sasse’s “gradually terminative” verb class. It may certainly be discussed whether actions such as ‘arrive’ and ‘die’ are momentaneous or not in extralinguistic reality. Thus, such actions are often used as prototypical examples of Vendler’s “achievements”. The basis of the present classification is, however, the empirical observation that actional phrases expressing such actions allow pretransformational phases of some duration in their actual linguistic behaviour. Many European languages have few [+tf, -mom] verbs, but readily create corresponding expanded actional phrases (6.1). Since the actions are both goal-oriented and conceived of as having a certain duration as a totality, the actional phrases may occur in the question ‘How long does it take to V?’, then combine with adverbials expressing in what time a given event is carried out (‘in X time’).

Non-momentaneous finitransformatives are fertile with various aspects. +INTRA envisages the preliminaries without the transformation, e.g., Turkish getiyor’a ‘was coming’. +AD envisages the attainment of the crucial limit, i.e., the very transformation, e.g., Russian vstretil ‘met’. —INTRA and —AD disregard limits, e.g., Turkish geldi ‘came’. Russian vstreščal ‘met, was meeting’.

5.2.1.2. [+ti]

The crucial limit may also be the beginning of the action. Initiotransformatives [+ti] are, like finitransformatives, actionally heterogeneous, but conceptualize an initial evolutional turning point as an inherent part of the actional content. They combine the concept of entering a state with that of the state itself, “marquen un point de départ avec une ouverture possible sur un développement ultérieur” (Seiler 1993: 28). Such actions, which involve a transformative beginning of the cursive, correspond to the ones expressed by Breu’s and Sasse’s “inoactive-stative” verb class.

An initiotransformative such as Turkish otur- denotes two evolutionally coupled phases: a transformational ‘sit down’ and a resulting posttransformational ‘sit’. It can thus occur in constructions such as ‘has V-ed and is still V-ing’. The first phase stands for a telic and dynamic action, the second one for an atelic and static action. The verb may thus correspond to both a finitransformative and a nontransformatative of another language, e.g., Russian sest ’sit down’, sidet ’sit’. It is clear that initiotransformatives constitute a class of their own and should not be mistaken for a subclass of [+tf] or [-t]. They are neither ingressive (inoactive, inceptive, etc.) nor stative. They cover both a telic action and an atelic action, i.e., what may, in some other language, be expressed by two actional phrases, one [+tf] and one [-t]. In this sense, initiotransformatives are certainly ambiguous, but their ambiguity is systematic, distinguishing them from all other classes. They involve a cognitively significant initium just in the same way as finitransformatives involve a cognitively significant finis, and thus do not deserve the designation “two-phase verbs” more than non-momentaneous finitransformatives do. The former imply a transformation leading to a state, the latter a state leading to a transformation. Just as non-momentaneous [+tf] actional phrases have a preliminary (pretransformational) and a transformational phase, [+ti] actional phrases possess a transformational and a posttransformational phase.

In their initial readings, [+ti] actional phrases are, like [+tf] items, compatible with momentaneous time adverbials. In their statal readings they are, like [-t] items, compatible with temporally delimiting duration adverbials. As for phrasal verbs, continuatives and egressives may combine with their statal reading (‘go on V-ing’, ‘stop V-ing’), whereas there are heavy constraints on the use of ingressive to specify their initium (‘begin V-ing’), at least when the initial transformative phase is momentaneous.

5.2.2. \([-t]\)

Nontransformative \([-t]\) contents are actionally homogeneous, without a salient initial or final phase, e.g., English *cry, dance, know, run, want, work, write*, Classical Greek *phērō* ‘carry’, Russian *duj* ‘blow’. The atelic actions they describe have, when represented as events, their natural limits, but none is conceptualized as crucial. All three phases are equally relevant, and a possible limitation is external (6.2). Needless to say, \([-t]\) is never identical to IPFV in the sense of +INTRA or −AD.

To specify initiun and finals of \([-t]\) contents, progressives and egressive (‘begin / stop V-ing’) are required. As a \([-t]\) actional content lacks a culminating point, it is, when represented as events, actually taking place from the moment it begins. Thus, to use a past tense for an event described with a \([-t]\) item, it is enough that its initial is prior to O. Predications such as English *X has written*, *X wrote*, Russian *X pisal*, Turkish *X yazdi* mean that X has already carried out a portion of the action at O, e.g., written something. The event must at least have begun, but may be still going on or already finished. This means that \([-t]\) actional phrases may occur in constructions such as ‘has V-ed and is still V-ing’. The action can be interrupted at any point of its course and still be said to have already taken place. On the other hand, there is no natural point beyond which it would not be prolongable.

Nontransformatives are naturally compatible with durative expressions indicating that the action is carried out for a certain time (‘for X time’). They are also compatible with points of time and may combine with momentaneous adverbials. This is due to the presence of a relevant limit in the actional content. Though \([-t]\) items lack a crucial limit, they do possess a limit of relevance for aspactical realizations: the initium. For ‘initial attraction’, see 7.2.2 and 10.2.2.1.1.

5.2.2.1. \([-t, +dyn]\)

The feature ‘dynamcity’ \([+dyn]\) is inherent to transformatives, but it is also a subclassifying criterion for nontransformatives with respect to aspect reagence. Most languages account for the distinction \([-t, ±dyn]\). Dynamic nontransformatives stand for less time-stable actional contents than non-dynamic ones, and have relatively well discernable cursus with clear beginnings and ends, e.g., *burn, eat, grow, look, play, sew, sing, speak, walk, wash, Russian pisat* ‘write’, *myr* ‘wash’, *pit* ‘drink’, *pomogat* ‘help’, *stradat* ‘suffer’, Modern Greek *dhiavdzo* ‘read’, *dhluve* ‘work’, East Armenian *šnčel* ‘breathe’, *gbosnel* ‘walk’. The actions expressed more or less correspond to Vendler’s ‘activities’ or Breu’s and Sasse’s ‘(processual) actions’ (ACTI). ‘Concreteness’ and ‘agentivity’ are frequent though not necessary features. While \([-t]\) actional contents are homogeneous in the sense of lacking initial or final transformations, \([-t, +dyn]\) contents are dynamic in the sense of internal processual evolution. They often involve some progress observable in gradually produced effects and may then combine with expressions of speed, e.g., *write very fast*. Many actions imply little if any internal progress.

Dynamic nontransformatives easily combine with +INTRA and −INTRA values, and the dynamicity is particularly well suited for +INTRA\(^{HF}\) items (“progressives”). In ±AD languages, −AD is the natural choice, whereas the use of +AD implies transfer to [+t], e.g., Russian *napisat* ‘write’, *vymyri* ‘wash’, *vypit* ‘drink’, *pomoc* ‘help’, *postradat* ‘suffer’. Thus, the ±AD distinction clearly manifests itself with verbs of this kind, without the tendencies towards lexical differentiation observed with [−t−f, −nom] verbs (Forsyth 1970: 53). The difference between +AD and −AD only resides in the view of the event: its presentation in the attainment of the crucial limit (+AD), or as mere occurrence with the action, without reference to any limit (−AD). Russian \([-t, +dyn]\) verbs expressing actions that imply little internal progress often lack perfective partners, e.g., *iskat* ‘search for’, *mesti* ‘sweep’, *tancevati* ‘dance’, *upravilat* ‘govern’, *šumati* ‘make noise’ or indeterminate motion verbs such as *guljat* ‘stroll’ and *tei* ‘flow’. Even in languages lacking ±AD distinctions, many verbs of the types cited above, e.g., *eat, write*, may vacillate with respect to their \([±t]\) conceptualization, the finis being potentially conceivable as a crucial limit (without explicit external limitation by an object).

5.2.2.2. \([-t, −dyn]\)

With non-dynamic nontransformatives \([-t, −dyn]\), the actional content is conceptualized as static, homogeneous, lacking internal processual evolution. It covers relatively unchanging, time-stable physical, psychical and social states – properties, relations, knowledge, possession, etc. – with less clearly discernible cursus and limits, and is often less concrete and less agentive than \([-t, +dyn]\) actional contents, e.g., *be blind, contain, remain*, Icelandic *eiga* ‘possess’, *pekjó* ‘know’, Portuguese viver ‘live’, Romanian *costa* ‘cost’, Modern Greek *lipo* ‘be lacking’, *aksizo* ‘be worth’, Russian *znáčiti* ‘mean’, *prinadležat* ‘belong’, *sostojat* ‘consist’, *naxodišja* ‘be located’, *uvazat* ‘respect’, East Armenian *karoyanat* ‘be able’, *nšanakel* ‘denote’. The actions expressed approximately correspond to Vendler’s ‘states’ or Breu’s and Sasse’s ‘totally static’ class. In default of internal evolution, \([-t, −dyn]\) actional contents are incompatible with expressions of speed. As they have a low preference for countability, they are often incompatible with expressions of repetition. They may also avoid combining with progressives and egressives. Actional contents implying little internal progress exclude gradual expressions, e.g., *sit little by little.*

\([-t, −dyn]\) actional contents readily combine with +INTRA, which presents them from a viewpoint located within their course, e.g., Modern Greek *išere*, Turkish *biliyordu* ‘he knew’. Due to their lack of dynamicity they are infertile with +INTRA\(^{HF}\) (10.2.2.5). Combinations with −INTRA are often rather limited. Thus, Romanian verbs such as *cântari* ‘weigh’ are normally not used in the −INTRA past.
and Modern Greek verbs such as aniko ‘belong to’, periéko ‘contain’, periméno ‘wait’ lack Aorist forms. Not unexpectedly, +AD is excluded. Thus, Russian [−t, −dyn] verbs such as stojat’ ‘stand’ and zdat’ ‘wait’ lack perfective partners. Perfectives such as prostojať ‘stand through a certain period of time’, and podozdat’ ‘await’ represent special modes of action (Section 4.2) and are not normal +AD asp ectual partners of stojat’ and zdat’.

6. Actional recategorization

6.1. Recategorization processes

An actional phrase is minimally a verb lexeme taken in its most concrete and quantitatively simple sense, referring to a single basic event. It may be assigned one or more of the features discussed above and classified accordingly. Attention must be paid to different semantic readings and valency differences that affect the internal phase structure. The problem is extremely complex, so much the more as actional values can also change pragmatically. Restriction to the lexeme level is impracticable, since verbs are seldom context-free. Though the central syntactic role of the verb and its morphology has often led to the assumption that aspect and actionality relate to the simple verb, strict lexeme classifications are impossible, even language-specifically. One and the same lexical item may prove ambivalent in tests, showing both [−t] and [+t] properties, e.g., dine for two hours vs. dine in two hours. In particular, many [+t, −mom] verbs do not represent their class in a clear-cut way without disambiguating complements.

In the following, it will be assumed that minimal actional phrases may change their basic phase structure by way of recategorization. This is thought to take place according to certain principles that were discussed in Johanson (1971: 198–220) and supposed to be valid beyond the particular purpose of classifying Turkish actional phrases. The compositional process of recategorization starts from the syntactic-semantic minimum of a verb in its most concrete and quantitatively simple sense and proceeds to account for the actional effects of more abstract and quantitatively complex readings in successively expanding syntags containing various obligatory and facultative complements. Note that this conception is not equal to the traditional view of the actional content of the very verb as “vaccillating according to the context”.

The basic phase structure may be transformativized or nontransformativized. The former change implies actional heterogenization, the latter homogenization. The specification of the actional content may be overtly signalled by +T-marking and –T-marking. +T- and –T-markers may be derivational elements closely tied to the verb, auxiliaries, parts of complex predicates, case-marking devices, adverbials, etc. The actional values expressed by +T- and –T-marking are often referred to as “imperfectivity” and “perfectivity” respectively, though they are not aspectual in the sense of viewpoint categories. Exceptions are portmanteau markers (2.2), which combine a viewpoint and a phase structure value, thus expressing an interactional meaning in themselves.

6.2. Transformativization

Nontransformatives may be limited to [+t] by mensural units expressing a specific quantity and thus defining the minimal-maximal extension of the action. A crucial limit, external to the verb meaning itself, is set with regard to the subject referent, an object referent or the goal of a motion. The decisive factor is the undivided reference. The limitation lies in the verb-external entity, which is totally involved in the action – totally covered, affected, created, consumed, destroyed, etc. – and thus specifies its crucial limit. The action leads to a transformation because there is an end to the limiting elements. Limiting elements will not be dealt with as “content”, but as part of the actional phrase.

The limitation may also be spatial. With [−t, +dyn] verbs such as go, run, walk, a crucial limit may be set by a mensural expression, e.g., a kilometre, or by the goal of the motion, a materially limiting entity expressed by a direction adverbial, e.g., to the beach. Undivided reference (‘all the way to’) is decisive for the limitation to [+tf]. Similarly, [+tf] items can be recategorized to [+t] by adverbials that restrict their content to one of the two possible phases. In Turkish sandalyeye otur- ‘sit down on the chair’ and Hungarian az égyn fekszik ‘lie down on the bed’, the items otur- ‘sit down + sit’ and fekszik ‘lie down + lie’ are recategorized as [+tf]. In sandalyeye otur- ‘sit on the chair’ and az égyn fekszik ‘lie on the bed’, the actional contents are homogenized to [−t] (cf. Csató 2000).

As far as verb complements are concerned, the decisive point is, again, whether their referents are quantified as undivided entities or not. The crucial limit may be set in relation to a subject or object referent with certain properties. A [−t, +dyn] verb such as write primarily refers to an atelic event. It may be limited to [+t] by a totally affected object referent, expressed by a nominal such as a letter, the letter, letters, the letters, two letters, a set of letters. With undivided reference, the resulting action is telic, i.e., it cannot be considered fully achieved unless the relevant amount of letters is produced.

The present article is not the adequate framework for dealing in detail with how complements and their case-marking relate to limitation, and how limitation relates to referentiality, specificity and definiteness as part of general problems of “transitivity” and information structure. There are certain – though often rather unsystematic – affinities between undivided reference and object definiteness, between [−t] and indefinite objects, between [+t] and definite objects. Even the indefinite objects in
build a house and bake a cake offer crucial limits, whereas the definite article in *play the piano* does not. Many European languages lack a definite article, the presence vs. absence of which may signal specificity, non-specificity, definiteness and indefiniteness. Russian *pisat* 'write' has the basic features [-t, +dynt]. Writing is an atelic action unless it has an object as a goal. More important than goal-directedness, however, is the unidirectional reference to the object. Reference to an entity that is conceived of as totally produced (*pis’mo* ‘letter’), referring, sets a crucial limit to it. With +AD *napisal pis’mo*, the event is viewed in its attainment of this limit, which can be translated as ‘wrote a/the letter’. For the question of multiple entities, see 6.4. Differences between the definite and the indefinite conjugation in some Finno-Ugrian languages may also contribute to differentiating [+t].

6.3. +T-marking

A nontransformatory actional content may be transformativized by means of special phase structure markers, +T-markers, which, focusing on the finis or the initium, explicitly signal the notion of a crucial limit which the basic actional phrase does not contain. +T-markers may turn nontransformatives into finitransformatives, e.g., English *sit* [+t] → *sit down* [+tf], or initiotransformatives into finitransformatives, specifying the initial phase of the content of the unprefixed verb, e.g., Hungarian *fekszik* 'lie down + lie' [+ti] → *le-fekszik* 'lie down' [+tf]. +T-marking categories also include the above-mentioned delimitative and permutative modes of action, which imply a crucial limit, e.g., Russian *počitat* 'read for a while', *pročitat* 'read through'.

Though [+t] features are very often implicit, most European languages also use explicit +T-marking devices. The use is more or less generalized. Some languages, e.g., Baltic (Lithuanian, Latvian), Hungarian, Kartvelian, Ossetic, most Turkic languages, and some Slavic languages such as Bulgarian, employ +T-marking rather systematically. +T-marking mostly starts with phase specification and limitation of transitive actional phrases containing objects (e.g., *write a letter*).

Preverbs are most commonly used as +T-markers, e.g., Classical Greek *pheyagō* → *dia-pheygō* 'flee', Latin *facio* → *ef-facio* 'yield', Gothic *fulljan* → *ga-fulljan* 'fill up', Lithuanian *rašyti* → *pa-rašyti* 'write down', Latvian *rakstīt* → *uz-rakstīt* 'write down', *lastīt* → *iz-lastīt* 'read (and finish reading)', Hungarian *ir* → *meg-ir* 'write (and finish writing), write down'. Bulgarian mostly uses preverbs or the suffix -n to turn imperfectives into perfectives, e.g., *piša* 'I write', *I am writing*, -napiša 'I write up'. Kartvelian uses +T-marking preverbs that do not change the lexical meaning of the verb, e.g., Georgian *da-* for *cers* 'writes' and *mo-* for *kvdeba* 'dies'. Modern Georgian offers a choice between an unmarked Present, e.g., *cer* 'tu l’écrits', and a +T-marked prefixed Present, expressing the action "vue par rapport au terme", e.g., *da-čer* 'tu l’écrits = tu mènes à bout l’action d’écrire > tu l’écriras' (Vogt 1971: 175). The preverbs used mostly go back to expressions of movement, often directional adverbs meaning *‘away’, ‘down’, ‘into’, ‘through’, ‘up’, etc.*, e.g., Classical Greek *apo-* [‘away’] from*, *dia- ‘through’, kata- ‘down’, syn- ‘[together] with’*. In Svan, the +T-marker is a directional preverb. Ossetic, which is rather similar to Georgian in its +T-marking system, has genuinely Iranian preverbs with primary spatial-directional functions, e.g., *fe* [‘away’]; *pait-*. Postverbs are used as +T-markers in Turkic and Mongolian: Kalmyk -or[k] (converb + *throw*) > *ek*, e.g., *a-e ‘drink → a-ek ‘drink up*. They are common in all Turkic languages of Europe except Standard Turkish. The postverbs mostly go back to dynamic verbs such as *give*, *put*, *reach*, *send*, *take*, *throw*, e.g., Chuvash *bêr- ‘end’, if- ‘take*, *par- ‘give*, *xur- ‘put*, *sit- ‘reach*. +T-markers thus go back to lexemes with dynamic meaning components. They may more or less preserve the original lexical meaning or add an additional actional meaning, from which the [+t] notion derives. The [+t] meaning is often combined with some additional specification of the content with respect to direction or manner of realization, e.g., Hungarian *ki-fon* ‘come out’, German *er-jagen* ‘hunt down’, Tatar *lässup bêrêr* ‘work (and finish working)’. +T-marking is often performed by completives, consumatives, and exhaustives, signalling that the object referent is affected or affected thoroughly, to completion, totally consumed (e.g., *eat up*). The additional meanings tend to fade away in favour of pure +T-marking. In archaic Classical Greek, the lexical meanings of +T-marking preverbs such as *apo- ‘away’* from* are often rather well preserved. The possibility of substituting *apo-thanein* for *thanêin* ‘die’ in Attic Greek indicates that the lexical meaning has been lost. This development may even lead to the loss of the simplicia. +T-marking is often referred to as "perfectivization" and confused with marking of +AD. Thus, Lithuanian verbs provided with +T-markers such as *pa-* are usually called "perfective", though they only signal transformativity (cf. Maslov 1985: 15). +T-marked items are functionally similar to +AD items by signalling a crucial limit, but they do not, as the latter, imply the actual attainment of this limit. +T-marking only specifies the actional phrase. In Functional Grammar of the Simon Dik tradition, it should, as argued in Johnson (1996), be taken to belong to the innermost layer of T-operators, operating immediately on the predicate. +T-marking may be said to represent a preaspectual stage, since it may develop diachronically into viewpoint marking. This shift has taken place in Slavic languages such as Russian, where +T-marking not only implies ‘a crucial limit to attain’, but also views this limit as *attained* in the sense of +AD.

Since +T-marking does not signal PFV in the sense of +AD or -INTRA, its absence should not be confused with IPFV in the sense of +INTRA or -AD. Thus, Hungarian +T-unmarked past items as in *irta a levelet* 'wrote the letter', *irt egy levelet* 'wrote a letter', *levelet ir* 'wrote letters' do not display +INTRA or -AD
meanings and may, for example, readily combine with ‘for X time’ adverbials. The combination +PAST times +T is not a past intraterminal, but just suggests that the crucial limit was not attained at the relevant time interval, e.g., Finnish kirjoitti kirjetta ‘was [occupied with] writing a letter’ (partitive); cf. kirjoitti kirjaa ‘wrote a letter’ (+T-unmarked).

In systems with +T-marking, +[t] items may get conative interpretations without ±INTRA opposition, e.g., sterben ‘die’ as against er-sterben in 19th century German, e.g., Ich sterbe, sterbe und kann nicht ersterben ‘I am dying, dying, and cannot pass away’ (Goethe). Similarly, a Classical Greek [−t] item such as όπειθε ‘persuaded’ may suggest conation (‘tried to persuade’). The distinction between +T-marked and +T-unmarked yields the same effect in Georgian, e.g., in the Aorist items of the sentence ათაფას, ათაფას ვიცად 1 ‘I essayed to open, without result’ (Vogt 1971: 187).

As we noted, +T-markers are used with various degrees of generality. Some languages have developed consistent transformating systems, where +T-markers form highly grammaticalized modes of action used more or less obligatorily with [+t] actional phrases. For example, Hungarian verbs that are clearly transformative in their quantitatively basic meaning are +T-marked, e.g., meg-hal ‘die’ (6.8). Among the Kartvelian languages, Svan applies obligatory +T-marking to transformatives. Still, +T-marking generally tends to be rather irregular in that not all [+t] actional phrases take part in it. +T-marking may also be more or less fertile with different aspectotemporal categories (10.2.1, 10.3.2).

Note that +T-marking may combine with iterativity or pluri-occasional markers. Bulgarian secondary imperfectives derived from perfectives, e.g., napisva ‘usually writes up’ ← pf napishe ‘writes up’, form a special actional type denoting pluri-occasional global events with telic subevents. Compare Russian iterative participles such as pročítavaet ‘repeatedly reads through’ ← pročitait ‘reads through’. Lithuanian exhibits +T-marked frequentatives such as parašydamo ‘used to write (to completion)’.

6.4. Nontransformativization

Transformatives may be actionally homogenized by suppression of the effect of the crucial limit and thus turned into nontransformatives (Johanson 1971: 194–201). Nontransformativization may come about in different ways, most frequently by quantitative reinterpretation. In these cases, the actional content does not suggest a single-action reading [+ser], but is quantitatively interpreted as repeated – as an action composed of a series of identical actions – and thus gets a serial reading [+ser]. Such actional phrases are used to represent global events containing subevents. [+ser] readings may be suggested by overt markers indicating the involvement of multiple entities (number of subject and object referents), by quantifying adverbials, etc., but they are also possible without such markers.

Serialization may turn transformatives into nontransformatives: [+t] + [+ser] = [−t]. The actional content then no longer involves one single transformation, but recurrent transformations all through its duration, which has a homogenizing effect. Iteratives are normally nontransformative. An actional phrase with actants involving multiple entities such as French tous mouraient ‘all were dying’ (Johanson 1971: 206) may thus be nontransformative: a collective ‘dying’ may be conceived of as telic. When [+tf, +mom] actional contents such as ‘explode’ are realized as [+ser], they normally lose their transformativity. The change of the phase structure to [−t] naturally changes the applicability of viewpoint operators. For example, high-focal intraterminals prefer to operate on [+ser] actional phrases (10.2.1.5).

The feature [+ser] is always present in pluri-occasional (‘inactual’, habitual, etc.) meanings. Note that, since [+ser] is not part of the context, but of the actional phrase itself, we do not say that the applicability of aspects to certain verbs changes under pluri-occasional readings.

The limiting effect of “accusative” objects in Finnish and Estonian is cancelled by [+ser] interpretation. The same is true of Lithuanian +T-marked actional phrases: in kasdien parasite po vieną laišką ‘writes (and finishes writing) a letter every day’, the global event, envisaged in its course, is a sequence of events, each characterized as transformative. –PAST (+INTRA) operates on the global event, while the +T-marking refers to the actionality of each subevent. Slavic secondary imperfectives, which have a nontransformativizing effect, frequently imply [+ser]. Though the notion of a crucial limit is preserved in the verb meaning, it is only valid for each sub-action and suspended as a feature of the whole action expressed. The formation of Bulgarian imperfectives from perfectives (with -a-, -a-, -a-, -a-) is a productive nontransformativizing device, the products of which often occur with pluri-occasional (habitual) meanings, e.g., napis-vam ‘I (usually) write up’.

Though [+t] might be said to be typical of actional phrases expressing repeated events, plurality is not homogenizing as such. Even a [+ser] actional phrase may be limited. The plurality may be exhaustive, involving a whole set of entities, e.g., boil eggs [+t] → boil all the eggs [+s], and definite articles as markers of identifying reference may support such readings. Thus, write letters tends to be interpreted as [−t] because of its indefinite plural object. The corresponding object nominal in Russian pisat’ pis’ma may easily be interpreted as referring, in a limiting way, to a complete particular set (‘write and finish writing a / the [whole set of] letter[s]’). Still, the decisive factor is not the reference to a whole set of entities. Actional phrases with actants involving multiple entities may also be transformative: a collective ‘dying’ can, for example, also be conceived of as telic. The decisive question is about un-divided vs. divided reference to the set of entities: does the global event as a whole have a “desinence” – a built-in endpoint, an inherent final limit indicating an evolu-
6.5. — T-marking

Nontransformativization may be signalled by — T-marking modes of action, which overrule the idea of a crucial limit in the meaning of the basic actional phrase and thus exclude limit-oriented interpretations.

— T-marking can be performed by Slavic secondary imperfectives derived from prefixed perfective stems by means of suffixes that go back to iterative markers. In the meaning of these verbs, the actional notion of a crucial limit is suspended as a relevant feature. They still preserve their iterative function in some Slavic and Baltic languages, e.g., Lithuanian *per-raš-inėti* 'rewrite, copy (repeatedly)'. But Slavic secondary imperfectives may also function as — T-markers without implying [+ser], e.g., Czech vy-hazují 'I throw out, I am throwing out'. Ossetic transformatives may be nontransformatized by means of the element -cči. Turkic and Mongolian languages use postverb constructions to specify the statal phase of ambiguous actional phrases, e.g., Tatar *awır- 'fall ill + be ill' → awır-ip tör- 'be ill', Kalmyk *un- 'fall asleep + sleep' → un-t kevr- 'sleep'. The — T meaning may also be combined with a specification of the manner of realization, e.g., Turkish yaz-ip *dur- 'keep on writing' (durativity).

— T-marking can also be carried out with case-marking on object nominals. Transitive [+t] actional phrases may have intrasitive [+t,-t] counterparts, e.g., German *(etwas) durchbören* [+t,-t,+mom]/ *(etwas) dürchbohren* [+t,-t,-mom] 'bore through, pierce (something)' vs. *durch (etwas) bohren* 'bore through (something)', Swedish *skriva* (något) 'write (something)' vs. *skriva på* *(skriva på)* (något) 'be engaged in writing (something)'. Some Finno-Ugric languages employ systemic — T-marking by means of the partitive as opposed to the total ("accusative", formally genitive or nominative) object case. Such oppositions are usually said to distinguish "limited" from "non-limited" ("total", "resultative") actions. Since "limitation" here means divided reference to the object, the definition does not contradict our analysis. Limitation in our sense means that the actional content has an inherent limit defined by the extension of the object. The partitive serves as a — T-marker with homogenizing effect, e.g., Finnish *lukea kirjaa* 'read (parts of) the book'. By contrast, the total object case implies an action that includes a crucial limit, *lukea kirjan* 'read (and finish reading) the book'. Similarly, the total object case in Estonian *käpsetus koogi* 'baked a cake' (cf. Metsländ & Tammola 1995: 305) might be analysed as the unmarked case representing the natural transformativity of 'bake a cake', i.e., with a built-in crucial limit, whereas the partitive suppresses this limit in *käpsetus kooki* 'engaged in baking a cake'.

+T- and — T-markers may interact to produce differentiated actionality systems. Transformatives need nontransformativizing devices and vice versa. It is thus not surprising if — T-markers occur with items carrying +T-markers. Several — T-markers go back to iteratives, which often start from [+tf,-t] verbs and then diffuse to other types. Interestingly enough, the originally iterative Slavic -af- derivates, which developed into — T-markers, almost always occur with +T-marked verbs.

6.6. Recategorization options

The recategorization options mentioned are roughly summarized in the following graphic, which shows the paths of SER(ialization) to — t by means of [+ser], HOM(ogenization) to — t by other means, and LIM(itation) to [+tf]:

- +ti → HOM \(→ \) LIM \(→ \) SER \(→ \) - +t
- -t → LIM \(→ \) - -t
- +tf → SER \(→ \) - +tf

6.7. Interaction with time adverbials

A few words should be said here about the interaction of time adverbials with actional values, i.e., as modifiers of the actional phrase. The compatibility of time adverbials with actionality and aspect is a complex matter, to which I shall return in several sections. One basic question is whether certain adverbials refer to the global event, its subevents, or some other interval, e.g., an aspectual orientation point. The stereotype 'X Time' will be used for any quantified unit of time, and 't₁', 't₂' for different instant of time (Bertinetto & Delfitto, this volume).

Compatibilities with certain time adverbials can be used as criteria for distinguishing [+t]. The adverbials themselves do not indicate such actional values, but their meanings interact with the phase structure in various ways. The temporal delimitation performed by certain adverbials differs from the material limitation discussed above. Time adverbials have no limiting effect — t → +t. Not all temporally delimited events are telic and expressed by [+t] actional phrases.
‘In X time’ expressions do not measure the action, but the time needed for its accomplishment. Since this implies totality, they only combine with transformatives and may thus serve as a diagnostic tool for identifying the actional feature [+t]. They do not delimit the action, but indicate how long it takes to reach its crucial limit, e.g., *mow the lawn in (= within) ten minutes.*

‘X times’ expressions quantify the number of occurrences overtly and may thus have a delimiting effect, e.g., ‘go out four times’. ‘For X time’ expressions are mensoral, indicating temporal extension. Despite this temporally delimiting function, they do not limit [−t] actional phrases. They might, on the contrary, even seem to have a nontransformatizing effect in cases such as *mow the lawn for ten minutes.* However, *mow the lawn* is an actional phrase with no intrinsic transformativity to lose. The adverbial *for ten minutes* serves as a criterion for determining it as nontransformative. Basic transformatives must undergo quantitative reinterpretation to become compatible with ‘for X time’, e.g., *win for a long time:* [+t] + [−ser] > [−t, +dyn]. The type ‘from t₁ to t₂’ is delimiting in a similar way. Both types are not only used to measure the event itself, but may also indicate an O, the interval of an aspectual view (2.3.1). ‘Until t₂’ expressions are temporally delimiting, either referring to the extension of the action or to the time it takes to accomplish it. With [−t], they measure the action, e.g., *drink until dawn,* and with [+if, −mom], they may measure the accomplishment time, e.g., German *das Problem bis zehn Uhr lösen* ‘solve the problem by ten o’clock’. They neither transformativize nor nontransformativize, and cannot serve as [+t] criteria.

Abtemporal expressions of the types ‘since t₁’ and ‘since X time’ determine the beginning of an event still going on at an O, and may combine with [−t] or [+t]. Speed adverbials combine with [+t] and [−t, +dyn] actional phrases, e.g., *kill slowly, write fast.* Basically [+t, +mom] actional phrases can combine with them after quantitative reinterpretation, e.g., *tick quickly: [−t, +mom] actional phrases > [−t, +dyn]. Graduality adverbials combine with [+t] and [−t, +dyn] actional phrases capable of implying internal progress, e.g., *burn down gradually* (but *dance little by little*). Adverbials meaning ‘already’ express a state already obtaining at O (‘already being in the state at O’). Those meaning ‘still’ express a state that has not yet ceased to obtain at O (‘remaining in the state at O’). Both are only compatible with states, which does not, however, mean that they combine with [−t] actional phrases only.

### 6.8. Generalized ±T-marking

As a stage on the way leading from lexicon to grammaticalized aspect, ±T-marking, overt marking of the [±t] distinction, may be employed in a generalized way, [+t] and [−t] verbs being grouped together to form fixed actional pairs. Thus, while Indo-European verbs were largely assigned “tense classes” according to their [±t] actionality, many Classical Greek verbs acquired counterparts of the opposite actionality. More and more Aoristic [+t] counterparts to Presentive [−t] verbs were created. Verbs with similar meanings and different phase structures combined to form suppletive pairs integrated in the [±t] duality. The difference obviously concerned the actional content, not aspect as “la vue d’un procès” (Seiler 1993: 27). The actional function of the Aorist was increasingly taken over by preverbal items, e.g., *diēphyme* and *kaūphyme,* whereas simple items such as *éphyme* ‘fell’ were limited to a new “constative” use of the Aorist (cf. 7.2.2, 7.7.2). The +T-marking was rather general, but did not comprise all Aorists. +T-marked items later expanded to encroach on the functional territory of the simple verbs, causing their partial loss. Some modern European languages, e.g., Italo-Croatian, show similar tendencies to generalize +T-marked verbs and to lose their unprefixed counterparts (Breu 1992: 114–116).

In Slavic, ±T-marking is rather dominant. The perfective vs. imperfective duality created actional systems of paired verbs early on. The lexical meanings of the markers largely faded, and the [±t] functions were generalized: dynamic [+t] contents were systematically distinguished from [−t] contents, e.g., *napisati* ‘write down’ from *pisati* ‘write’. Items without +T-marking were increasingly interpreted as [−t]. Some Slavic perfective vs. imperfective distinctions, e.g., the Bulgarian one, have retained much of this early stage of semantic development. A system of this kind is also present in modern Hungarian. Basically finitransformative actional phrases require +T-marking, e.g., *meg-hat ‘die*’. The unmarked counterpart hal can only refer to an atelic action of a global event with [+ser] reading: [+t] > [+t] > [−t]. Mensural complements specifying the total extension need +T-marking for limitation, e.g., *ér egy levelet ‘write a letter’ → meg-fr egy levelet ‘write a letter (to completion)*, a levelet írja ‘write the letter’ → meg-irja a levelet ‘write the letter (to completion)’. With nonmensural complements, the +T-markers marks the crucial limit of each subevent, not of the global event, e.g., *leveleket ír ‘write letters’ → leveleket ír meg ‘write letters (to completion)’. Even type-referring actional phrases may be +T-marked: *levelet ír ’do letter-writing’ → levelet ír meg ’do letter-writing (to completion)*.

Even in languages where ±T-marking has become relatively systematic, it may be optional or lacking in certain cases. Given the asymmetrical nature of the actional distinctions, ±T-unmarked actional phrases are not always necessarily classified as [−t]. Classical Greek explicit +T-marking did not comprise all Aorists. The clearly transformative nature of an actional phrase may make +T-marking superfluous, e.g., Lithuanian *jeiti ‘enter,* miriti ‘die’. Modern Slavic languages possess nontransformativa tantum lacking [+t] counterparts, e.g., Bulgarian *govorja ‘I speak, am speaking’. Actional phrases with a potentially limiting object may dispense with +T-marking to signal that the object is nonlimiting, e.g., Bulgarian *pišče nova simfonija* ‘was writing a new symphony’ (Lindstedt 1985: 163).
Hungarian may refrain from marking actional phrases containing non-specific complements, e.g., levet kaptak ‘received a letter / letters’, új munkába kezdett ‘began a new work’. Directional adverbials may limit an actional phrase without obligatory +T-marking, e.g., lefekszik az ágyra or az ágyra fekszik ‘lies down on the bed’ (6.2).

Some cases of lacking ±T-marking concern the relation between global events and subevents. It was noted that a basically transformative Hungarian actional phrase may dispense with +T-marking if it gets a [+ser] reading recategorizing it to [−t]. Thus, hal ‘die’ requires +T-marking if the actional content is [−ser], e.g., meg-halt ‘(s)he died’, whereas the +T-marker is optional under the reading [−t] + [+ser] > [−t], e.g., százával halak ‘hundreds died’. The simple item refers to the actionality of the global event, not of the single subevents. The situation is similar in Italo-Croatian, which has in principle preserved its ±T distinctions, e.g., in Present and Imperfect, but shows tendencies towards dismantling the system. The younger generation is giving up +T-marking to signal transformativity of the subevents of a [+ser] global event, e.g., rivaša ‘arrived (repeatedly)’ (Breu 1992: 110).

Generalized and systematic ±T-marking was the starting point of the evolution of Slavic ±AD aspect (Section 9.4). The change implied that the [+t] and [−t] verbs grouped together developed into pairs signalling viewpoint distinctions. Interestingly enough, a similar path led from the Classical Greek preaspective actionality duality to the Modern Greek ±INTRA aspect (Section 7.2).

7. Intraterminality

7.1. Definition

The most widespread viewpoint opposition in European languages is that of intraterminality vs. nonintraterminality. Intraterminality, +INTRA, envisages the event from an internal point of view, intra terminos: within its limits, after its beginning and before its end. +INTRA items view the event in its course and are unable to grasp it in its totality. Since the viewpoint is inside the event, the initium, the finis and the full cursus do not appear in the range of vision (Johanson 1971: 101). In narrative discourse, this internal way of viewing events makes them non-propulsive, incapable of advancing a plot.

+INTRA items are used to describe processes and states as observed from orientation points temporally included in them. +INTRA is thus an instruction to situate the cursus of the event as overlapping an O. The event and O are not coextensive, O being included in the event time. The extension of the event is otherwise left unspecified: it may or may not last beyond O. As with all viewpoint operators, the realization of the phases that are not aspectually highlighted is by no means negated, but only latent, excluded from the view. +INTRA items tell us nothing about a possible attainment of the final limit after the point of aspect and thus do not signal objective non-completion.

Nonintraterminality, −INTRA, as opposed to +INTRA, does not present the event from an inside point of view, but rather envisages it from outside, without special regard to limits. It neither expresses nor excludes completion, but tacitly suggests, unless the contrary is signalled, the occurrence of the event as an unanalyzed totality including the endpoint. This integral meaning makes −INTRA items propulsive in narrative discourse. −INTRA may also imply the attainment of a crucial limit, if there is one to reach. Completion in this sense is the effect of transformative actional phrases.

The role of O should not be misstated to the effect that +INTRA only signals an orientation interval for the event, while the −INTRA denotes the very event. Both +INTRA and −INTRA items obviously refer to the event itself.

+INTRA items apply to events of various ontological types. The reason for using them is not that the event is durative or repeated. The event may be going on in a concrete and uninterrupted sense, have a short duration, be observed as ongoing over a longer stretch of time, be pluri-occasional, etc. Even telic events of a very short duration can be conceived of as viewed ‘from within’. Terms such as ‘durative’ or ‘nonpunctual’ for ‘intraterminal’ should, however, be avoided, since they are too easily interpreted as ‘temporally extended’, ‘being in a prolonged state’, etc. The massive attention given to ‘duration’ and ‘punctuality’ in literature on aspect has often caused confusion with notions concerning longer and shorter duration. ±INTRA oppositions do not primarily concern the question of duration.

The introspective manner of presentation emanates from the primary deictic “nunc” perspective. This natural vantage point for observing current events is always located in the middle of what happens, only allowing one to perceive an event from inside, not in its totality (Johanson 1971: 100–101, 130–131, 1994: 249–251). This view is typical of the discourse type of the synchronic report, which focuses on O and does not capture any simultaneous event as a whole (Johanson 1971: 77–78).

Without temporalization, an intraterminal may refer to ongoing events in any temporal stratum. Inside a narrative with a past-time O² axis, it is naturally understood as a past item. Otherwise, it is mostly understood as non-past by default. A −PAST (+INTRA) item may thus be regarded as an instruction to situate the cursus of the event as overlapping an O which is not posterior to O². Unless there are contextual indications to the contrary, O will be interpreted as coinciding with O², e.g., is finishing the letter. The narrow “nunc” perspective is naturally intraterminal, inherent to O³-oriented non-past items. This has important consequences for present time reference, as the restrictions concerning +AD show (Section 9). +AD cannot be applied to events current at “nunc”, as it disregards the cursus and envisages the future attainment of the crucial limit. −INTRA items are also incapable of envisaging a present cursus and are thus prima facie interpreted as ‘past’. The claim that
7.2. Intratemporality oppositions

Since intratemporality is a primitive category, ±INTRA oppositions are found in many languages. Even all known creole systems have +INTRA and −INTRA items, though less temporalized. The Arabic opposition +INTRA yaktuba ‘writes, is writing,’ was writing’ (‘Imperfect’, al-mūdārī) vs. −INTRA kataba ‘has written, wrote’ (‘Perfect’, al-mādīḥ) is often regarded as the typical example of “un système aspectal pur” (Kuryłowicz 1956: 27). +PAST (±INTRA) oppositions are found in huge areas throughout Europe, e.g., in English, all Romance languages, South Slavic, Modern Greek, Maltese, Basque, all Turkic languages, most Iranian languages (except Ossetic), Kalmyk, eastern Finno-Ugrian, Kartvelian and several other Caucasian languages. The oppositions are less developed in Germanic and western Finno-Ugrian languages. Most Slavic languages have given up their earlier intratemporality oppositions (7.9). Today, +PAST (±INTRA) is relevant in Eastern South Slavic and neighbouring Scandinavian varieties. Where only the so-called Aorist has been preserved formally, e.g., in certain Serbo-Croatian varieties, it does not represent −INTRA, since it no longer takes part in a +PAST (±INTRA) opposition.

With intratemporality-in-past, the “nunc” perspective is applied to past events by shifting the point of view from O to an O′. +PAST (−INTRA) is an instruction to situate the curasus as overlapping a past O′. +PAST (±INTRA) oppositions are known under different more or less felicitous designations, e.g., ‘cursive’ vs. ‘constative’, ‘imperfect’ vs. ‘aorist’, ‘inaccompli’ vs. ‘accompli’, ‘paratatic’ vs. ‘aoristic’ oppositions. As is well known, +PAST (±INTRA) oppositions are often subsumed together with +PAST (AD) oppositions under a general IPFV vs. PFV dichotomy. It is one of the aims of the present contribution to point out some substantial differences between these two types of opposition.

Examples of +PAST (±INTRA) oppositions are Hittite appikšit ‘was taking’ vs. epta ‘took, has taken’, Italian cantava ‘sang, was singing’ vs. canto ‘sang’, Spanish hablaba ‘talked, was talking’ vs. habló ‘talked’, Catalan veia ‘was seeing’ vs. va veure ‘saw’. Romanian fugea ‘ran, was running’ vs. fugi ‘ran’, Bulgarian četeše ‘read, was reading’ vs. čete ‘read’, Albanian hapte ‘opened, was opening’ vs. hapi ‘opened’, Romany džahs ‘went, was going’ vs. džaja ‘went’, Modern Greek εγκατέστηκε ‘wrote, was writing’ vs. εγκατέστηκε ‘wrote, was writing’ vs. γράφηκε, Gagauz avårdı ‘took, was taking’ vs. avårdı ‘took’, Chuvash vu-luččë ‘read, was reading’ vs. vūčč ‘read’, Karachai ala ‘edī ‘took, was taking’ vs. ala ‘took’, Kumyk bara ‘edī ‘went, was going’ vs. bărdı ‘went’, Kalmyk unsjala ‘read, was reading’ vs. umš ‘read’, Tati ba-ba-ba ‘wove, was weaving’ vs. ba-ba ‘wove’, Lezgian fwoj ‘was going’ vs. fenä ‘went’, Sami lǣ bædrædæm ‘was eating’ vs. bædrædi ‘ate’, Mordov lovlil ‘read, was reading’ vs. lovses ‘read’, Low (Meadow) Mari lăđeš ‘edī ‘read, was reading’ vs. ldo ‘read’, Udmurt pukol val ‘sat, was sitting’ vs. pukol ‘sat, was sitting’, Kom-Zyryan maru ‘wove, was weaving’ vs. mar ‘wove’. In a similar way, Basque analytical verbs oppose +PAST (+INTRA) to +PAST (−INTRA) items, e.g., mintatsen nintzen ‘I spoke, was speaking’ vs. mintatsen nintzen ‘I spoke’. The few synthetic verbs form a similar but less generalized +PAST (±INTRA) opposition besides an “aspectually neutral” Past tense (Haase 1994: 289).

Such language-specific oppositions have much in common. As shown by examples like French régna ‘reigned’ vs. régna ‘reigned for thirty years’ (Lyons 1977: 709), they obviously signal different aspects in the sense of viewpoint notions. For example, the Turkic oppositions are very similar to the Romance ones. The corresponding distinction present in Basque analytical verbs “is the same as in the Romance languages” (Haase 1994: 282). Kartvelian makes a basic difference between items derived from +INTRA (xavovani) and a −INTRA (peritebriv) stem. Thus, the Georgian +PAST (±INTRA) opposition also largely corresponds “à l’opposition, en français littéraire, entre l’imparfait et le passé simple” (Vogt 1971: 182). It is clear that the viewpoint operators of these oppositions basically operate on global events. The aspectual values have scope over the actional ones. This is also the case when, as in systems of the Bulgarian type, both the aspect of the global event and the actionality of its subevents are expressed overtly.

There is often formal parallelism between −INTRA (±INTRA) and +PAST (±INTRA) items, the latter being formed from Present stems by means of past auxiliaries, e.g., Tatar bara ‘is going, goes’ vs. bara idé ‘was going’, Udmurt mĩnd ‘is going, goes’ vs. mĩnd val ‘was going’, Romany džal ‘is going, goes’ vs. džahs ‘was going’ (cf. his ‘was’), Talysh händëdä ‘is reading, reads’ vs. händëdä be ‘was reading’, Kabardian ef ‘reads, is reading’ vs. eﬀert ‘was reading’, Chechen molu ‘drinks, is drinking’ vs. molu-ra ‘was drinking’. Kartvelian Imperfects are formed from the +INTRA stem by means of a d-suffix. In Indo-European, the Imperfect and the Present are also formed from one common +INTRA (“Present”) stem.

The items signalling intratemporality show varying degrees of grammaticalization and generalized use. In the languages dealt with here, the ±INTRA distinction is generalized (“obligatory”) in the past tense. There are, however, also systems in which
7.2.1. Uses of +PAST (+INTRA)

A +INTRA item suggests that the event is being the case at an O. Any instant during the cursor is a possible vantage point O. An O² may be more or less easily identifiable on the internal time axis of the discourse, but the value +INTRA is not dependent on this identifiability. +PAST (+INTRA) items may also be used without an identifiable O². The event may or may not be conceived of as occurring on a specific occasion or as part of a particular setting. Since a +PAST (+INTRA) item does not envisage the finis, it does not tell us whether or not the event continued beyond O².

A +PAST (+INTRA) item may present a uni-occasional event as an ongoing process at a past O², e.g., Italian pioveva, Turkish yağmur yağıyordu, Modern Greek ἐχότα 'it was raining'. This "continuative" use is said to be one of the main functions of IPFV items. A +PAST (+INTRA) item may also present a pluri-occasional event — as a global event containing repeated subevents — in the same way, e.g., Italian veniva ogni giovedì, Turkish her perşembe günü geldi 'came every Thursday'. This 'habitual' use is supposed to be another main function of IPFV items. In certain languages, e.g., Bulgarian, the actionality of the subevents may additionally be signalled by +T-marking (Section 6.3). Repetition is, however, not a pertinent feature of +INTRA, and +INTRA items are not necessary to express repetition. Hedin (this volume) emphasizes that, though the 'habitual' use has led to the conclusion that repetition is part of the IPFV semantics, mere repetition does not call for IPFV.

O² may be part of a longer interval expressed by a temporal adverbial such as in Turkish +PAST (+INTRA) Dün yağmur yağıyordu or Italian leri pioveva 'Yesterday it was raining'. The corresponding +PAST (+ INTRA) items yağmur yağdı or ha piovuto 'it rained' do not suggest any included O². Often, [−dyn] actional phrases expressing permanent states combine with +PAST (+INTRA), e.g., Turkish Ev, Roma'da bulunanlardı, Italian La casa si trovava a Roma 'The house was situated in Rome'. Here, the state is viewed as being the case (valid, obtaining) at a temporarily included O². Frequentive expressions do not block the use of +PAST (+INTRA) items, e.g., French J'y allais cinq fois par semaine, Turkish Haftada beş defa oraya gidiyordum, Modern Greek Πέντε εκεί πέντε χρόνια τόσον ενδέχεται 'I went there five times a week'. The decisive factor is that the event was the case during an interval that serves as a point of introspection.

In narrative discourse, +PAST (+INTRA) items play an important part within the so-called incidental schema of overlapping events, denoting an event that has already begun and is taking place when another event begins, e.g., egészse 'was writing', přechodzovach so 'was walking' and utul 'was sleeping' in Modern Greek Εγκατάστατα είνα γρήγορα άτανη bika 'He was writing a letter when I entered', Upper Sorbian Přechodzovach so po lěsku. Nadobo sumpich na hada 'I was walking in the forest. Suddenly I stepped on a snake' and Mordvin Zahr sovas 'kudõv, Elena eščo utul 'Zahar entered the house. Elena was still asleep' (Serebrennikov 1960: 229). Sequences of +PAST (+INTRA) items may express complex situations in which several events are going on simultaneously.

7.2.2. Uses of +PAST (−INTRA)

+PAST (−INTRA) items are by no means restricted to single events of limited duration, as often assumed in the traditional literature. 'Nondurative' is not a pertinent feature of their use. However, durative events are not viewed in their course, but rather summarized, e.g., Kalmyk +PAST (−INTRA) gazet umš 'read newspapers' as against +PAST (+INTRA) gazet umžula 'was reading newspapers'. Nor is 'noniterative' a pertinent property. +PAST (−INTRA) items are readily employed in sentences with global events containing repeated subevents, e.g., Italian è venuto ogni giovedì, Turkish her perşembe günü geldi 'came every Thursday', or with explicit reference to a definite number of times, e.g., French (ii) y est allé cinq fois, Turkish beş defa oraya gitti, Modern Greek pije eki pende forê 'went there five times'. The exact delimitation of an event naturally combines with a −INTRA view, though a +INTRA view can also, as we have seen, be applied. In y allait cinq fois par semaine 'went there five times a week', the global event contains an indefinite number of subevents, each constituting a weekly procedure consisting of five occurrences of a basic event. It is the global event that is characterized as viewed from the viewpoint of a temporally included O². The overt quantification of occurrences is not decisive for the aspect choice.

Moreover, 'situational change' or 'the view of the event as a completed whole' are not pertinent features of the nonterminal varieties of PIFV. +PAST (−INTRA) items of various languages are readily used for events that are neither transitional nor terminally delimited, e.g., Turkish geçen yıl çok çalışan, Modern Greek πέρσι διήλευσε πολύ 'worked much last year'. −INTRA does not signal completion, but typically suggests totality with transformative. As for entities expressed by objects, −INTRA as such does not specify whether or not they are totally affected (finished, consumed, etc.). Such contextual meanings presuppose undivided reference to the entity in question, i.e., require that the referent is totally involved in the actional content as its minimal-maximal mensural unit.

As unmarked members of their oppositions, −INTRA items possess a negative and a neutral value. The negative value of a +PAST (−INTRA) item enables it to present an event as 'becoming the case', i.e., situation-changing. With certain actional contents it suggests 'initial attraction', with others 'final attraction', realizations of-
ten interpreted as "ingressivity" and "resultativity", respectively. In such cases, the Modern Greek Aorist, as Seller remarks, "provoquera toujours l'impression d'une forte coupe" (1952: 74). The neutral value of -INTRA disregards any situational change, presents the event in an integral way and is thus kind of "natural" aspect for the action phrase. The neutral value allows complexive, constative, summarizing uses. It was said in traditional literature that the Classical Greek Aorist, in its complexive function, expresses the view of the event in its totality, contracting the cursus, as it were, into one point, surveying it with one glance from the beginning to the end, and concentrating a set of subevents into one point (Brugmann 1900: 476). When required, the negative value is activated, contrasting with the +INTRA value. Similar phenomena are observed in many languages, e.g., in the Akkadian 'constative' ikku, a - INTRA ('non-cursive') item with the negative value of a *forme historique*, 'he conquered, and then ' as well as a neutral value, 'he has conquered, he conquers in general' (Rundgren 1963: 57).

However, the use of a +PAST (-INTRA) item ultimately depends on the number and nature of the interacting items present in the system. If it only interacts with a +PAST (+INTRA) item, it covers a wider functional range than if it also interacts with a -PAST (+POST) item. +PAST (-INTRA) items only interacting with a +PAST (+INTRA) denote past events both in a historical and a diagnostic way, e.g., Turkish yâzdi, Maltese kieb 'wrote, has written'.

+PAST (-INTRA) items are main devices in narrative discourse. Thus, in literary French, the Passé simple (Simple Past) fulfills the function of a propulsive tense, on which the advancement of the plot rests. +PAST (-INTRA) items may denote sequences of temporally successive events, conceived of as linked to each other, e.g., Latin veni, vidi, vici 'I came, I saw, I conquered', but also temporally overlapping events, e.g., Ali konuşt, biz de dinledik 'Ali spoke and we listened', Portuguese A Maria contou uma história e o Pedro ouviu-a 'Maria told a story and Pedro listened to it' (Oliveira & Lopes 1995: 100). A +PAST (+INTRA) item is used when one of the events includes the A2 of the other, e.g., Turkish Ali konuşt, biz de dinliyorduk 'Ali spoke and while he was speaking we listened'. Within the incidenal schema of overlapping events, +PAST (-INTRA) items denote an event that begins while another event is already taking place, e.g., stupich 'stepped' in the Upper Sorbian example cited above.

7.2.3. Allegedly propulsive uses of +PAST (+INTRA)

In several European languages, +PAST (+INTRA) seems to intrude into the domain of items capable of viewing an event as a totality and to have a propulsive effect with regard to the progression of events in the sequential taxi of narratives. Such uses ("narrative imperfect", "imparfait pitoresque", "imperfectum rupturae") are well-known in stylistically marked contexts, often in specific discourse types. A question often posed is whether the +INTRA value is neutralized here or the orientation of the opposition is inverted in the effect that +PAST (+INTRA) is its unmarked member. An Imperfect such as Italian cantava 'was singing, sang' may indeed seem to be an unmarked Past tense as opposed to cantò (Vincent 1988: 300).

In the present framework, these uses are still considered realizations of the value +INTRA and not neutral "simple denotative" uses. The +PAST (+INTRA) item still refer to a state obtaining at an O2, though with a technique of presentation that imitates, for the purpose of narrative intimacy and vividness, the one-dimensionality of the synchronic report (Johanson 1971: 262–265). The event is shown as a synchronically observed scene without limits, which creates an impression of direct perception. The +INTRA view is not tied to a given O established by the narrative, but the plot is advanced by changing points of orientation, moving along the time axis and allowing for successive insertions of the intratemporal perspective. The point of view is mobile, whereas the view of the event remains introspective.

This use of +INTRA may suggest a direct leap into the cursus and thus create an "in medias res" effect, an unexpected perspective on the event as already going on, e.g., French A minuit il mourut 'At midnight, he was (already) dying' (Pollak 1960: 145–151) or East Armenian K'ii ii hetu na iynem er depi joro 'Shortly afterwards he was (already) walking down to the gorge' (Kozintseva 1995: 282). The dwelling before the finis produces an effect of non-advance, and the aspectual time may be interpreted as 'already obtaining' or as 'still obtaining'. The former reading is by no means aggressive. Turkish birdenbire uyuyordu 'was suddenly asleep' does not express the initiates, but offers, by contrast to uydu 'fell asleep', slept', a sudden introspection into the cursus. For combinations of soudain 'suddenly' with French Imperfect, see Sten (1952: 261–262). Languages void of +PAST (+INTRA) items may achieve a similar effect by using a [-t] verb instead of a corresponding ingressive [+t] verb (specifying the initial phase of the action). German Plötzlich schlief er ein 'Suddenly he fell asleep' denotes the beginning of the action 'to sleep', whereas Plötzlich schlief er 'Suddenly he was asleep' does not (Johanson 1975: 147).

A certain time interval may constitute the focus of interest and serve as O. Its overt expression may then function as the topic of the sentence, whereas the following comment conveys what is characteristic of O, i.e. what is 'already' or 'still' the case there, e.g., Italian +PAST (+INTRA) Due secoli fa nasceva a Bonn L. van Beethoven 'Two centuries ago, L. van Beethoven was born in Bonn' (Bertinetto 1987: 75). Hedin (this volume) cites Modern Greek cases in which a time interval is focused on, for example, in a curriculum vitae: +PAST (+INTRA) To 1945 pandrevolax 'In 1945, (s)he got married' as opposed to +PAST (-INTRA) To 1945 pandréftike '(S)he got married in 1945'.

Although the +INTRA value is neutralized here or the orientation of the opposition is inverted in the effect that +PAST (+INTRA) is its unmarked member. An Imperfect such as Italian cantava 'was singing, sang' may indeed seem to be an unmarked Past tense as opposed to cantò (Vincent 1988: 300).

In the present framework, these uses are still considered realizations of the value +INTRA and not neutral "simple denotative" uses. The +PAST (+INTRA) item still refer to a state obtaining at an O2, though with a technique of presentation that imitates, for the purpose of narrative intimacy and vividness, the one-dimensionality of the synchronic report (Johanson 1971: 262–265). The event is shown as a synchronically observed scene without limits, which creates an impression of direct perception. The +INTRA view is not tied to a given O established by the narrative, but the plot is advanced by changing points of orientation, moving along the time axis and allowing for successive insertions of the intratemporal perspective. The point of view is mobile, whereas the view of the event remains introspective.

This use of +INTRA may suggest a direct leap into the cursus and thus create an "in medias res" effect, an unexpected perspective on the event as already going on, e.g., French A minuit il mourut 'At midnight, he was (already) dying' (Pollak 1960: 145–151) or East Armenian K'ii ii hetu na iynem er depi joro 'Shortly afterwards he was (already) walking down to the gorge' (Kozintseva 1995: 282). The dwelling before the finis produces an effect of non-advance, and the aspectual time may be interpreted as 'already obtaining' or as 'still obtaining'. The former reading is by no means aggressive. Turkish birdenbire uyuyordu 'was suddenly asleep' does not express the initiates, but offers, by contrast to uydu 'fell asleep', slept', a sudden introspection into the cursus. For combinations of soudain 'suddenly' with French Imperfect, see Sten (1952: 261–262). Languages void of +PAST (+INTRA) items may achieve a similar effect by using a [-t] verb instead of a corresponding ingressive [+t] verb (specifying the initial phase of the action). German Plötzlich schlief er ein 'Suddenly he fell asleep' denotes the beginning of the action 'to sleep', whereas Plötzlich schlief er 'Suddenly he was asleep' does not (Johanson 1975: 147).

A certain time interval may constitute the focus of interest and serve as O. Its overt expression may then function as the topic of the sentence, whereas the following comment conveys what is characteristic of O, i.e. what is 'already' or 'still' the case there, e.g., Italian +PAST (+INTRA) Due secoli fa nasceva a Bonn L. van Beethoven 'Two centuries ago, L. van Beethoven was born in Bonn' (Bertinetto 1987: 75). Hedin (this volume) cites Modern Greek cases in which a time interval is focused on, for example, in a curriculum vitae: +PAST (+INTRA) To 1945 pandrevolax 'In 1945, (s)he got married' as opposed to +PAST (-INTRA) To 1945 pandréftike '(S)he got married in 1945'.

7.2.3. Allegedly propulsive uses of +PAST (+INTRA)

In several European languages, +PAST (+INTRA) seems to intrude into the domain of items capable of viewing an event as a totality and to have a propulsive effect with regard to the progression of events in the sequential taxi of narratives. Such uses ("narrative imperfect", "imparfait pitoresque", "imperfectum rupturae") are well-known in stylistically marked contexts, often in specific discourse types. A question
7.2.4. ±INTRA choice with time expressions

The choice of ±INTRA items with time expressions is a complex matter that cannot be dealt with at length here. The situation is hardly ever so simple that a certain adverbial occurs exclusively with +INTRA or −INTRA items. Time adverbials as contextual markers offer numerous problems that can only be hinted at here, in particular, whether they refer to O, the global event, or its subevents. Even the role of temporally delimiting adverbials depends on which of these three units they delimit.

Both +INTRA and −INTRA occur with expressions of ‘duration’ and ‘punctuality’ (for Modern Greek, see Seiler 1969: 6). Punctual expressions such as ‘suddenly’ are compatible with +INTRA if they refer to the point of introspection, e.g., Turkish Birdenbiye gülüyor ‘Suddenly [it was observed that] (s)he was laughing’. Compare the restricted combinability with −AD. Intraterminals naturally cooccur with O-referring adverbials such as ‘just’, ‘right now’, ‘right then’, and with adverbials expressing that the initium is not later than O (‘already’) or that the finis is not earlier than O (‘still’): is already writing, is still writing. Compare the similar use of −AD.

With ‘X times’ expressions, +PAST (=INTRA) is required to represent the whole global event including its final limit, e.g., Turkish üç kere bana yazdı ‘wrote to me three times’. Note that +PAST (=INTRA) is excluded in such cases, whereas both +AD and −AD items can be used. With ‘in X time’ expressions, which measure accomplishment time and identify the actional phrase as [+t], +PAST (=INTRA) items are usually chosen, e.g., repaired the car in three hours. They reject +PAST (+INTRA) items, since the indication of the outer measures of an event is not reconcilable with its presentation from an internal point of view (Johanson 1971: 229). Compare the similar use of +AD. ‘In X time’ can only cooccur with a basically [+t] actional phrase, if the latter is reinterpreted as [+ser] > [−t] and the adverbial refers to each subevent. Then, +PAST (=INTRA) is also possible, e.g., French toujours réparait la voiture en trois heures ‘always repaired the car in three hours’.

‘For X time’ expressions, which measure the temporal extension and identify the actional phrase as [−t], prefer +PAST (=INTRA), e.g., played chess for one hour, repaired the car for three hours. Exact indications of the outer measures of the event are mostly infertile with a +INTRA view, e.g., *When I entered, they were playing chess for an hour. Compare the natural use of +PAST (−AD) to present an event as extending over a period of time. This choice shows an essential difference between IPPV items of the +INTRA and −AD types. It is thus wrong to claim that ‘for X time’ necessitates a IPPV view.

‘For X time’ may cooccur with +INTRA items if the actional content has a [+ser] reading and the adverbial can be taken to refer to each subevent, e.g., French Ils jouaient toujours aux échecs pendant une heure ‘They always played chess for an hour’. Low-focals are generally used in such cases. Some high-focals can only be used for uni-occasional events, for example, the Italian Copula + Gerund peripher-

sis, which is thus incompatible with durative adverbials. Languages with a focality opposition may use a higher item to envisage each subevent as ongoing, e.g., They were playing chess every evening for three years. If ‘for X time’ measures the total extension of a pluri-occasional global event, −INTRA is again natural, e.g., Turkish Senelerce, her hafta bana mektup yazedì ‘For years and years he wrote to me every week’.

‘Until ts’ expressions are temporally delimiting in a similar way and choose −INTRA, e.g., played chess until dinner. +INTRA is possible if the actional content gets a [+ser] interpretation. The adverbial then determines the duration of each occurrence, e.g., Turkish Her akşam, saat ona kadar ışınca oynuyordum ‘Each evening they played / were playing chess until ten o’clock’. Here, +INTRA applies to a pluri-occasional global event composed of temporally delimited but aspectually not characterized subevents. Again, languages with a focality opposition may use a higher item to envisage each subevent as ongoing, e.g., Each evening they were playing chess until ten o’clock. The type ‘from ts to ts’ behaves similarly, if it measures the event itself, e.g., played chess from 9 p.m. to midnight. If it indicates O, the intraterminal viewpoint, it is of course compatible with +INTRA, e.g., From 9 to 10 p.m. (= as long as observed), they were playing chess.

In many languages, ‘since ts’ expressions refer to an event that is still going on and viewed intraterminal at O, ‘ts’ determining its initium, e.g., Italian ballava da mezzogiorno, Spanish ballaba desde el mediodía ‘had been dancing since noon’. The abtemporal expression ‘since X time’, which measures the time between the initium and O, may be used similarly (Bertinetto, this volume). Compare the corresponding uses of −AD.

7.3. Degrees of focality

Intraterminals display higher and lower focality degrees. Focality concerns the concentration (focus) of the psychological interest on the situation obtaining at O, the core of “nunc”. All intraterminals refer to events that are relevant within an interval including O, but they may differ with respect to the relative narrowness of the range of vision determined by “nunc” (Johanson 1971: 130–134). The ‘presentness’ is more or less focal: from the narrowest idea of an interval confined to the immediate proximity of O to broader ideas of an expanded and even infinitely expandable period of time.

Focality is a scalar notion, and focality values are relative. The focality values of individual items are also subject to constant diachronic change. If focality degrees mirror the temporal validity of events, it is only in a relative sense. For example, the temporariness conveyed by high-focals is not restricted to events going on at O in the most concrete and unbroken sense. I am writing a book can be felicitously
uttered at a moment when no concrete writing or preparatory work is going on. *Are you still playing the guitar?* may be asked at a moment of total musical inactivity and only imply a relative temporariness, delimiting an expanded ‘presentness’ from a still broader one. A higher focality degree may also be chosen to express a higher internal dynamics, intensity or actional density of what is going on at O. Such effects depend on the conceptualization of the actional content. For example, actional density is less likely to be produced with [-dyn] actional phrases.

There have been many attempts to classify items of different focality degrees in European languages and at defining them in a general way by means of ontological and situational characteristics. The results are unsatisfactory, partly due to the lack of clear criteria for the contexts in which the types are supposed to occur. It has not been possible to set up situational types in terms of the focality degrees used to describe them, not even to establish absolute functional stations such as ‘progressive’ in a straightforward way. Focality oppositions do not distinguish ‘processes’ (non-transitional events involving internal gradual change) from ‘states’ (non-transitional events not involving any internal gradual change). The ontological and situational characterization basically depends on actionality and is ultimately a matter of interaction of aspect – of higher and lower focality degrees – with different types of actional content.

As a rough classification of ‘presentness’ ascribable to events going on at O, it might be assumed that the range of vision can be (i) narrow, (ii) expanded, or (iii) open. It may thus concern (i) uni-occasional events, basically confined to the immediate proximity of O and actually performed there; (ii) uni- or pluri-occasional events, not confined to the immediate proximity of O, but actually performed there; or (iii) uni- or pluri-occasional events, in principle being the case at O, but not actually performed there.

The tentative focality scale adopted here has three positions or cardinal degrees: relatively high focality (HF), relatively low focality (LF) and nonfocality (NF). The classification is based on notions developed in Johanson (1971), where different degrees of focality (‘Prägnanz’z) were discerned, and mirrors empirically well-known variants of intraterminals. It is not incompatible with the one found in Comrie (1976: 25), where an ‘imperfective’ aspect is subdivided into “habitual” and “continuous”, the latter category being further subdivided into “nonprogressive” and “progressive”. High-focal roughly corresponds to “progressive”, low-focal to “nonprogressive continuous”, and nonfocal to “habitual”. However, my classification only applies to IPFV items of the intraterminal kind. European nonadterminals do not distinguish linguistically relevant focality degrees.

Terms such as “progressivity” and “habituality” will be avoided here, since they are often used inaspectological literature in a substantial sense (e.g., for short-term and long-term states) that has little in common with focality degrees. The meaning of “habituality” in everyday language might also give rise to confusion, suggesting that ‘habit’ and ‘repetition’ are necessary features. Nonfocality does not only cover +INTRA operating on [+ser] actional phrases. On the other hand, as noted above, habits do not necessarily require +INTRA presentation as obtaining at O. The focality degrees will not be referred to as different “aspects”. They are neither special viewpoint nor actional content categories. Since the same is obviously true of Comrie’s subtypes, there is no justification for Bache’s assessment of “progressivity” and “habituality” as inherent meanings in the sense of “Aktionsarten”, or for his remark that Comrie’s subcategories are “all definable in terms of inherent meanings rather than as subdivisions of imperfection” (1982: 60).

7.3.1. Focality types

Intraterminals of high focality, +INTRAHF items, focus on the core of “nunc” and events going on there, suggesting a ‘narrow presentness’. They tend to stand for uni- occasional events, i.e., one single occasion of performance, and are particularly suited to convey the impression of internal dynamics, gradual movement towards the finish. These properties are typical of PROG (“progressive”), often considered to be a subtype of IPFV, e.g., was writing. According to Dik, the English Progressive expresses one facet of what may be covered by the “imperfective” or other languages, though the semantic content gets a more specific interpretation (1989: 188–189).

Since clear criteria for “progressive situations” are not available, we shall not try to establish a high-focal category delimited from other intraterminals on the basis of situations. The question ‘What is X doing right now?’ may be interpreted in terms of different degrees of narrowness and answered with more than one item. It is not uncommon that two items of different focality degrees both qualify as PROG according to a given situational criterion or that an item qualifying for PROG in one test fails in the next one.

Intraterminals of low focality, +INTRA LF items, do not focus strongly on the core of “nunc” but denote, in the sense of an ‘expanded presentness’, single or repeated, uni- or pluri-occasional events going on there. What is often referred to as a “general present” is characterized by low-focal intraterminality and does not constitute an independent aspect. As noted above, nonfocal –PAST items are non-oppositional +INTRA0 items representing the intraterminal notion in a rather feeble way. This subtype of intraterminality is also represented by Imperfects such as French *écrivais* or Turkish *yazıyordu* ‘was writing, wrote’. It is apt to present an event as a ‘continuous unfolding process’ and thus corresponds to Comrie’s negatively defined “continuosity”, namely an “imperfectivity” that is not “habituality” (1976: 26). However, I do not consider it possible to establish an absolute low-focal category on the basis of unequivocal situational criteria.

Nonfocal intraterminals, expressing +INTRA NF, do not focus on the core of “nunc” but denote, in the sense of an ‘open presentness’, single or repeated, uni-
or pluri-occasional events obtaining there. The event is conceived of as being valid in a regular or characteristic way, without being actually performed at the very moment of introspection. It may thus also be an extratemporal event, an event-type or a general property. Nonfocals roughly correspond to Comrie’s “habituals” which “describe a situation which is characteristic of an extended period of time” (1976: 27–28). Note, however, that it is not the objective extension in time that decides whether the event is ‘characteristic’ or not, as Bache’s interpretation of Comrie’s classification seems to suggest (1982: 61).

Nonfocal non-pasts, -PAST (+INTRA\kappa) items, thus exhibit uses that clearly burst the narrow introspective view. These so-called “general” or “unmarked” Presents can be used for uni-occasional events in temporally limited progress at O, pluri-occasional events, temporally unlimited events, events referred to as a type, universally valid facts (gnomic use), past events (historical use), fictitious events, foreseen, scheduled, planned, intended events (futurate use), potential events, ability to perform a given action, etc. In all this, they are rather similar to -PAST (-AD) items.

7.3.2. Coverage of situations

Focality degrees are distributed across language-specific items in rather different ways. As for non-past items, there are, for example, “concrete” Presents representing high and low focality, “usual” or “general” Presents representing low focality or nonfocality, combined “Present-Futures”, general items covering the whole range of current, habitual and timeless events, and “potential” Presents representing nonfocality with modal values (e.g., disposition). For example, both the Georgian general Present and the Turkish potential Present may express timeless events: Georgian Dedamiqa miz giarasmo brunava, Turkish Dünya, giyins estraflinda dönör ‘The earth turns round the sun’.

A lower item on the focality scale is semantically more general than a higher one, indifferent towards the notion of a higher focality. It may thus cover referential areas of a higher item, i.e. be used in cases that allow characterization in terms of higher focality or require a higher item in some other language. If a language has two items of different focality, the lower one may roughly cover ongoing events that are more precisely expressed by the higher one, e.g. English wrote > was writing. A relatively low +INTRA item in language A may cover situations that require a higher item in language B, e.g., French écrivait > English was writing. This is also true of items that are indifferent towards intratemporality, e.g., German schrieb > English was writing. Nonfocals may roughly cover situations more accurately expressed by low- and high-focals, e.g., French fume, Modern Greek kapnaī ‘smokes’. Many nonfocals with partly modal functions may also cover higher areas. All these items must, however, be distinguished from special markers of pluri-occasionality, disposition, etc. (Section 4.2). The latter cannot cover any higher referential areas, as a praesens / imperfectum usuale, generale or potentialia can.

Though intratemporals generally operate on global events, high-focals may operate on the subevent level, i.e. apply to subevents of a pluri-occasional global event, e.g., Each time we flew home, he was reading a book. She always calls me when I am working, Portuguese: O João está sempre a fumar ‘John is always smoking’ (Oliveira & Lopes 1995: 109, footnote 16). If two items of different focality degrees are available, the lower one may apply to the global event and the higher one to subevents (see “Prägnanzüberlagerung”, “focality superimposition”, Johanson 1971: 267–268). Operating on the subevent level is typical of preaspectuals and early high-focals, e.g., Finnish Hon soittaa aina, kun olen siivoamassa ‘(She) always calls when I am cleaning’. This behaviour is rather natural given the fact that the items develop from modes of action, which modify single basic actions.

7.4. Focality oppositions

Numerous European languages exhibit thoroughly grammaticalized focality oppositions. The area of oppositions in this rigorous sense includes most Romance, Turkic, Iranian, and Caucasian languages, English, Icelandic, Irish, Basque, Maltese, Kalmyk, etc. The absolute degrees vary: some oppositions concern higher, others lower focality. On the other hand, many European languages such as Slavic, Finno-Ugrian and most of the Germanic ones make little use of highly grammaticalized devices for distinguishing focality degrees. However, many of them possess preaspectual devices representing lower degrees of grammaticalization and not integrated into the core of the aspect/temporal systems. It may sometimes seem difficult to estimate the degree of grammaticalization and thus to delimit the areas of focality oppositions. The items signalling higher focality show varying degrees of generalized use (“obligatoriness”) and combinability with tenses. Many are used rather restrictively. If all such devices are considered, the areas of focality oppositions will practically cover the whole of Europe. Some of them will be commented upon under 8.8–9.

In the non-past stratum, English progressives express high-focal intratemporality within the opposition -PAST (+INTRA\kappa (+FOC)) is writing vs. -PAST (+INTRA\kappa (-FOC)) writes. In the simple past stratum, however, the high-focal is the only +INTRA item of the opposition: +PAST (+INTRA) was writing vs. -PAST (-INTRA) wrote. The opposing simple Present and Past tenses are not “perfectives”, just items characterized by a lower degree or absence of focality. The highly developed English Progressive system is unique within the Germanic group, but Irish has a strikingly similar basic system. In the non-past stratum, there is an opposition of a high-focal progressive Present, e.g., -PAST (+INTRA\kappa (+FOC)) ṭd ag scriobh ‘is writing’, and a so-called “usual” or “habitual” Present tense, e.g., -PAST
(+INTRA\(^9\) (¬FOC)) scribbhann 'writes'. In the simple past stratum, however, the high-focal is, as in English, the only +INTRA item: +PAST (+INTRA\(^9\) bhi a\(\)d 'was drinking' vs. +PAST (¬INTRA) d\(\)il 'drank'. Similarly, in Basque, analytical verbs form one single +INTRA item in the simple past stratum, +PAST (+INTRA), e.g., joaten nintzen 'I went', was going' vs. +PAST (¬INTRA) joan nintzen 'I went'. In the non-past stratum, the few syntactical verbs left from an older system may oppose a −PAST (+INTRA\(^9\) (FOC)) item to a −PAST (+INTRA\(^9\) (¬FOC)) one, e.g., egoiten nai: 'I am staying' vs. banago 'I stay' (Haase 1994: 285). The situation is similar with some preaspectsual or early +INTRA distinctions, e.g., Estonian −PAST (+INTRA\(^9\) (FOC)) on tegemas 'is doing' vs. −PAST (+INTRA\(^9\) (¬FOC)) teeb 'does', but +PAST (+INTRA) oli tegenas 'was doing' vs. +PAST (¬INTRA) tegi 'did'. Kuryłowicz assumes a corresponding Hittite opposition appiskizzı 'is taking' vs. epiz 'takes' (1956: 26).

The types just mentioned are, however, rather marginal in the overall European picture. Focality oppositions more frequently involve two +INTRA items in both strata, a phenomenon sometimes addressed as grammaticalization of IPFV and PROG in one and the same language. For example, Romance languages except French and Romanian employ, apart from their +INTRA\(^9\) Presents and +INTRA Imperfects, thoroughly grammaticalized devices signalling higher focality, e.g., items of the type Auxiliary + Gerund / Infinitive. There are thus −PAST (+INTRA\(^9\) (FOC)) vs. −PAST (+INTRA\(^9\) (¬FOC)) oppositions such as Italian sta cantando 'is singing' vs. canta 'sings, is singing', Spanish está hablando 'is speaking' vs. habla 'speaks, is speaking', and Portuguese está a falar or est'a falando 'is speaking' vs. fala 'speaks, is speaking'. There are corresponding +PAST (+INTRA (FOC)) vs. +PAST (+INTRA (¬FOC)) oppositions such as stava cantando 'was singing' vs. cantava 'sang, used to sing, was singing', estava hablando 'was speaking' vs. hablaba 'spoke, used to speak, was speaking'. The +PAST high-focals are used rather extensively in the languages where they occur.

The situation is somewhat different in Turkic and Iranian languages. For example, Turkish has oppositions between higher and lower focal items, e.g., dişmekedir 'is falling' vs. dişiyor 'is falling, falls', dişmekseydi 'was falling' vs. dişiyordu 'was falling'; compare the corresponding Kirmanji oppositions dideviye 'is falling' vs. dikevi 'is falling, falls', dideviye 'was falling' vs. diket 'was falling'. The lower items are very frequently used. All Turkic and most of the Iranian languages also display −PAST (+INTRA\(^9\) (FOC)) vs. −PAST (+INTRA\(^9\) (¬FOC)) oppositions including still lower focals, e.g., Azerbaijani yazır 'is writing' vs. yazar 'writes, will write', Tati mibaftan 'is weaving' vs. mibaju 'weaves, will weave'. Corresponding +PAST (+INTRA (FOC)) vs. +PAST (+INTRA (¬FOC)) oppositions are Azerbaijani yazdırdı 'was writing' vs. yazdırı 'wrote, used to write, would write', Tati mibaftan bu 'was weaving' vs. mibaft 'wove, would weave', Talysh bóndeđa be 'was reading' vs. ahndi 'read, used to read, would read'.

Focality oppositions are found in many other languages. Examples of −PAST (+INTRA\(^9\) (+FOC)) oppositions are Sami le bàrdameyn 'is eating' vs. bàrat 'eats, is eating', Kalmyk umshana 'is reading' vs. umnə 'is reading, reads'. Northeast Caucasian (Nakh-Dagestanian) examples are Chechen (Nakh) molul 'is drinking' vs. molu 'is drinking, drinks', Khváshku küla göli 'is throwing' vs. küleš 'is throwing, throws', Akhvakh quwarere göli 'is writing' vs. quwarre 'writes' and Archi štaari vi q'ong 'I am writing a book (just now)' vs. zari štar q'ong 'I write a book (in general)'. Certain Caucasian languages use different copulas – an "esse concretum" and an "esse abstractum" – for different focality degrees, e.g., Tabasarán +PAST (+INTRA (FOC)) licurayi < licuri ayi 'was going' vs. +PAST (+INTRA (¬FOC)) licurii < licuri voyi 'went (generally)'. Note that, in spite of their material similarity to English Progressives, the Lithuanian so-called Continuatives (periphrases he 'be' + Present participle) do not regularly convey high-focal intraterminal meaning, but rather tend to express inimine, 'be about to'. Thus, buvo berašqąs is normally interpreted as 'was about to write', and not as 'was (already) writing'.

Renewal of focality is often observed earlier in −PAST than in +PAST items. Thus, Gagauz has one −PAST item of higher and one of lower focality, verer 'gives, is giving' vs. verir 'gives, will give', whereas there is only one established +PAST item, vereriği 'gave, was giving'.

In some languages, +PLUR (pluri-occasionality) and +DISP (disposition) markers may combine with members of focality oppositions. The marked member of the English opposition +PAST (+PLUR (+INTRA (+FOC))) used to be writing vs. +PAST (+PLUR (+INTRA (¬FOC))) used to write signals that the first actant referent was, on each occasion, found in the middle of the given event. Similarly, Irish pluri-occasionality constructions can distinguish "between a progressive event which is taking place at the moment of speaking and a similar event which is performed regularly over a longer period of time" (Ó Baoill 1994: 202), e.g., −PAST (+PLUR (+INTRA(+FOC)) bionn ag scriobh 'is usually writing' and +PAST (+PLUR (+INTRA(+FOC)) bhiodh ag scriobh 'used to be writing'. In Lithuanian, +PLUR may also combine with the so-called Continuative, e.g., būdavo berašqąs 'used to be about to write', būdavo beparašqąs 'used to be about to write to completion'.

The Maltese +DISP (disposition) marker ikun signals, with the Progressive +INTRA\(^9\) (FOC), disposition to high-focal intraterminality, e.g., −PAST (+DISP (+INTRA\(^9\) (+FOC)) ikun qed jikteb 'will be writing', and, with the Imperfect +INTRA\(^9\) (¬FOC), it signals disposition to low-focal intraterminality, e.g., −PAST (+DISP (+INTRA\(^9\) (¬FOC)) ikun jikteb 'he will write'.
7.5. Oppositions of higher and lower focality

The degree of focality signalled in the oppositions may be lower or higher. While no absolute graduation is possible, a rough distinction between relatively high focality (HF) and relatively low focality (LF) may be useful.

In some oppositions, the higher item basically stands for a narrow presentness and is not readily used for an expanded or open presentness, e.g., Icelandic: -PAST (+INTRA9 (+FOCSE)) er að lesa bókina ‘is reading the book’, er sofandi ‘is asleep’ vs. -PAST (+INTRA9 (-FOC)) lesa bókina ‘is reading, reads the book’. Some Romance verbs are more restricted than others. For example, Italian copula + Gerund items seem to represent a higher focality than motion verb + Gerund or copula + locative Infinitive items.

Turkish languages of Europe display oppositions of a relatively low focality, e.g., Turkish -PAST (+INTRA9 (+FOC)) yazyor ‘writes, is writing’ vs. -PAST (+INTRA9 (-FOC)) yazar ‘writes, will write’; +PAST (+INTRA (+FOC)) yazıyordu ‘was writing, wrote’ vs. +PAST (+INTRA (-FOC)) yazardi ‘wrote, would write’ (Johanson 1971: chapter 5, 1994: 261–262). A similar picture is found in some non-Turkish languages standing under strong Turkish influence, e.g., Lezgian: -PAST (+INTRA9 (+FOC)) firwa ‘goes, is going’ vs. -PAST (+INTRA9 (-FOC)) fida ‘goes, will go’; +PAST (+INTRA (+FOC)) fizwaj ‘was going, went’ vs. +PAST (+INTRA (-FOC)) fidaj ‘went, would go’. The unmarked -FOC items represent a highly general, ‘open presentness’, which includes pluri-occasionality and also type-reference, genericity, extratemporality, potentiality, disposition, inclination, tendency, intention, etc. The nonfocal value is thus partly modal. When being neither Habituals nor Futures, the items in question are, by virtue of their value, easily interpreted as having habitual or future time reference.

This is a type found in several European languages. A relatively low-focal Maltese intraterminal, signalled by the Imperfect + ged, is opposed to a nonfocal intraterminal, expressed by the bare Imperfect, e.g., -PAST (+INTRA9 (+FOC)) ged jikteb ‘he is writing’ vs. -PAST (+INTRA9 (-FOC)) jikteb ‘he writes, will write’; +PAST (+INTRA (+FOC)) kien ged jikteb ‘he was writing’ vs. +PAST (+INTRA (-FOC)) kien jikteb ‘he wrote, would write’. The nonfocal is often taken for a habitual, though it also gets modal and future time readings. It is a defocalized item similar to the Turkic type mentioned. In some cases, the ged-marked item is used in a still less focal sense, i.e., for pluri-occasional subsentences, albeit with a meaning of temporariness, e.g., ged jorgod ‘is (usually) sleeping (now as opposed to earlier)’. This occurs with initiotransformatives forming high-focal +POST items of the type riqied ‘has fallen asleep’ = ‘is asleep, is sleeping’ (see 10.3.1.2).

Northeast Caucasian (Nakh-Dagestanian) languages such as Andi, Avar, Archi, and Lezgian possess similar nonfocals of the type -PAST (+INTRA)9 (-FOC). The Lezgian -da form has general and partly modal functions interpretable as ‘habitual’, ‘future’, etc. It has therefore been characterized as a “Future” with a “future/habitual polysemy” (Haspelmath 1994: 276). The above-mentioned Khvashi item kule ‘throws, will throw’ displays analogous uses. In several Iranian languages such as Talysht and Fati, the +PAST (+INTRA (-FOC)) items get similar habitual and modal (potential, counterfactual) readings, e.g., Talysht ahndi ‘read, used to read, would read’. The further the focal item develops along the defocalization path (7.8), the stronger the modal meaning of the unmarked member will be.

Certain languages distinguish more than two degrees of focality. In particular, high focality can be renewed, when the lowest item has developed so far along the defocalization path that it rather belongs altogether to the modal area. Some Turkic languages of the area have renewed high focality by means of periphrases with auxiliary verbs such as yatir ‘is lying’ and turur ‘is standing’. Besides the Nogai opposition -PAST (+INTRA9 (+FOC)) yazya attir ‘is writing’ vs. -PAST (+INTRA9 (-FOC)) yazadi ‘is writing, writes’, there is a third lower item that corresponds formally to Turkish yazar but surpasses it with respect to modal content, -PAST (+MOD) yazar ‘will, may, tends to, is likely to write’. Compare Karachai ala turadi ‘is taking’, aladi ‘is taking, takes’, alir ‘will [etc.] take’. There are corresponding -PAST items, e.g., Karachai ala turda ed ‘was taking’, ala ed ‘was taking, took’, alir ed ‘would [etc.] take’. Turkish also has, besides yazyor and yazar, a third item which, at least in certain discourse types, represents a higher degree of focality, yazma killa ‘is writing’, yazmakta ‘was writing’. Similar trichotomies may be said to exist in Daghestanian languages, if their so-called continuatives, signalling ‘is, was still V-ing’ are taken to represent a high degree of focality. Albanian may express different degrees of focality by (i) copula + intraterminal gerund, (ii) the combination po + Present, and (iii) the plain Present. The narrowest "nunc" is expressed by the high-focal (i), e.g., esthé duke punuar ‘is just working’. Degree (ii) is defined as nongeneral ("merkmahhaft-nicht-generell", Buchholz & Fiedler 1987: 168) and is functionally rather close to the Turkish Present tense in -iyor. There are also +PAST items corresponding to both (i) and (ii).

7.6. Sources and shapes of intraterminals

Intraterminals, like postterminals, usually emerge as high-focals by way of grammaticalizing statal expressions. The creation seems to be based on relatively few models, largely identical to the construction types of statal, progressive, or cursus-specifying modes of action mentioned under 4.2.

In general, the verb takes a non-finite – participial, gerundial or infinitival – form, mostly provided with a copula. Typically, the point of departure is a nominal form of the verb, e.g., writing, a preaspectual item outside the verb conjugation and originally usable as an adjective. The aspectualization turns it into a genuinely verbal
to Aorist stems, e.g., ἐφυγε ‘escaped’. On this basis, Modern Greek has developed a full-fledged intraterminal opposition, enlarging the old stem formation to the effect that most verbs have a +INTRA stem opposed to a −INTRA stem, e.g., γηράω vs. γηράπω ‘write’. There are also suppletive pairs such as τροχή−ντα ‘fagile’− ‘eat’. The Latin Imperfect legēbat ‘was reading’ has its regular reflexes in all Romance languages, e.g., Portuguese lia. The Slavic imperative type in -aj, which came to oppose the old Present, was of iterative origin. Iranian languages form intraterminals with elements such as mi, di- prefixed to the stem, e.g., Kirmanji +PAST (+INTRA) dixebeit ‘was working’ vs. +PAST (=INTRA) xebit ‘worked’. Turkic languages formed older intraterminals in -(V)r, e.g., Turkish əlr ‘takes’ (later on generally renewed by means of periphrases).

7.7. The way to intraterminality

Many European languages display items that have progressive-like meanings without being full-fledged aspectual +INTRAHR items. The development of high-focal intraterminals often starts with periphrastics that preserve older iterative, durative or continuing meanings. Numerous progressive-like constructions in Germanic, Finno-Ugric, Turkic, etc. exhibit uses atypical of grammaticalized +INTRAHR items. Some periphrastics express ‘be in the course of’, e.g., French être en train de, Romanian a fi in curs de, Danish være i gang med. Others use verbs meaning ‘hold’, e.g., Norwegian bokmål jeg holder på med å skrive, Yiddish ikh halt in shraybn ‘I am writing’. Hungarian displays a progressive-like device based on inversion, e.g., ment ki ‘was going out’ vs. kiment ‘went out’. It is created by placing the +T-marker of a transformative in a postverbal position and adding a specific accent pattern (‘ment’), e.g., éppen írta ala a levelet ‘was just signing the letter’ vs. éppen aláírta a levelet ‘just signed the letter’. The Ossetic –T-marker -cai also has similar progressive-like uses, e.g., racxicići ‘was going out’ vs. racidći ‘went out’.

When a preaspectual progressive-like item develops into an early aspectual +INTRAHR item, there are stages where it exhibits both actional and aspectual features. For cases of apparent ambiguity in Turkic, see Johanson (1995). The process in question must also be distinguished from subsequent defocalization processes (7.8), which, in some cases, might even seem to take the reverse direction. Examples of these bidirectional tendencies will be given below.

Some languages possess special high-focal continuing items signalling that an intraterminal state has begun and is continued, ‘is, was still V-ing’, e.g., Catalan segueix treballant ‘is still working’ (segueir ‘follow, continue’ + Gerund). Dagh-estanian items of this kind carry markers such as Andi -gəzə, Archi -mat, Lezgian -ə-ma, e.g., Lezgian kəzəma ‘is still falling asleep’ as against the non-continuative high-focal kəzəwa ‘is falling asleep’ (Haspelmath 1994: 269). Kalmyk uses non-
past and past continuatives meaning ‘keeps, kept V-ing’, ‘is, was V-ing’, e.g., kūdūti būti ‘was still working’. The Lithuanian so-called Continuatives have different functions, but high-focal continuativity in the non-past stratum may be expressed by combining be- with the particle te-, e.g., tebėra (be)rašti ‘is still writing’ (Mathiassen 1996).

Preaspektuals are less grammaticalized in the sense of having a less generalized use and being easily replaced by unmarked items to refer to ongoing events, even within the so-called incidental schema. This is the case with most Germanic progressive periphrases. Not even items such as war am Essen ‘was eating’ in spoken German varieties are generalized enough to be included in the core systems. Their optional use for ongoing events indicates that they are less grammaticalized (Johanson 1975: 150). Among similar items are Baltic Finnic inessive constructions, e.g., Estonian ollit tegemas ‘was doing’, and the Hungarian progressive device based on inversion, e.g., ment kő ‘was going out’. Several Romance items, e.g., the Italian stava per periphrasis, are often easily replaced by simple Imperfects of lower focality.

Some other typical differences may be observed. Preaspektuals often combine with ‘in X time’ adverbials, whereas +INTRAHF items do not. Many preaspektuals such as Latin esse periphrases, Germanic postural statals, Swedish hälla på att loch constructions, Turkic postverb constructions with tur- ‘stand’, may express durativity in addition to their statal meaning, whereas +INTRAHF items do not. Preaspektuals may also apply to [-dyn] actional contents, whereas +INTRAHF items require dynamicity. Combination with [-dyn] may yield derogative connotations of impatience with the intensity or perseverence of the event. Such meanings result from durativity, i.e. an actional notion. Preaspektual postural verb constructions may preserve some of the original meaning of the auxiliary and thus be restricted to actions performed in a certain body position, e.g., Dutch zit te kijken ‘is sitting and watching’, Finnish istaan työssennelemässä ‘is sitting and working’. In +INTRAHF items, the auxiliaries are desemanticized and thus may be interchangeable. For Turkic postverbal constructions, see Johanson 1992: 30, 1995.

Some preaspektuals tend to be closely connected with agentivity, intention, and purpose. +INTRAHF items, as genuine viewpoint operators, do not require the event to be purposeful and thus easily combine with non-intentional actional phrases. There are locative-purposive items implying ‘dwelling somewhere in order to V’, in which an intentional notion (‘with the purpose of V-ing’) is added to the meaning of ongoing event (‘be V-ing’), e.g., the Finnish construction Copula + -ma-Ininitive + Inessive. For so-called absorptive constructions (‘be away V-ing’), see Ebert (this volume), De Groot (this volume), and Tommola (this volume a). Locative-purposive constructions are by definition inferfere with non-agentive, non-intentional actional phrases. Imminential constructions such as German war im Begriff zu schreiben or Lithuanian buvo berašti ‘was about to write’ often seem to reside in the immediate neighbourhood of high-focal intraterminals or to move in their direction.

While preaspektual items may occur in habitual contexts, i.e. be compatible with pluri- occasionality, +INTRAHF items tend towards uni-occasionality. The copula + gerund constructions of the Ibero-Romance languages are not restricted to uni-occasionality and thus preserve the old stage found in Late Latin esse periphrases (Dietrich 1973). The same seems to be true of the Finnish locative-purposive construction. However, a subsequent defocalization will increase the tendency towards pluri-occasionality, which is an example of the bidirectional tendencies mentioned above.

7.7.1. Peripheral periphrases

Whereas the distribution of +INTRA items is restricted, their components may exhibit a relatively high combinability and occur in various peripheral items of a lower degree of grammaticalization. For example, the elements of Late Latin esse periphrases have higher combinability than the high-focal items of modern Romance languages (Dietrich 1973). As mentioned above, some languages use intraterminal elements referring to events that are foreseen to be the case at a posterior O2, i.e., -PAST (+PRO) items may combine with items of intraterminal nature, e.g., English will be writing, Modern Greek tha ghvafi ‘will be writing’. Similar combinations are possible with certain Romance progressives, e.g., Italian stare + Gerund, the Lithuanian Continuous, the Turkish -mekte olacak periphrasis, etc. Peripheral items of this kind cannot be dealt with at length in the present section. Note, however, that auxiliaries involved in complex constructions may themselves take part in +INTRA and +POST oppositions. The latter will be dealt with in Section 8.9. As is well known, intraterminal participles also take part in lexicalization processes of adjectival formation, e.g., English charming. The whole combinatorics of such elements must be omitted here.

One important point should, however, be mentioned. In the +INTRAHF items dealt with so far, the copula is a non-dynamic auxiliary (‘is’, ‘was’). They imply non-dynamic, inessive readings in the sense of ‘dwellin in the cursus’. Some languages exhibit apparently similar constructions with dynamic auxiliaries (‘becomes’, ‘became’), in the illative sense of ‘entering into the cursus’, e.g., English get going, Turkish gelir ol- ‘set out’ (literally ‘get coming’). The dynamic statals resulting from these combinations have a rather modest distribution in modern European languages. The Turkish type does not, in the contemporary language, express an entering into a uni-occasional event and is thus not high-focal (Johanson 1971: 190–193).

Similar differences are also found in certain Romance constructions. In the Portuguese periphrasis estava a escrever ‘was writing’, which expresses a past dwelling in an intraterminal state, the auxiliary is a non-dynamic +PAST (+INTRA) item. In esteve a escrever ‘wrote’, however, the auxiliary is a dynamic +PAST (+INTRA) item. Constructions of the latter kind are indeed not intraterminals, since the event is
not envisaged in progress at an O, but nonintraterminals, rather functioning as delimitatives in the sense of 'come to spend a certain time V-ing'. They can consequently be used with mensural 'until t₁' and 'for X time' adverbials, e.g., Spanish *estuvo escribiendo todo el día* 'wrote the whole day'. Dynamic postterminal constructions will be dealt with in Section 8.9.

### 7.7.2. The Greek development

The Greek development from a preaspectual actionality duality into a +INTRA opposition is particularly interesting. The Classical Greek Present vs. Aorist distinction was, as we have noted, originally an actional one, but it developed into an aspe ctual one, the nontransformatives turning into intraterminals and the transformatives into nonintraterminals. The Classical Greek duality is not yet an IPPV opposition in the sense of a viewpoint distinction. The Aoristic [+t] items imply a crucial limit. The [-t] items imply a final one and may thus produce a so-called 'effective meaning', e.g., ἀρετή 'gained, acquired', ἐπιθέμενον 'persuaded'. The [+t] items imply an initial limit and may thus yield an 'ingressive meaning', e.g., ἐξάρχον 'burst out crying', ἐκδιάφραγμών 'got joyed', ἐβασίλευε 'became regent'. On the other hand, the [-t] items do not imply any limit and thus have a more general meaning of mere occupation with the action, e.g., ἐξάρχον 'cried, was crying', ἐκδιάφραγμών 'rejoiced', ἐβασίλευε 'reigned'.

Classical Greek [-t] items are therefore more easily used for single accomplished events than Modern Greek +INTRA items. Even [-t] items such as ἐπιθέμενον 'persuaded / has persuaded' only denote engagement in the action and do not signal either continuation ('tried / has tried to persuade') or full accomplishment ('convincing / has convinced', 'succeeded / has succeeded in persuading'). The interacting Aorists have a marked [+t] meaning and consequently a more limited frequency. Thus, [-t] ἐπεσκέφασε means 'was / has been busy with the production', whereas [+t] ἐπεσκέφασε means 'produced / has produced'. These past items are the only event-oriented ones, since the Perfect was still a high-focal postterminal.

In early narrativizations, we often find sets of [-t] items denoting discrete events, e.g., ἑτερον 'gave birth to' or ἐλεπον 'handed over', and a concluding [+t] item, e.g. τικτίν 'gave birth to' or λείπε 'handed over'. The [-t] items are not inceptive (Koller 1951), since they do not indicate the beginning of the actions expressed by τικτίν 'give birth to' and λείπε 'leave, let'. They are more likely to highlight the consequences of the event at O (Ruipérez 1954: 86) or, more precisely, to suggest the opening of a consequence ('une ouverture possible sur un développement ultérieur'; Seiler 1993: 28). The use is based on the simple fact that the Imperfect has the default value [-t], whereas the Aorist is transformative, i.e., [+t] or [+t₁]. Since transformatives by definition imply a Aorist, the Aorist may suggest a situational change in the propulsive sense: 'did (and then)', which is not possible with the unmarked, nontransformative Imperfect. The unmarked [-t] item is also used for constative functions, since Classical Greek lacks a low-focal +POST item for such purposes.

The development in Homeric, Classical, and Hellenistic Greek cannot be dealt with here, but it should be noted that Modern Greek exhibits a clearly different opposition with a wider applicability and essentially changed values. The actionality of the verb pairs has developed into corresponding viewpoint values, though the orientation of the system is inverted. The Imperfect has developed into a +INTRA item with a narrower use, the Aorist into a -INTRA item with a broader use. This is a more definite change to a genuine viewpoint opposition limited to "la vue d'un procès" (Seiler 1993: 27).

### 7.8. Defocalization of intraterminals

High-focal intraterminals tend to develop into less focal items, acquiring more general and finally modal (prospective, subjunctive, etc.) functions along the line +INTRAHF > +INTRALF > +INTRANF > +MOD. Cases of semantic fusion in the sense of a general +INTRA item and other combined items are frequent. This development is a defocalization drift and not a process of perfectivization. It is often accompanied by morphological reduction. As we have noted, newly created marked items are more likely to be expressed periphrastically than older and unmarked ones, which often have reduced shapes and less clearly identifiable sources.

The diachronic development of high-focals expanding their range of uses to assume lower functions is rather well-known. When items of higher degrees are degraded, the higher focality is renewed by new items that leave the old items with lower functions. Innovations of higher focality encroaching on the area of -PAST (+INTRA LHF) items constantly lead to changes of whole systems. Old "worn out" intraterminals may also finally disappear. Compare the similar encroachment upon -PAST (+POST LHF) items by high-focal postterminals (8.10).

The development from high-focals into more general Presents and Imperfects is known from many languages. Maltese jikteb 'writes', together with kteb 'has written, wrote' reflecting the West Semitic ±INTRA opposition (cf. Standard Arabic yaktubu vs. katabu), goes back to a +INTRAHF item, a participle stative of nominal origin, which later on penetrated the low-focal area of a former Imperfect, thus assuming the whole +INTRA range. It is now a +INTRA LHF item, the high-focality having been renewed by ged jikteb 'is writing'. The Slavic pripēkaq 'burn', originally an iterative and then a renewer of higher focality, drove the old Present pripěk into the modal domain of prospectivity (Kuryłowicz 1956: 28). In Irish, Scots Gaelic and Welsh, periphrases have pushed the old simple Presents into the areas of low- and nonfocality. In Turkic, former high-focals have become low-focals, pushing the
former low-focals, the so-called Aorists, into the nonfocal and modal domains (Johanson 1971: 131–139). In Armenian, the originally high-focal էսը ‘is hearing’ has been degraded to a low-focal and relegated the old Present է is ‘hears’ into nonfocal and modal functions. Persian Ծ і kunad ‘is doing, does’ has similarly pushed the former low-focal kunad into the modal area. The Lezgian intraterminal in -z(a)wa, e.g., fiza ‘is going’, which once renewed high focality, is now a low-focal, while the item in -da, e.g., փیدa ‘will go, goes’, has assumed nonfocal (‘habitual’) and even modal (‘future’) functions, possibly under Azerbaijani influence (Haspelmath 1994: 276).

Old intraterminals have vanished in several languages. In Basque, the older Present item is used with only about a dozen of verbs (Haase 1994: 279, 284.). The old Kartvelian so-called Permannive, belonging to the Aorist system, once had low- and nonfocal functions (habitual, general, timeless events), but is absent in modern literary Georgian, where the lower functions are now fulfilled by the Imperfect. Defocalization often seems to take place earlier with -ПАСТ than with +ПАСТ items. Turkic +ПАСТ items of lower focality have generally preserved more indicativity than the corresponding -ПАСТ items.

High-focal intraterminals are mostly confined to certain types of internal phase structure. While presuppositional progressives of an actional nature may also apply to [-dyn] actional contents, genuine +INTRAHF items start with [+dyn] actional phrases and are generally infertile with [-dyn]. However, when an +INTRAHF item begins to step down the focality scale, it tends to tolerate weaker dynamicity again. When it has expanded to cover all actionality classes including [+t, +mom], it has eo ipso ceased to be a high-focal. Similarly, while presuppositional progressives are often also used with non-agentive actional contents, +INTRAHF items seem to start in agentive contexts. The compatibility with non-agentive actional phrases increases further down the focality scale. Finally, while presuppositional may be compatible with pluri-occasionality, +INTRAHF items tend towards uni-occasionality. In the course of a subsequent defocalization, a tendency towards pluri-occasionality is observed. These cases are examples of the bidirectionality mentioned, involving one development from actionality into +INTRAHF and a reverse development within the defocalization process. It has already been noted that operating on the subjacent level is typical of presuppositional developed from modes of action, which modify single basic actions, and that this option may also be observed with +INTRAHF items. Lower intraterminals operate on global events.

When a former low-focal yields its central function to an expanding high-focal, it may be left with a residue that is nonfocal and even more or less modal (Johanson 1971: 138–139). It implies disposition (potentiality, inclination, attitude, etc.) and is thus easily interpretable as having habitual or future time reference, though it is neither a Habitual nor a Future. As has already been noted, Turkic languages of Europe possess dispositive items such as Turkish yaz ɾ ‘will write, tends to write’.

+ПАСТ markers turn them into dispositive pasts and counterfactuals, e.g., yazâr ‘would write’. Items situated at the end of the defocalization path display strongly modal meanings, e.g., Tatar barîr ‘will go’ (vs. bar ‘is going, goes’), Chuvash ýalû ‘will remain’ (vs. ýalay ‘is remaining, remains’). As we have also noted, the Lezgian so-called Future in -d (Haspelmath 1994: 271, 276) is claimed to exhibit "future / habitual polysynymy". This is not surprising, since it is a nonfocal item with modal functions interpretable as future time reference. It would be more astonishing if it were a Future that expressed habituality. As Haspelmath remarks, the corresponding +ПАСТ item “cannot, of course, express past future situations”, and thus only has “the past habitual reading” (1994: 271). This is, however, a restriction we would not expect from a Future. Genuine -ПАСТ (+ПРО) items usually have +ПАСТ (+ПРО) counterparts, prospective-in-past such as Turkish yazâcakûn ‘would write, was going to write’, Bulgarian стеа да чете ‘would read, was going to read’.

Tendencies towards defocalization are observed in different parts of the linguistic map of Europe. Many of today’s low-focals are results of the development -ПАСТ (+INTRAHF) > -ПАСТ (+INTRALF). Turkish, whose -ıyor items have undergone this development, is far from unique in this respect, but rather typical of an eastern area in which defocalization and renewal of focal intraterminality have taken place in particularly systematic and observable ways.

### 7.9. Loss of ±INTRA categories

±INTRA distinctions emerge, undergo various changes and may finally vanish. When studying such developments, it is important to distinguish changes of formal markers from cases where functional oppositions as such cease to exist. A phenomenon of the former kind, observed in Romance and other languages, is that a former -ПАСТ (+ПОСТ) item, e.g., French passé composé, takes over a nonintraterminal function from an older +ПАСТ (-INTRA) item, e.g., French passé simple (Section 8.10.2).

A phenomenon of the latter kind is the loss of the +ПАСТ (±INTRA) distinction, signalled by the Imperfect and the Aorist, in most Slavic languages. This destruction started with the loss of the Imperfect, whereas the Aorist has usually been preserved longer as a formal item, before being replaced by a former -ПАСТ (+ПОСТ) item.

The +ПАСТ (±INTRA) distinction is only maintained in South Slavic languages, Bulgarian, Macedonian and conservative Serbo-Croatian varieties, e.g., Bulgarian gledâte ‘was looking’ vs. gleda ‘looked’, Serbo-Croatian gledâte ‘was writing, wrote’ vs. pisa ‘wrote’. Its use in written Croatian is stylistically marked as archaic. Though some Serbo-Croatian dialects have preserved the Aorist, the Imperfect has usually disappeared and the opposition therefore ceased to function. Thus, the spoken standard Serbian “Aorist” is just a +ПАСТ item. There are even signs of a merger between
Aorist and Present tense forms. Interestingly enough, Italo-Croatian has preserved
the Imperfect but lost the Aorist. Here, the old opposition is carried on by means of an
item developed from a former -PAST (+POST) item and taking over the +PAST
(-INTRA) part. This situation is obviously due to contact with Italian, which has a
similar ±INTRA distinction. The +PAST (±INTRA) distinction also seems to be
endangered in spoken Romanian, where both the Aorist (perfectul simplu) and the
Imperfect (imperfectul) tend to be replaced by the former -PAST (+POST) item (per-
fectul compus). The Sorbian +PAST (±INTRA) distinction remained relatively long,
but is now lost.

The early reduction of verbal categories in East and West Slavic languages and the
loss of the +PAST (±INTRA) distinction laid the ground for the development of the
+AD distinctions found there. The intratermal and nonintratermal items of the
past strata vanished. The inherently intratermal nonpast items left underwent a
defocalization process down to the nonfocal stage. The postterminal categories to be
dealt with in Section 8.10 underwent a corresponding defocalization process down
to the nonfocal stage. On this basis, the new idiosyncratic viewpoint distinction of
adterminality was established (9.4).

8. Postterminality

8.1. Definition

The next viewpoint opposition to deal with is that of postterminality vs. nonpostter-
minality. Postterminality, +POST, envisages the event after the transgression of its
relevant limit, post terminum. Transgressing the limit means going beyond it and not
only reaching it in the adterminal sense. Nonpostterminality, -POST, disregards this
view. Postterminals are used to describe events as observed from different orientation
points situated after the initium or the finis, depending on the phase structure
type. The initium is the relevant limit of initiortransformatives and nontransforma-
tives, and the finis is the relevant limit of finittransformatives. +POST items may thus
present an event from an orientation point outside its cursus.

Postterminality is, like intraterminality, a basic mode of presentation emerging
from the narrow perspective of the primary "nunc", and as such a natural way of
conceptualizing the flow of events. In its focal forms, the postterminal perspective is
tied to an O at which no event is grasped in its totality. No past phase of the event
appears in the range of vision so that it might be regarded directly. This indirect way
of presentation implies that the event is, entirely or partly, already out of sight. As
with all aspects, however, the phases not envisaged are only "concealed", i.e. latent.
Postterminals do not negate the realization of what they exclude from their more or
less narrow view.

+POST focuses the attention on a situation obtaining beyond the relevant limit, where
the event, whether totally or partially past, is still relevant in one way or another,
i.e. extends right up to O, has effects relevant to O, or allows a conclusive
judgment at O. The relevance of the event to O does not mean that it terminates at
O. Nor does the general +POST definition include notions such as 'change of situa-
tion', 'state', 'result', or 'recentness'. If +POST items suggest a change leading to
a new situation, this is an effect of transformativity and dynamicity. Whether or
not the postterminal situation is conceptualized as a state depends on how strongly
it is focused, i.e. on the focality degree. If the action itself is telic and resultative,
the postterminal situation can be said to result from it. Even if the event has al-
dreadly disappeared from the range of vision, it may have left traces, vestiges, effects
observable there. Thus, the well-known fact that children usually acquire -PAST
(+POST) items (e.g., British English and Swedish Perfects) earlier than other past
tenses is explained by the naturalness of the postterminal perspective on past events
with perceivable effects. However, this kind of resultativity is not part of the general
definition. Nor is it decisive whether such possible effects of the event have already
been overruled. Finally, it is also unessential whether the event is temporally located
immediately prior to O or in a more remote past.

+POST items of some focality are compatible with and often accompanied by
relational adverbs indicating the diagnostic dimension and meaning 'already' = 'not
later than O', e.g., has already left. In languages lacking focal postterminals, such
lexical markers give a diagnostic interpretation to other past items.

8.2. Postterminals as anteriors

While +POST can of course be interpreted in temporal terms, it cannot simply be
defined as anteriority relative to O, in the sense of "the position of P relative to R"
(Reichenbach 1947: 297). It does not just form 'relative tenses' denoting events that
are completed before O. Whether the whole event or just part of it may be interpreted
as having occurred prior to O depends on the internal phase structure. The feature
+POST is an instruction to situate the relevant limit of the event posterior to an O,
the point of relevance.

While +POST has a natural affinity with the representation of past events, it is not
equal to the feature -PAST. A -PAST (+POST) item can, by virtue of its viewpoint
value, refer to an event partly or wholly prior to O. It consequently involves a
component of anteriority as opposed to -PAST (+INTRA) items, which allows it to
compete with +PAST (-POST) items in the simple past stratum. On the other hand,
it does not signal remoteness in the sense of +POST items. Focal +POST items
typically remain in the realm of the given deictic centre and do not establish own
deictic centres, as +PAST (-INTRA) and +PAST (-POST) items do.
Comrie’s description of the “perfect” (PF) as a relation between a state and a previous situation (1976: 52, 56, 62) may seem to concern an event-external time relation and thus to be a tense definition according to his own criteria. It has been criticized as contradictory that an aspect is taken to describe something as being prior to some point on the time-axis. The contradiction disappears if it is not the event itself that is situated anterior to O, but if the postterminal perspective on it is situated at O. The definition of PF as a +POST item does not vitiate the distinction between aspect and tense.

Anterior items can be interpreted more or less diagnostically or historically, i.e. as focusing more on the O (orientation point) or on the L (localization point) of the temporal relation. Postterminals tend to be diagnostic and are thus mostly used as non-narrative devices. Focal −PAST (+POST) items are rather typical of the synchronic report, and their occurrence in narrative discourse is relatively low. Focal +POST items are, due to their indirect way of viewing events, non-propulsive, ill-suited to advance the plot in the way historical items do. When used in narratives, they typically represent events which, at “topic time” (O), are accessible to retrospection only and thus do not belong to the narrative event chain at a given discourse level. This of course does not mean that the events they refer to are unessential for the narrative in question. With decreasing focality, +POST items become increasingly historical, without focusing explicitly on the localization point. They often refer to events outside strict temporal and sequential settings and are less inclined to combine with expressions that specify the occasion on which the event has taken place.

8.3. Postterminality oppositions

Postterminals are extremely widespread. Even all known creole systems exhibit +POST and −POST items, though the latter are less temporalized. In the temporalized European systems, items expressing natural viewpoints such as intra- and postterminality get contrastive values only if they have competing categories to interact with in the same temporal stratum. This is, for example, the case when a language has both a primarily oriented postterminal-in-present and a corresponding nonpostterminal past item. Such oppositions are found in many European languages: English, North Germanic, Modern Greek, Albanian, Bulgarian, Macedonian, Iranian, Armenian, Kartvelian, Finno-Ugrian, Turkic, etc. A competing nonpostterminal past item opposed to a −PAST (+POST) item will be written as +PAST −POST.

Examples of the oppositions of the type −PAST (+POST) vs. +PAST −POST are Icelandic hefur talado ‘has spoken’ vs. talado ‘spoke’, Faroese er komin ‘has come’ vs. kom ‘came’, Norwegian har skrev ‘has written’ vs. skrev ‘wrote’, Swedish har rest bort ‘has gone on a journey’ vs. reste bort ‘went on a journey’, Sami le báradan ‘has eaten’ vs. báradí ‘ate, has eaten’, Estonian on teinud ‘has done’ vs. tegi ‘did’, Vepsian tonu ‘has brought’ vs. toi ‘brought’, Low (Meadow) Mari ludín ‘has read’ vs. lúdo ‘read’, vozen ‘has written’ vs. vozī ‘wrote’, High (Hill) Mari siren ‘has written’ vs. sirī ‘wrote’, Udmurt minêm ‘has gone’ vs. mënêm ‘went’, Komí-Zyryan munôm ‘has gone’ vs. mûnûm ‘went’, Latvian ir rakstījis ‘has written’ vs. rakstīja ‘wrote’, Standard Italian ha cantato ‘has sung’ vs. cantò ‘sang’, Spanish ha hablado ‘has spoken’ vs. habló ‘spoke’, Catalan ha vist ‘has seen’ vs. va veure ‘saw’, Basque minitzatu dut ‘I have spoken’ vs. minitzatu nuen ‘I spoke’, Bulgarian xoðdî e ‘has gone’ vs. xoðdî ‘went’, Modern Greek εξε πέσεi ‘has fallen’, ἐπέσε ‘fell, has fallen’, Albanian ka vranë ‘has killed’ vs. vraun ‘killed’, Armenian գրես ‘has written’ vs. գրե ‘wrote’, Sorani nûşwa ‘has written’ vs. nûsî ‘wrote’, Kalmyk umîj ‘has read’ vs. umîn ‘read’, Karachai alyng ‘has taken’ vs. aði ‘took’, Lezgian fenma ‘has gone’ vs. fena ‘went’, Chechen melia ‘has drunk’ vs. melira ‘drank’, Georgian dâmâĢera ‘I have written it’ vs. dawere ‘I wrote it’.

−PAST (+POST) items may differ a great deal from each other with respect to how systematically they are used. Thus, the Lithuanian item yra rašęs ‘has written’, is relatively rare in everyday usage, the Simple Past raše ‘wrote’, being the dominant item in the simple past stratum. This is an effect of a relatively high degree of focality of the −PAST (+POST) item (Section 8.5). Similarly, since the Irish −PAST (+POST) is a high-focal item, tá éis ... a scríobh ‘has just written’, the −PAST (+POST) item is generally also used in cases where English uses the Perfect or the Pluperfect, e.g., scríobh ‘has written / had written / wrote’. The artificial language Esperanto has corresponding devices, e.g., −PAST (+POST) estas skribinta ‘has written’ vs. −PAST (+POST) skribis ‘wrote’, though it would be difficult to determine the range of their use.

Postterminals-in-present, often referred to as Present Perfect, Anterior Present, etc., invite the addressee to situate the relevant limit of the event before a non-past O. Unless there are contextual indications to the contrary, O will by default be identified as O0, i.e. as having primary orientation. Postterminals used with this orientation convey events whose relevant limit has been transgressed at O0 (E* before O0), e.g., Modern Greek εξε fíji ‘has left’. Thus, by virtue of their viewpoint value, they may refer to an event prior or partly prior to O0, and, as such, compete with +PAST (+POST) items in the simple past stratum.

+PAST (+POST) items are characterized by the absence of postterminality, which makes them more event-oriented and suitable as narrative pasts. Since their perspective is not tied to an O that narrows the range of vision, they freely survey the flow of events and may refer directly, in a historical way, to an event at the very interval of its realization, independently of its relevance to any simultaneous or following O. If a +PAST (+POST) item is not intraterminal, it may present the historical event including its limits in an integral way, suggesting, unless the contrary is signalled, the occurrence of the event as an unanalyzed totality. Note that this is possible without
the marked totality explicitly signalled by +AD items, which highlight the crucial limit.

A historical +PAST (−POST) item emancipates the event from the deictic centre of O^2, creating a deictic centre of its own, an O^2 somewhere in the text world. +PAST (−POST) items are thus typically used for situating events and often refer to events conceived of as occurring on specific past occasions. Consequently, they are less comparable with markers of indefinite, unrestricted or generalized time (‘ever’, ‘always’, ‘never’, etc.) or with O-implying adverbs meaning ‘already’, ‘not yet’, ‘just’, ‘now’, etc., e.g., Norwegian allerede, French déjà, Italian gia, Spanish ya, Finnish jo, Lithuanian jau ‘already’. However, they readily combine with temporal expressions specifying the interval of realization, e.g., Norwegian døde i gdr ‘died yesterday’. +PAST (−POST) items do not break the linear successivity, since they are propositional, capable of narrating chains of events and advancing the plot in narrative discourse. They may, of course, also refer to isolated events outside such chains. The decisive point is that they present an event in a more direct way than focal -PAST (+POST) items do.

+PAST (−POST) items are thus not "simple Past", usable for all past events. The tasks just sketched clearly result from the value -PAST, i.e. independence of O situated after the relevant limit. They differ considerably from items that may present past events both in a historical and a diagnostic way, e.g., Hungarian lopott, Maltese seraq, Turkish çalidi ‘stole, has stolen’. Two types of +PAST (−POST) items will be distinguished below, one plain type and one +PAST (−POST (−INTRA)) type (11.6.2–3).

Some languages exhibit similar oppositions in the pre-past stratum, distinctions between a non-dynamic-diagnostic item ("plusquamperfectum status") and a dynamic-historical one ("plusquamperfectum actionis"). One Romance example is the obsolete French opposition Pluperfect vs. Past anterior, e.g., avait fait vs. eut fait 'had done'. As the loss of the Simple past also led to the loss of the Past anterior, the Pluperfect was the only item to cover the whole pre-past stratum (diagnostic and historical functions). In many spoken varieties, however, the Past anterior has been replaced by a "passé surcomposé" a eu fait (literally 'has had done'), which, according to Harris, may be used as an optional "perfectivity" marker, e.g., quand il a eu payé 'as soon as he had finished paying' (1988: 229). Albanian has an analogous distinction between a Pluperfect and an "Aorist II", e.g., kishte hapur vs. pat hapur 'had opened' (Buchholz & Fedler 1987: 130–131). Similar oppositions are Udmurt min-imm val vs. min-š val 'had gone', varam val vs. veraq val 'had said', Chuvash kilqeeš vs. kilqeeš 'had come', Turkish gitişti 'had gone' vs. gitiydi 'went (once, long ago, etc.)', Lexzian fenwa 'had gone' vs. fenaj 'went earlier' (cf. fenwa 'has gone' vs. fenaj 'went'; Haspelmath 1994: 267).

8.4. +POST⁰ items

The O of the postterminal perspective may also, like the O of the intraterminal perspective, be separated from the time of encoding and situated at any other point on the time-axis. For example, it may be determined relative to another event (taxis). If the vantage point is a foreseen O^2, the perspective is projected into the future, e.g., French Ce soir j'ai terminé la lettre 'This evening, I will have finished the letter', Dutch Wanneer X komt, is Y al vertrokken 'When X arrives, Y will have left'. In such cases, the postterminal-in-present is a -PAST (+POST⁰) item, as it lacks a competing historical item with a contrastive value.

Postterminals-in-past (referred to as Pluperfects, Past Perfects, Anterior Past, Past Anterior, Perteret Anterior, etc.), convey events whose relevant limit is transgressed at a past O^2, e.g., Classical Greek egegræphi 'had written', Modern Greek ixe íthápsi 'had written', Icelandic háflti talad 'had spoken', Sami lai báradan 'had eaten', Estonian olí teind 'had done', Vepsian oIi tonu 'had brought', Low (Meadow) Mari vozen ile 'had written', ludin ile 'had read', Udmurt veram vai 'had said', Komí-Zyryan munóma vôli 'had gone', Latvian bija rakstījis 'had written', Latin contéverat 'had sung', Catalan havia vist 'had seen', Italian aveva cantato 'had sung', Romanian meroșe 'had gone', Portuguese paritra or tinha partido 'had left', Bulgarian beše daval 'had given', Tatar baryn idé 'had gone', Nagai barip edí 'had done', Karachai alyan edí 'had taken', Chuvash kalandtš 'had said', Turkish yemıþı 'had eaten', Albanian kishtet nuk 'had died', Serbian bio je isao 'had gone', Kirmanji hatibü 'had come', Sorani nást bu 'had written', Chechen melléra 'had drunk'.

In general, so-called Pluperfects do not have the same semantic structure as so-called Perfects. They differ from them by signalling +PAST, but they are not just "Perfects related to the past", temporally transposed -PAST (+POST) items, the only difference residing in the orientation points (O^2 vs. O^3). Most European Pluperfects are +PAST (+POST⁰) items since they cover the whole pre-past stratum and lack a competing historical item with a contrastive value. They thus do not share the special properties of the corresponding -PAST (+POST) items, which have a more restricted use due to the competition with +PAST (−POST) items. For example, the Portuguese Pluperfect is not subject to the restrictions typical of the Perfect (8.10.2, 10.3.2).

While a -PAST (+POST) item competes with a +PAST (−POST) item, there are seldom oppositions of the type Perfect-in-past vs. Preterite-in-past (for exceptions, see 8.3). There may also be more substantial differences between the non-past and past items in question. Thus, Turkish has a Pluperfect in -miʃtı, e.g., gitmiştı 'had gone', whereas the corresponding simple finite form in -miʃ is a predominantly indirective item, e.g., gitmiş 'has [apparently] gone'.

A +PAST (+POST) item invites the addressee to situate the relevant limit of the event before a past O^2 (E^* before O^2). In X had left when Y came, the transgression
8.5. Degrees of focality

Anterior items can be interpreted more or less diagnostically or historically. A diagnostic reading is O-oriented, focusing the attention on O and stressing the relevance of the event at this point, often supported by adverbials of the type ‘already’. A historical reading is event-oriented, focusing on L and stressing the relevance of the event at the time of its realization, answering questions such as ‘When did it occur?’.

However, the two dimensions are seldom distinctly distinguished by morphosyntactic means. Most anterior items represent both sides, the reported event and its validity at O.

Postterminals tend towards diagnostic readings, referring to events that are relevant to an interval including O, e.g., has broken the window vs. the more event-oriented broke the window. However, they can also be more O-oriented themselves, focusing less rigidly on the postterminal situation. They thus display higher and lower degrees of focality, concentration (focus) of the psychological interest on the situation obtaining at O, the core of ‘nunc’. The range of vision may extend from the narrowest idea of an interval confined to the immediate proximity of O to much broader views. It has already been emphasized that focality is a scalar notion, that focality values are relative, and that the choice also depends on the conceptualization of the actional content. Still, it might be roughly assumed that events whose relevant limits precede O may be presented by +POST items in a(i) narrow, (ii) expanded or (iii) open way. The range may be (i) confined to O, the event being conceived of as relevant at O only; (ii) not confined to O, while the event is conceived of as still relevant at O; or (iii) not confined to O, while the event is not necessarily conceived of as relevant at O.

Since the scalar focality of +POST items depends on the relative narrowness of the range of vision, it is reminiscent of the focality of +INTRA items. For example, so-called ‘resultatives’ and ‘progressives’ might be claimed to represent high focality in the postterminal and intraterminal dimensions respectively. In both dimensions, the basic question is to what degree the event is conceived of as part of the ‘O world’. Since focality values are relative, we do not assume absolute functional stations such as ‘resultative’, ‘perfect’, etc. Nevertheless, a tentative focality scale with three cardinal degrees will be adopted here: relatively high focality (HF), relatively low focality (LF), and nonfocality (NF). Note again that the nonfocals are non-oppositional +POST items that represent the postterminal notion in a weak way.

The interpretation of a +POST item in terms of diagnostic and historical orientation depends on its focality degree. By and large, high-focals might be said to correspond to ‘statives’ and ‘resultatives’, low-focals to ‘perfects’ and ‘constatives’, and nonfocals to more general pasts. However, we assume gliding transitions and areas of overlap between the postulated types. The focality degrees are distributed to items in different ways, and individual items may also represent more than one degree. All language-specific +POST items are subject to constant functional shifts along the focality scale. Labels such as ‘perfect’ and ‘resultativity’ will be avoided, since they are often used in a more substantial sense. It seems impossible to establish absolute categories on the basis of unequivocal situational criteria. Our scheme does not reflect any attempt at classifying postterminals by means of fixed ontological and situational characteristics. Such interpretational types are a matter of interaction of aspect (of higher and lower focality) with different types of actional content (Section 10).

One word on focality degrees and coverage of situations must be added. Since a +POST item of lower focality is more general than a higher one, it may be used in
cases where some other language permits or requires a higher item. It may cover referential areas of a higher item, i.e. be used instead of it to refer to a given situation, without expressing a higher degree of focality. In languages that do not distinguish focality degrees, items indifferent towards such distinctions may cover situations that would require higher focality in other languages, e.g., German hat geschrieben ☐ English has written. A nonfocal item in language A may roughly cover situations that would require a low-focal item in language B, e.g., French a écrit ☐ English has written. Lower focality does not exclude higher interpretations, e.g., stative readings of sentences such as has arrived = 'is now here' or Spanish ha comprado una casa 'has bought a house' = 'owns a house'. To render the static situation described in is already asleep / awake, individual languages may use high-focals, low-focals, nonfocals, or items indifferent to postterminality. A general Past covers the whole range of anteriority. The South German Past tense may cover situations that require focality in other languages. Thus, ist verschwunden 'has disappeared / disappeared' may correspond to three Swedish items representing the simple past stratum, -PAST (+POST)F är försvunnen 'is gone', -PAST (+POST)F har försvunnit 'has disappeared', and +PAST (−POST) försvann 'disappeared'. Higher items may also encompass lower levels in the sense of involving them logically. Thus, Russian выпил 'is drunk up' implies that the liquid in question has been drunk or was drunk on some occasion(s).

8.5.1. High-focal postterminality

+POSTHF items are strongly O-oriented, putting high focus on the postterminal state obtaining at O after the transgression of the relevant limit of the event. Their range of vision is narrow, restricted to what is still relevant of the event in the 'O world'. High-focals are basically restricted to transformative, i.e. [+if] and [+it] actional phrases. The high focality of the Indo-European Perfect is attested in Classical Greek, e.g., ἔλθειν 'is dead', γεγραφεῖν 'has written'. Other examples of -PAST (+POST)HF items are Hittite apāna harti 'has taken', Lithuanian yra rasęs 'has written', yra atejęs 'has come [and is here]', Romany hi mulo 'is dead', Turkish ölmüş bulunuyor 'has died, is dead', Karachai ketib 'is gone', East Armenian gnacac է 'is gone', Kalmyk umun 'is asleep', Akhvakh čankehe gidi 'has fallen ill', Agul aq umane 'is / has done', Basque joana da 'is gone'. Corresponding +PAST (+POST)HF items are, for example, Hittite apāna harta 'had taken', Lithuanian buvo atvykęs 'had arrived [and was there]', Romany his mulo 'had died, was dead', Turkish ölmüş bulunuyordu 'had died, was [already] dead', Karachai ketib ed 'was gone', Kalmyk swusn bilä 'was sitting', Eastern Armenian gnacac է 'was gone'.

What is often referred to in terms such as 'l'état résultant d'une action accomplie' (Kuryłowicz 1956: 26) is thus not taken here to be an independent aspect but just to represent a high degree of focal postterminality. High-focals denote a dwelling in a postterminal state created by transgressing the relevant limit of the event and still prevailing at O. They often imply that something - the referent of the subject or of an object - has such properties at O that it can be concluded that the relevant limit, leading to this state, has already been transgressed at that point. However, readings with respect to 'result' vary according to lexical contents. For example, as Ruizpérez shows, the pertinent value of the Classical Greek perfect cannot be "la consideración del estado resultante" (1954: 60). Since high-focals signal property-like states, the number of verbs occurring with them is usually limited to a rather restricted set. Among verbs of a suitable actional content are many denoting spatial and mental transformations, e.g., 'come', 'go out, 'hang up', 'lean', 'open', 'pass by', 'put', 'sit down', 'call to mind', 'convince', 'decide', 'discover', 'fall asleep', 'get accustomed', 'get tired', 'persuade', 'understand', 'wake up'. The posttransformational state may be reversible or not, e.g., German ist geöffnet 'is opened', ist zerrissen 'is torn'. The postterminal property-like states tend to be perceptible. For example, the event may be manifested by nothing more than traces left at O. This is the source of the well-known indirective meanings connected with many postterminals (8.7).

8.5.1.1. -PAST (+POST)HF items

-PAST (+POST)HF items indicate that the posttransformational state obtains at O and may thus get present-like readings, in particular with initiotransformatives, e.g., Classical Greek Perfect δείξει 'has got frightened and is frightened', kēktēr 'has acquired and] owns', Arabic wūdāl b'awwāl wi 'is sitting on the chair' (Kitāb 1977: 195). As is well known from school grammars, the Classical Greek Perfect corresponds to a Latin "perfectum praesens" and not to a "perfectum historicum". The Irish high-focal easily gets non-past interpretations, e.g., tá leabhar scríofa atge 'has written a book' or 'has a book written' (Ó Baoill 1994: 208). The high-focal Old Georgian Perfect is often considered a Present tense. Svan -PAST (+POST)HF items behave syntactically like Presents (Deeters 1930: 181-182). High-focal postterminals of Baltic languages are usually called "Compound Presents". Analogously, +PAST (+POST)HF items indicating that the state obtains at a past O may get imperfect-like readings. The syntactic behaviour of high-focals thus tends to be similar to that of intraterinals. However, +POSTHF items differ from INTRAHF items by their reluctance to be used for future time reference.

The highest focus uses imply a dwelling in the postterminal state without regard to the preceding telic event, however recent. Less high uses allow reference to the event itself. While paying due attention to such differences, we shall not try to set up absolute categories such as "statives" vs. "resultatives" (Nedjalkov 1983) on the
basis of situational criteria (use in "static situations" and "resultative situations"). In many languages, however, certain verbs possess special adjective-like forms, totally diagnostic +POSTHF items expressing 'frozen' states without any dynamic element, e.g., English is gone, French est muet 'is emaciated', Bulgarian e umoren 'is tired', Irish tá briste 'is broken', Turkish asludur 'is suspended', Georgian ჭერია 'scriptum est'.

It can thus be concluded that, if the only focal of a given language is a high-focal, the opposing +PAST (−POST) has a wide range of use, including functions typical of a "historical perfect". For example, the Classical Greek Aorist + PAST (−POSTHF) έκτεταρο 'has acquired, owns', corresponds to both −PAST (+POSTLF) has acquired and +PAST (−POSTLF) acquired in English.

The highest postterminalss are naturally compatible with temporal qualifiers of the type 'still', 'as before', indicating that the state has not ceased to obtain at O ("remaining in the posttransformational state at O"), e.g., is still gone. They also combine with abtemporal 'since X time' expressions, e.g., German ist seit gestern verhaftet 'is arrested since yesterday'. Like low-focals, they also occur with qualifiers signalling 'being in the posttransformational state at O already'. Some languages have special high-focal continuative items signalling that the postterminal state has begun and is continued, e.g., Archi abumati bi 'continue to have snowed' = 'has not thawed' (Kibrik 1983: 114); cf. Lezgian continuative postterminalss signalling 'still' or 'any more' (Haspelmath 1994: 273).

High-focal postterminalss avoid expressions referring to the historical dimension. They less readily combine with expressions signalling the event time, e.g., German ist gestern verhaftet 'was arrested yesterday'. If such expressions do occur, the O-orientedness remains, e.g., Dutch is in 1703 gesticht 'was founded in 1703', Swedish är född 1936 'was born in 1936', Modern Greek τέκτονες το 1900 'was built in 1900'. They are mostly incompatible with expressions of iteration (e.g., several times), since the events denoted are, as a rule, un-ocational. High-focal postterminalss may also less readily combine with agentive complements, e.g., the Finnish construction 'be' + -tiu. Even if an agent is actualized, the O-orientedness is preserved, e.g., Russian napisano inostrcem 'has been / written by a foreigner'.

The interaction of high-focals with initio- and finitransformatives will be discussed in Section 10.2.1.5.

8.5.1.2. Diathetic conditions

The diathetic conditions, which vary considerably, will not be dealt with in detail here. In sentences based upon intransitive +POSTHF items, the first actant of the basic valency pattern is realized as subject, e.g., English is gone, Classical Greek βέβηκε 'has gone', Icelandic er dottir 'has fallen [and is lying]'. Lithuanian yra atėjęs 'has come [and is here]', Russian ушедший 'is gone', Macedonian e umoren 'has died, is dead', Romany hi mulo 'has died, is dead', Karaim ӧlíg’an ‘has died, is dead', čekkan 'is gone (out)', Kalmyk ӧkän 'has died, is dead'.

With transitives, the second actant of the basic valency pattern may become first actant and thus function as subject without any other overt voice shift, e.g., English is closed = 'has been closed', Classical Greek ἔφηγε 'is broken' (ῥήγνημα 'break'), ἱερέα 'stands' (ἱερέα 'set'), Lithuanian yra užrašyta 'is / has been written down' (užrašyti 'write down'), Russian postreno 'is / has been built' (postrojil 'build'), Czech je napsán 'is / has been written', Macedonian e razbudeno 'is awake' (razbud-'wake'), Romany hi xalo 'is / has been eaten' (xa- 'eat'), East Armenian p'akac ē 'is / has been closed' (p'akel 'close'), Georgian ჭერია 'is / has been written' (ჭერ- 'write'), Archi ebašali bi 'is lying' (ešas 'put, lay').

This diathetic versatility is mirrored in the distribution of intransitive and transitive transformatives in Indo-European passive constructions with postterminal participles, e.g., German ist gestorben 'has died' (from sterbe 'die') vs. ist getötet 'is / has been killed' (from töten 'kill'). French verbs such as mourir 'die' and naer 'kill' exhibit the same ambiguity. It is also typical of Iranian ergative languages such as Kirmans and Talash. The split ergative systems of all Indo-Iranian languages are restricted to postterminal (focal and defocalized). Since the object of transitives gets the same case-marking as the subject of intransitives, postterminal forms of transitives are often claimed to be 'passives'. Romany postterminal participles show the same diathetic ambiguity, getting an active or passive interpretation according to the actant structure of the verb (intransitive / transitive). They are thus not passive participles, and it is not adequate to claim that the states sit, stand, lie can only be expressed by means of passive constructions (Holzinger 1993: 194). Items such as hi hëšë 'is sitting', hi tardo 'is standing', hi tšido 'is lying' do not require passive interpretations ('is / has been put, laid', etc.). A similar diathetic versatility is also found in Mongolian, e.g., Mogholi tebatxan bi 'has fallen asleep [= is asleep]' vs. bicekšambë 'is written' (Johansen 1974b), and in Old Turkic high-focals; cf. reflexes such as Modern Turkish yantk 'lying' vs. yırtk 'torn'. High-focals with inverse orientation do not necessarily go back to passives; nor do they per se indicate ergative structures.

Thus, in languages of the type dealt with here, either the first or the second actant of the basic valency pattern may turn up as first actant with transitive +POSTHF items. The decisive criterion for the choice is which participant is most clearly affected by the transformation. The change is mostly discernible in the state of second actant referents. The effects of verb contents such as 'close', 'eat up', 'fill', 'hang up', 'wash', 'write down' are usually less characteristic of the agents than of the patients, e.g., 'window', 'cake', 'bottle', 'picture', 'shirt', 'word'. The promotion to subjecthood results from the semantic role of a patient affected by the transformation and thus being bearer of a property typical of the postterminal state. There may also, however, be ambivalence with one and the same verb, e.g., Romany hi pilo is drunk,
has got drunk / is drunk, has been drunk up', Mongolian idegesen 'he who has eaten' / 'that which has been eaten' (Greembech & Krueger 1955: 33).

In most modern Indo-European languages, however, first actants of transitive patterns do not remain first actants with high-focals. Thus, transitive constructions mostly get passive interpretations. The situation is different in languages whose postterminals take part in systematic diathetic oppositions, e.g., Turkish ilmiy bulunuyor / öldürümüş bulunuyor / öldürülmüş bulunuyor ("is in the state of having died / having killed / having been killed"). In Indo-European languages, originally possessive-passive constructions, implying that the first actant possesses the result of the telic action ("possesses something being in a postterminal state"), have later been transformed into active high-focals, e.g., Latin habet epistolam scriptam 'has finished the letter' = 'has the letter in a written-down state'. Old Icelandic hefur bòkina lesna 'has finished the book' ("has the book in a read-through state"), Swedish har ar

gether skrivit 'has finished the article'. This type has undergone later decolonization in most languages, e.g., French Passé composé a écrit la lettre 'has written, wrote the letter' (8.10.2). The pattern also seems to have been copied into Basque, where the Perfect shows close structural similarity with the habeo factum item of Late Latin. There is a comparable development in ergative languages lacking a possessive verb meaning 'have', where the possessor of the original nominal construction appears as the first actant in an oblique case.

8.5.2. Low-focal postterminal

Low-focal postterminals, +POSTLP items, imply lower degrees of focality than high-focals. They tie the event less tightly to the "O world", focusing less strongly on the postterminal phase as a state persisting at the core of "nunc". They are more event-oriented, expanding the view in the historical direction and directing more attention to the event itself. Whereas high-focals operate on transformative, low-focals also operate on [-1] actional phrases and may denote single and repeated, uni- and pluri-occasional events. At the same time, they express relevance of the event to the situation obtaining at O. This relevance may be of different kinds: temporal closeness, importance with respect to the effect, some other affinity or psychological link to O. Obviously, such meanings are largely non-objective. Low-focal postterminal does not correspond to a certain situational type (such as some "PF situation"), and, indeed, attempts at finding unequivocal situational criteria to establish an absolute low-focal category seem futile. It is not a pertinent feature of low-focals to express, as is often claimed for PF, a present result of a past event. On the one hand, +POSTLP items certainly express the event itself, and, on the other hand, the feature ‘result’ is, again, dependent upon actional factors. Readings of ‘completion’ are restricted to transformative. The idea that +POSTLP items refer to two temporal strata simultaneously ("Doppelzeitigkeit") seems rather inaccurate. Postterminal

is the value that determines precisely the connection of a past or partly past event with O.

The -PAST (+POSTLP) subtype of postterminals is found in many European languages, not only in Germanic ones such as English, Scandinavian, North German and Dutch, or Romance ones such as Italian, Spanish and Portuguese, but also in Modern Greek, Albanian, Bulgarian, Macedonian, Armenian, Georgian, etc., as well as in Iranian, Finno-Ugrian, and Turkic languages. Examples: English has gone, Standard Italian ha camitato ‘has sung’, Catalan ha escrit ‘has written’, Modern Greek εξερήθη ‘has come’, Albanian ka skhruar ‘has written’, Armenian գրել ‘has written’, Basque joan da ‘has gone’, Finnish on lukennut ‘has read’, Estonian on tõenud ‘has done’, Ingrian ono länd ‘has spoken’, Votian on jõnnu ‘has drunk’, High (Hill) Māri siren ‘has written’, Low (Mowani) Māri lum vōtin ‘snow has fallen’, Komziyyran kulloma ‘has died’, Talysh händzē ‘has read’, Kirmanji zwendye ‘has read’, Georgian dawceria ‘has written it’, Chechen vaxana ‘has gone’, Nogai yazyan ‘has written’, Azerbaijani yazməz ‘has written’, Chuvash kilnē ‘has come’, Kalmyk irlä ‘has come’.

If the only focal of a given language is a low-focal, the opposing +PAST (-POST) has a relatively narrow range of use, excluding functions typical of a “historical perfect”, e.g., English +PAST (-POST) acquired as opposed to -PAST (+POSTLP) has acquired. Compare Classical Greek +PAST (-POST) ekōsato, which, as was stated above, corresponds to both English items. But low-focals can also have a relatively higher and lower position on the focality scale, implying more or less O-relevance. Some of them, e.g., the Modern Greek and Armenian ones, are relatively high and used more restrictively than the English one, without being genuine high-focals. The Modern Greek Perfect represents a rather late renewal of focal postterminality (Aerts 1965), has a limited use in several varieties, and does not exhibit any tendencies to be used historically, i.e. in an event-oriented sense.

-PAST (+POSTLP) items allow varying contextual interpretations. Alongside their affinity with the present, they function as past tenses, opposed to a +PAST (-POST) and sometimes also to a +PAST (+INTRA) item. The temporal reading is based on the event being past or partly past at O (E* before O). Low-focals are incompatible with adverbials of the type ‘still’, indicating ‘remaining in the posttransformational state at O’, e.g., *has still gone (cf. high-focal is still gone), Armenian *der gretel ‘has still written’. The types ‘already’ (‘the relevant limit is not later than O’) and ‘not yet’ (‘the relevant limit is later than O’) are allowed.

Due to their rather strong diagnostic orientation, -PAST (+POSTLP) items do not yet present the event in a direct way, but in a rather static manner lacking narrative dynamism. It is typical of their textual behaviour that they are not used for main narrative sequences, but rather for expressing past or partly past events relevant to the discourse "hence". On the other hand, they are frequent in conversational discourse. In spite of their relative event-orientedness, -PAST (+POSTLP) items are typically
used to refer to isolated events, detached from event chains and other clear settings. They often occur when the order of events is less important, when less attention is paid to the individual occasion, or when no particular occasion is referred to. The latter case includes type-reference to past events and summarizing characterizations in terms of experience concerning several or all possible past occasions. This does not mean that \(-PAST (+POST^{LF})\) items refer to an "unspecified past". They certainly refer to events occurring on specific occasions, but they present them in a less specified way. Non-specificity of this kind may also be suggested by other means, e.g., relatively unqualified devices such as \(+PAST (-INTRA), +PAST (-AD), \) and more general \(+PAST\) items.

The relatively strong \(O\)-dependence thus restricts the use of \(-PAST (+POST^{LF})\) items to locate events on specific occasions, to specify their realization intervals. Their combinability with specific past time adverbials varies across languages. It is excluded in English (*has arrived yesterday at six o'clock), and mostly avoided in Scandinavian and Finnish, except in some inferential uses. Though the toleration of more event-oriented expressions in some other languages, e.g., in nearly all Romance languages, may be seen as a sign of lower focality, it does not deplete the meaning of \(O\)-relevance. Many \(-PAST (+POST^{LF})\) items are more tolerant of definite localization and thus seem to be less focal than the English Perfect. However, even the relatively high Lithuanian postterminal may be used with locating adverbials such as vaker 'yesterday'. Estonian on teinud 'has done' seems to be more tolerant than its Finnish counterpart, whereas the latter differs from the English Perfect by combining more easily with adverbials indicating a point of time (Tommola 1994: 227). The Bulgarian Perfect allows "perfect of action" uses such as e došel, snosi kásno 'has arrived, late in the night' (Maslov 1981: 254) and is even considered an "unmarked past" by some linguists (Janacek 1962: 432, Aronson 1967: 88). In any case, it has been shown that its basic meaning cannot be 'resultative' or 'definite' (see Friedman 1977: 55-61).

One kind of current relevance is recentness, temporal closeness to \(O\), sometimes explicitly marked by a relational adverbial of the type 'just', e.g., has (just) left. But recentness is not part of the definition of low-focal postterminality. Readings such as 'recent past', 'recent change', 'new situation', or 'hot news' (McCawley 1971, Comrie 1976: 56-61, Anderson 1982, Dahl & Hedin, this volume), claimed to be typical of PF, are just contextual interpretations of \(-PAST (+POST^{LF})\) items. Not all languages possessing a \(-PAST (+POST)\) choose this item to render such meanings. Other items may be preferred, unless it is essential to stress that the recent event still persists at \(O\). To convey 'hot news' in the sense of has (just, already) left, languages such as Modern Greek, Bulgarian, and Armenian tend to use Aorist Pasts, i.e., \(+PAST (-PAST (-INTRA))\) items. The sensitivity of \(-PAST (+POST)\) items to temporal distance varies across languages (see, e.g., Sguratini & Bertinetto, this volume) and may be a factor in the defocalization drift (8.10.2). A well-known example of a specific kind of sensitivity is the hodiernal \(-PAST (+POST)\) type. Thus, in Spanish ha hablado esta mañana 'spoke this morning' and Catalan aquesta nit ha dormit bé 'slept well last night', \(-PAST (+POST (-INTRA))\) is used instead of the \(+PAST (-PAST (-INTRA))\) items habló and dormí, since the period in which the events were performed is conceived of as not yet finished.

To avoid the \(O\)-relevance interpretation suggested by a \(-PAST (+POST^{LF})\) item, a \(+PAST (+POST)\) item without a secondary orientation can be used, e.g., Modern Greek Pluperfect in O papás mu xe pandrefi téseri forés 'My grandfather married four times' (Hedin, this volume; cf. 1987: 22). This use signals non-relevance or even non-validity at \(O\): the event is not valid any more, is overruled by another past event (since the event, other events have occurred), or its effect is cancelled, possibly by a "twoway action". In such cases, \(+AD\) languages naturally tend to use \(+PAST (-AD)\) items, which do not highlight any limit.

8.5.2.1. \(O\)-overlapping uses

Contextual readings such as "inclusive" (\(O\)-overlapping), "resultative", and "experiential" depend on the actional content, i.e. result from interaction with different phase structures.

\(O\)-relevance may exist in the sense that the event has begun in the past and stretches right up to \(O\) and overlaps it. Inclusive readings in this sense are possible with non-transformatives and initiotransformatives. The combinations \(+POST \times [-t] \) and \(+POST \times [+t]|\) only imply that \(O\), the point where the relevant limit is viewed as transgressed, is situated after the initium. The event has started before \(O\), but it is unclear whether it has taken place in its totality or whether \(O\) is included in its duration. For \(-PAST (+POST^{LF})\), this means that the event may still be carried on at \(O\), the present moment of coding ("perfect of persistent situation"; Comrie 1976: 60, 62). Languages possessing a focal postterminal generally use it in such cases, often together with "for X time" or "since X time" adverbials of duration, e.g., Finnish on asunnut tihittä jo kolme vuotta 'has lived here for three years'. The \(O\)-overlapping interpretation may be made unequivocal with contextual devices such as 'already'.

On the use of \(-PAST (+POST (-INTRA))\) items, e.g., English has / had been V-ing paraphrases, to suggest Os-overlapping readings, see 11.4.

8.5.2.2. "Resultative" and constative uses

One possible kind of \(O\)-relevance is 'resultativity', implying a change that has yielded a result present at \(O\), e.g., Modern Greek eixi érthi 'has come (and is here)'. Low-focals are aspactual because they express a postterminal perspective, not because they may have resultative realizations. The difference between resultative and non-resultative readings resides in actional differences. If a resultative reading is suggested, it is due to a [+t] phase structure, possibly expressed by means +T-
marking, plus suitable additional lexical properties. Besides being telic, the event must also yield an effect that is valid at O°. For example, has woken up and has broken the window suggest valid effects on the referents of the first and second actors respectively. Such uses are reminiscent of the 'resultativity' of high-focals and are restricted to the same types of verbs, e.g., Russian postaret ‘grow old’, Armenian hompag ‘get tired’. Combination with [−t] yields non-resultative readings, e.g., Finnish on lukanut sitä kirjaa ‘has read in this book’, with −T-marking by means of the partitive object.

A further kind of O°-relevance is the constative use, based on a conclusion at O° regarding the event. It includes the ‘experiential’ meaning, which is considered to be one of the main PF functions, implying that a ‘given situation has held at least once during some time in the past leading up to the present’ (Comrie 1976: 58). Constative postterminals present uni- or pluri-occasional events in a complexive, summarizing way: ‘has done (altogether, always, all life long, so far, hitherto, before, ever, often, on some / any occasion, never)’, e.g., has met him (at least once), has married twice (so far), Catalan Voste ha viscut sempre aqui? ‘Have you always lived here?’, Latvian Vai tu [vispäē] esi bijis Parisē? ‘Have you [ever] been to Paris?’ (as opposed to Vai tu biji Parisē? ‘Were you in Paris?’). There is no reason to consider this use exclusively ‘temporal’ or less ‘aspectual’ than others. Constative low-focals are often accompanied by adverbials of the types ‘ever’ or ‘so far’. Thus, Armenian –PAST (+POSTLF) items usually cooccur with markers of indefinite time such as erbev ‘some time’, orevē zamanak ‘ever’ (Kozintseva 1995: 283). Many European languages use low-focal postterminals as constatives. Some of them possess rather specialized constative items. Thus, Turkic postterminals in -ipdir, -mişdir, and -gändir present events in a complexive, summarizing way (often with elements of evidentiality and/or remoteness). The Kalmyk item in -lu has similar uses, e.g., Ter neg dalki uženč xarlha ‘I once (some time) have met / met him in the street’ (Benzing 1985: 75).

Constative readings are often products of the interaction of low-focal postterminals with [−t] actional phrases, e.g., has seen much. They may, however, also arise with [+t] actional phrases, in which case a telic event is similarly summed up at O°. The main element of O°-relevance is then just a conclusion regarding the event rather than the posttransformational state. If constatives with [−t] actional phrases seem to be more event-oriented in the sense of ‘Perfests of Action’, it is only because they offer no posttransformational state to highlight. They may be used, as is, for example, the Bulgarian Perfect, to suggest that the event is not tied to a specific setting. The same is indeed true of –PAST (+POST)LF items with [+t] actional phrases, but this phenomenon is mostly ignored by grammarians because of the more salient posttransformational (“resultative”) readings possible with such combinations.

Certain low-focals are basically restricted to constative uses. The Portuguese –PAST (+POST)LF item does not exhibit any strongly posttransformational (“re-
sultative”) readings, e.g., *tem escrito a carta *has written the letter’ (Oliveira & Lopes 1995: 108), and is rather limited in its use, basically preferring [−t, +dyn] actional phrases, including cases of quantitative reinterpretation [+t] with [+ser] > [−t]. Constative uses are also typical of many varieties of American Spanish. The Turkish finite item in -miş is not a “resultative” Perfect but has, besides its inferential uses, also low-focal constative functions (Johnson 1971: chapter 8). The corresponding Azerbaijani -mişt, however, has more “perfect-like” uses than the Turkish item, probably due to influence from the Persian –PAST (+POST)LF item, e.g., karda ast ‘has done’ = yapmış (Johnson 1988: 249). The same is true of some Kipchak-Turkic -gän items.

Certain languages possess special negated low-focal constatives with the meaning of a perfectum nondum facti ‘has not yet done’.

8.5.3. Nonfocal postterminalia

Nonfocal postterminals, +POSTNF items, do not focus on O, but denote a wide-open anteriority, not tying the event to the “O world” and not implying any particular O-relevance. –PAST (+POSTNF) items are –PAST (+POST) items, since they lack competing nonpostterminals, general anteceders covering the whole diagnostic-historical range, usable as general retrospective items with primary as well as secondary orientation. Differing from focals by being suited for direct event-orientation, they are used as propulsive items in narratives and combine freely with specific time expressions. They denote single or repeated, uni- or pluri-occasional past events. With respect to actionality, the same tendencies are found as with focals: [+t] actional phrases are more suited to highlight the effect of the event than [−t] actional phrases.

–PAST (+POSTNF) items require special lexical markers to distinguish the diagnostic dimension from the historical one. The use of specific time expressions suggests historical readings, e.g., German hat um sechs Uhr gefrühstückt ‘had breakfast at six o’clock’, whereas devices of the ‘already’ type exclude them, e.g., hat schon gefrühstückt ‘has (already) had breakfast’, Czech už napsal ten dopis ‘has (already) written the letter’. Constative readings may be suggested by expressions of the types ‘once’, ‘ever’, ‘already’ (e.g., German schon, schon einmal, jemals, Hungarian már, valaha), e.g., Hungarian Lättad már a lunadináki? ‘Have you ever seen my dog?’

Nonfocals are found in most Slavic languages, in South German, Yiddish, Hungarian, several Romance varieties such as colloquial French, northern Italian dialects, colloquial Romanian, Romansh, etc. Some examples from verbs meaning ‘write’ are: Serbo-Croatian je pisao, Italian ha scritto, French a écrit, Maltese kiteb. Some are general +POST items that also cover the pre-post stratum, e.g., Polish przeczytał ‘has read, read, had read’, Hungarian írt ‘has written, wrote, had written’. Very many Pluperfects are nonfocals, i.e. +PAST (+POSTNF) items,
e.g., Dutch had gewerkt ‘had worked’, Estonian oli kirjutanud ‘had written’, Talysh hundatš be ‘had read’, Kirmanjî kiribû ‘had done’.

Nonfocals emerge from focal postterminals due to loss of nonpostterminals (8.10.2). They function as pasts capable of primary orientation and also maintain their original postterminal capability of secondary orientation. While sometimes called “temporal Perfects”, they are not low-focal postterminals any more. Even Slavic past items taking part in ±AD oppositions, e.g., Russian (napisat’ ‘has written, wrote, had written’, are former focal postterminals that have lost their focality and become −PAST (+POST⁰) = +PAST items. These +PAST items might thus also be represented as −PAST (+POST⁰ (+AD)) and −PAST (+POST⁰ (−AD)) items, respectively.

8.6. Oppositions of higher and lower focality

Postterminals may form language-specific oppositions with respect to the degree of focality: −PAST (+POST (+FOC)) vs. −PAST (+POST (−FOC)). The degrees signalled may be higher or lower. Examples of ±FOC oppositions in which the higher item is a −PAST (+POST⁰) one (‘the posttransformative state is still prevailing at O’)) and the lower item a −PAST (+POST²) are English is gone vs. has gone. Irish tá leabhar scríofa asge ‘has a book written’ vs. tá far eis leabhar a scríobh ‘has [just] written a book’, Icelandic er dött ‘has fallen (and is now lying)’ vs. hefur dött ‘has fallen’, French est maigri ‘is emaciated’ vs. a maigri ‘has grown thin’, Finnish ovat vääneita ‘are tired’ vs. ovat vääneet ‘have got tired’, Swedish är bortest ‘is gone on a journey’ vs. har rest bort ‘has gone on a journey’, North Macedonian e dojden ‘has come (and is here)’ vs. ima dojdena ‘has come’, Albanian është i vdekur ‘is dead’ vs. ka vdekur ‘has died’, Kashmiri ketbêdi ‘has left (and is now gone)’ vs. ketgendi ‘has gone’, Armenian grac ē ‘has written’ vs. gret ē ‘has written’, Lezgian fenma ‘has, is still gone’ vs. fenwa ‘has gone’, Chechen vaxana bu ‘is gone’ vs. vaxana ‘has gone’, Basque joana da ‘is gone’ vs. joan da ‘is, has gone’.

There are also ±FOC oppositions with passive items such as North German ist gestohlen ‘is stolen (and now missing)” vs. ist gestohlen worden ‘has been stolen’. Passive constructions of higher focality often contrast with active ones of lower focality, e.g., English is convinced vs. has convinced, Georgian içereba igi ‘this is written’ vs. dauceria ‘has written it’, Finnish [hänät] on kammanut ‘((s)he) is / has been combed’ vs. on kammanut ‘has combed’. Items of different voice do not, however, form proper oppositions on a common basis of comparison.

It was stated above that most European Pluperfects are general +PAST (+POST⁰) items, since competing nonpostterminals are lacking. They are thus both diagnostic and historical, exhibiting static, experiential and other uses. Nevertheless, they may be more or less focal. Corresponding focality oppositions of +PAST (+POST⁰) items are, for example, English +PAST (+POST⁰ (+FOC)) was gone vs. +PAST (+POST⁰ (−FOC)) had gone, French était maigri ‘was emaciated’ vs. avait maigri ‘had grown thin’, Karachai ketbi ed ‘had left (and was still gone)” vs. ketgen ed ‘had gone’, Armenian gnacac ēr ‘was gone’ vs. gnacel ēr ‘had gone’, Lezgian fennaj ‘had, was still gone’ vs. fenwaj ‘had gone’. In Kalmyk, past forms of higher foci -sn bilâ contrast with forms of the postterminal -f, which, however, mostly lack the +PAST marker bila ‘was’.

While items such as the Latin Perfect cantavis have lost their postmocality and turned into nonfocals, focality might seem to be more resistant in Pluperfects such as cantavera ‘had sung’, but the latter is a general +PAST (+POST⁰) item, lacking contrasting items and thus covering all pre-past situations. Though the corresponding former −PAST (+POST) items have developed into nonfocals, Pluperfects of this kind may be largely restricted to diagnostic uses, highlighting the posttransformational state, rather than being used to refer in a historical way to pre-past events. Thus, Western South Slavic Pluperfects are nowadays restricted to [+t] actional phrases and diagnostic uses (cf. Gvozdanović 1995).

8.7. Indirective postterminals

The problem of postterminal and ex-postterminal items conveying indirectivity must be mentioned here, though it cannot be dealt with at length. As is well known, certain languages possess evidential categories signalling that a given utterance is based on indirect evidence. Indirectives, often referred to as “reportive”, “narrative”, or “relative” items, are used to express different kinds of dissociation from the event, cognitive or emotional distance to it, non-testimonial reference, assumption, doubt, irony, surprise, etc. While they play central parts in Altaic, Uralic, and several other languages, they are marginal in Indo-European, though represented in certain regions such as the Baltic, Pontic, Caucasian, and Central Asian areas.

Certain types of indirectives are closely connected with postmocality. Focal postterminals often get more or less clear readings of indirective evidentiality. −PAST (+POST) items convey an indirect perspective, expressing the postterminal state emerging from a past or partially past event, and may thus also be used indirectly for past events whose occurrence is only inferred from information available at O. For example, −PAST (+POST) items of the eastern Finno-Ugrian languages are characterized as “perfecta praesentis” etc. (Serebrennikov 1960: 59, 165), but have additional indirective meanings, e.g., Kom-Zyryan munôma ‘has [apparently] gone’. The connection between the postterminal state and the event is then established by way of inference: the situation at “nunc” is such that it may be concluded that the relevant limit of the event has already passed. The indirect view creates an element of distance and uncertainty concerning the actual realization of the event.
The source of information, the basis on which the conclusions regarding the past or partly past event are drawn, may vary. It may be inference from perception or present knowledge, a conclusion based on given facts, effects, vestiges, or hearsay, reports of other persons.

This semantic link between indicative and modal uses is a general typological one. Many focal postterminals activate this latent property and exhibit both aspectual and more or less vague inferential uses. Focal postterminals tend towards indirective readings in various Indo-European languages, from Sanskrit down to modern languages such as Armenian and Scandinavian. For inferentiality suggested by PF items in different languages, see Comrie (1976: 108–110). A recent example is the new Macedonian postterinal consisting of 'have' + participle, which may also get modal readings, e.g., ima napraveno 'has [presumably] done' (cf. Graves, this volume). In some Italo-Albanian varieties, the construction corresponding to the literary Albanian Perfect has modal meanings expressing probability, for example, ka vejekur 'may have died', 'has presumably died' (Brej 1991: 55). In Balkan varieties of Romany, the postterinal active participle may be used as an inferential past item. Similar phenomena may be found in the use of the Perfect of certain Kurdish varieties, obviously under Turkish influence.

But the indirect shades of meaning occurring with focal postterminals are generally vague and unstable. The indirective capacities are often overstated in the literature, for example, in claims regarding presumptive or inferential uses of Scandinavian Perfects "about a probable event in the past" (Haugen 1976: 80). The modal meaning is often produced by other factors. Tendencies towards indirectiveness are often supported by inferential or dubitative expressions, e.g., particles such as Swedish nog 'probably, presumably' or Armenian ेre ेvi 'probably' used with the low-focal postterminals in question.

However, certain languages possess comparatively clear-cut and stable indirectives developed from postterminals. Such items are often found in Turkic, Mongolian, Finno-Ugrian, Kartvelian, etc. They have left the focal stage of postterminality and developed into nonfocal indirectives that may also be used historically and serve, in narratives accounting for unattended past events, as propagative units of the discourse basis. Unlike focials, they thus also combine freely with specific time expressions. Since references to the very circumstances of the event, notably the temporal localization, are not favoured by a more or less strongly O-dependent focality, they tend to block indicative readings and to urge indirective interpretations. Thus, the indirect postterinal perspective is reinterpreted as indirective meaning. This development may already start with inferential uses of low-focals, but in the nonfocal indirective types, the ability to represent the historical dimension is fully developed.

This development is typical of Turkic finite items in -gän, -miś, -iptir, etc., which have indirective and certain constative uses. The situation is partly similar in Lithuanian. The Kalmyk low-focal in -f may refer to past events in an inferential or reportive way and also express the typical additional meanings of unexpectedness, etc. Former Perfects of the Bulgarian and southwestern Macedonian area show similar functions and are thus obviously not PF items any more. The Albanian so-called admirative goes back to a focal postterinal, differing from it by the reverse order of the 'have' auxiliary and the participle. It displays the expected nuances of emotional distance, disbelief, irony, astonishment, and is also used narratively.

The presence of an indirect marker of non-attested evidence means that the opposing items get more categorial readings. Moreover, if a postterinal has turned into a nonfocal indirective, it lacks a nonpostterinal item to compete with in the non-modal past stratum. Thus, Türk - PAST (-INTRA) items in -dl often lack pure postterminals to compete with and thus have a rather wide range of use. Since Turkish gitmiş mainly displays indirective uses, e.g., 'went / has gone' + 'apparently', the item gitti 'went / has gone' is employed for almost all past events that do not call for indirective and / or intraternal marking. The opposition with indirective items does of course not imply that -dl only expresses events witnessed by the speaker. In the literary language, the addition of -dir ('is < turur 'stands') to -miş eliminates the indirective and creates an indicative item in -mişdir. Since -dir corresponds to the Bulgarian copula e, the formal and functional situation seems to be rather similar in the third person: xodil = gitmiş, xodil e = gitmişdir (Johnson 1971: 305). In spoken varieties, however, -mişdir is a presumptive item, which allows for an opposition within the evidential field: gitmiş' went, has gone' + 'presumably' vs. gitmiş 'went, has gone' + 'obviously, reportedly'. A similar phenomenon in Latvian is that past indirectives used in dubitative functions carry the auxiliary esot, but may omit it in narrative functions.

Many languages, Turkic, Mongolian, Finno-Ugrian, Caucasian, Nuristani languages, Tibetan, etc., possess indirective particles (reportive particles, distance particles) that may produce indirectives corresponding to different aspectotemporal and modal items. Turkic languages possess generalized, temporally indifferent indirective markers of the types imiś < ārmiś and ekën < ārkān, which should not be confused with the postterinal types. Bulgarian bil may function as a generalized marker of indirectiveness in a rather similar way. The overall structure of the Bulgarian indirective system indicates considerable Turkic influence, non-Oghuzian patterns being the most probable primary models (Johnson 1998).

The Baltic Finnic and Baltic indirective markers are somewhat different, though also of a participial nature. They produce special -PAST and +PAST items, e.g., of the Estonian indirective mood ("kaudne kõnevili") sōižāt 'reportedly goes', ol-evāt sōitād 'has reportedly gone'. The Latvian "relative mood" is based on the finitely used intraternal participle in -ot (< *-ant), e.g., - PAST rakstot 'reportedly writes', +PAST esot rakstītās 'has reportedly written'. Lithuanian has corresponding items, -PAST rašęs, +PAST esą rašęs.
8.8. Sources and shapes of postterminals

Postterminals have various though largely similar sources. Many can be traced back to periphrases, which tend to turn into more reduced and synthetic shapes as a concomitant of the semantic development. The old Indo-European Perfect, a high-focal postterminal, was already synthetic in Old Indic and Classical Greek. In some Turkic languages, the analytic item -ib turur (postterminal converb + turur ‘stands’) has boiled down to -b. Analytic and synthetic items may coexist in one system. Thus, Arumanian has a synthetic -PAST (+POST) item, but an analytic +PAST (+POST) item.

Most European postterminals can be traced back to periphrastic essive or possessive constructions, based on the metaphorical models ‘dwelling in a postterminal phase’ (essive) and ‘having something in a postterminal phase’ (possessive). There is no evidence that they go back to complete or to constructions with auxiliaries derived from directional and movement verbs. There are also dynamic versions, ‘entering into a postterminal phase’ (essive) and ‘getting something into a postterminal phase’ (possessive).

The postterminal phase is signalled by a non-finite verbal form, e.g. a participle or a converb. Typically the point of departure of the development is a nominal form of the verb, a preaspectsual item usable as an adjective, an adverb or a noun, and not part of the verb conjugation, e.g., Latin scriptum, Hungarian írva ‘written’. The aspectualization turns it into a genuinely verbal form, e.g., scriptum est ‘is written’, directly related to scribere ‘write’. A further example of an item going back to a deverbal nominal form outside the conjugation is the Armenian item in -ac (Kozinceva 1983: 215). Compare the preaspectsual development into intraterrinals (7.7).

Certain languages use locative morphs, such as ‘being (just) after the event’, e.g., Irish tá éis a scríbh ‘has just written’ (as ‘is after writing’). An older item of possessive origin is the Akkadian Statue (Rundgren 1961: 59). The auxiliaries of possessive items is often a conjugated transitive verb of the ‘have’ type, whereas essive items are mostly provided with a copula that is a conjugated form of an auxiliary ‘be’, ‘be situated’, ‘stand’, e.g., Hittite es, Latin esse, Old English beo, Old Slavic byt, Armenian em, Turkish tur-, Kalmyk bû-, Lezgian awa, Sami leit.

Essive items with different ‘nomina perfecti’, postterminal participles, converbs, gerunds, are used in practically all languages, e.g., Indo-European, Finno-Ugrian, Turkic, Mongolian, Caucasian, Basque. A typical model is the Archi combination postterminal suffix -w- + converb + copula, i.e. -PAST (+POST) -li i, +PAST (+POST) -li ede. Some examples of active readings in Dutch are is was vertrokken ‘has / had left, Finnish on / oli tullut ‘has / had come’, Latin ir / ibi rastis ‘has / had written’, Soriern je / be pil ‘has / had drunk’, Livonian um / vel ‘su gēns ‘has / had read’, Abaza daqajat ‘has gone’, daqaxan ‘had gone’, Kirmanjë ketye ‘has fallen’, kettu ‘had fallen’, Talysh avim gät ‘I have taken it’ vs. avim gät be ‘I had taken it’ (ergative), Lezgian ksanwa ‘has fallen asleep’, ksanwaj ‘had fallen asleep’.

Slavic has in general used the old participle in -l, but some modern varieties employ other active postterminal participles, e.g., in the North Russian focal polučist ‘has received’ (Trubinskij 1984: 216).

Some items of the essive type are diathetically ambiguous (8.5.1.2). Some get passive interpretations, e.g., Polish jest napisany ‘is / has been written’, Czech je napsán ‘is / has been written’, German ist gestohlen ‘is / has been stolen’, Faroese er gjort ‘is done’, Irish tá léite ‘is read’. In Georgian, some postterminals are periphrases with a passive participle + copula ‘be’, whereas others have developed from passive passives, e.g., miceria ‘is written for me’. Many modern languages, Baltic, Finno-Ugrian, Turkic and others, consistently distinguish active and passive postterminal participles, Latvian ir / bija uzrakstīts ‘has / had written down’, ir / bija uzrakstīts ‘has / had been written down’; cf. active vs. passive distinctions in participles such as Estonian -nud vs. -tad, Tajik -gân vs. -élât, Esperanto -îto vs. -îtjo. Indo-European postterminal participles may not only be diathetically ambiguous, but also have present or past interpretations according to their internal phase structure and thus seem temporally ambiguous (10.3.2).

Auxiliaries of essive items often occur in reduced shapes, mirroring their level of grammaticalization. They may also be lacking altogether. The copula of the Old Perfect is lost in most Slavic languages, e.g., Polish pisat (Old Polish pisat jest), preserved in Bulgarian, Macedonian, and Sorbian, and can be omitted in certain cases in some languages, e.g., Serbo-Croatian. The copula may often be absent in postterminals-in-present but present, at least optionally, in postterminals-in-past, e.g., Ukrainian xodiv ‘has gone’ vs. buv xodiv ‘had gone’, Vepsian tomu ‘has brought’ vs. ol’i tomu ‘had brought’, Low (Meadow) Mari vozen ‘has written’ vs. vozen ile ‘had written’, Maltese khbe ‘has written’ vs. kien kheb ‘had written’, Kalmyk iron ‘has come’ vs. irin bila ‘had come’. Finally, it may be lacking in the 3rd person of postterminals-in-present but be present elsewhere. This is usually the case with Turkic non-verbal auxiliaries. It has been developed from personal pronouns, e.g., in -gân, -mišt, -p items. With postterminals-in-present, the absence and presence of the 3rd person copula may also distinguish indirect meanings from non-indirective ones. Compare the similar situation in Bulgarian and the copulaless form of the Latin ‘relative mood’ as a reportive Past, e.g., rastis ‘is reported to have written’.

The possessive type presents the referent of the 1st actant as the possessor of the posttransformational state. A deverbal nominal denoting a posttransformational state is interpreted as a verbal structure and incorporated into an inflectional paradigm. One widespread subtype makes use of a possessive verb meaning ‘have’. The type has broken a window is thus the result of a reanalysis of has a broken window. The subject = possessor remains in the nominative case. Representatives of this ‘have’ auxiliary are, e.g., Latin habere, Old Icelandic hafa, Old English habb-, Italian avere, Portuguese ter, Sardinian ëre, Romanian avea, Macedonian ima, Modern
Greek ἐξο, Albanian ka. The auxiliary may be contracted, e.g., Romanian a < are, and even omitted. The latter is possible in subordinated clauses in earlier German and still in modern Swedish, e.g., Swedish brevet jag skrivit 'the letter I have / had written'. The possessive type is common to many European languages, e.g., spoken Latin habet scriptum 'has written', French a donné 'has given', Italian ha cantato 'has sung', Dutch heeft gelezen 'has read', Modern Greek εξί ghrάphi 'has written', Albanian ka hapur 'has opened', Macedonian ima dojđeno 'has come'. Some Slavic languages, notably colloquial varieties, exhibit more recent items of this type. (See Maslov 1988: 80–85; for Polish, Czech, Slovak, Serbo-Croatian, see Galton 1976; for northern Russian dialects, see Panzer 1984: 115–127). One of the Georgian Perfect types is a combination of a participle with 'have', e.g., მოქნილი მყავს 'I have killed him'. In this paper, we shall not discuss contact-induced developments of the possessive type in European languages, but just note that it is even possible that periphrases such as the Old Icelandic and Basque ones are structural copies of the Latin habet factum type. The Basque low-focal analytical construction (present auxiliary + participle) may be an innovation originating from spoken Latin.

A second possessive subtype, presenting the possessor as the first actant, is found in ergative languages lacking a possessive verb meaning 'have'. Like the first one, this subtype also goes back to a deverbal nominal denoting a posttransformational state, reanalyzed as a verbal structure and incorporated into an infinitival paradigm. The possessor of the nominal construction appears as the first actant marked by an oblique case, e.g., Kirmanjik mi tu diti 'I saw you'.

Older Indo-European languages display a rather clear-cut distribution of possessive and possessive items. At their high-focal stages, the items in question are restricted to certain actional phrases compatible with the original meanings of the paraphrases. The possessive type is primarily used with intransitives, and the possessive type with transitives, e.g., Hittite pān ḫṣi 'is gone', pān ʾstā 'was gone', hātrān ḫαrti 'has written', ḫātrān ḫart 'had written'. The auxiliaries tend to agree with the first actant. Examples of this are the Latin high-focal with habēre, the Old English one with habba- 'have', the Old Icelandic ones with hafa and the corresponding esse, beo- and verb a items.

At later stages of development, generalization phenomena can be observed, and the distribution of possessive and possessive items varies considerably across languages. Transitive get passive meanings with the possessive type, e.g., is written. Transformative intransitives often choose the esitive type, e.g., Dutch is gareerven 'has arrived'. Nontransitive intransitives may choose the possessive type, e.g., Dutch heeft geslapen 'has slept', or the esitive type, e.g., Yiddish iz geslofn 'has slept'. (Yiddish, however, does not use the esitive type for all nontransitive intransitives.) The possessive type has generalized in English and Swedish low-focals, e.g., Swedish har försvunnit 'has disappeared', har skrivit artikel 'has written the article'. If esitive constructions with intransitives are available, they are high-focal, e.g., English is gone, Swedish är försvunnen 'has disappeared, is lost'. Compare high-focal possessive constructions with transitive such as Swedish har artikeln skrivit 'has finished the article, has the article in a written state'.

8.9. Peripheral postterminal items

Many components found in postterminals show a high combinability and also occur in constructions that indicate a 'dwelling in' or 'entering into' a posttransformational phase without functioning as viewpoint operators of the core systems. These less generalized peripheral items exhibit a typology of fully grammaticalized postterminal items and must be assigned +POST* values, as they do not compete with nonpostterminals in their respective temporal strata. Some are only actual, specifying postterminal states related to hypothetical actions rather than expressing events. Certain preaspectual items may be difficult to distinguish from viewpoint operators. For some Turkic cases of apparent ambiguity, see Johanson (1995). Baltic Finnic has prespecular high-focals consisting of a non-finite item (past participle or infinitive + case) and an auxiliary going back verbs meaning 'become', 'remain', etc.

As for prospective postterminals, —PAST (+PRO (+POST*)) items ("Future perfect", "Futureurum exactum", "Future anterior", etc.), instruct the addressee to situate the relevant limit of the event prior to an O2 foreseen at O1, e.g., Latin scripturit 'will have written', Icelandic mun hafa talað 'will have spoken', French aura 'will have seen', Modern Greek tha ἔξι ghrάphi, Bulgarian šte e dal 'will have given', Italian avrà cantato 'will have sung', Romanian va fi venit 'will have come'. Portuguese terá ido 'will have gone', Maltese ikun kiel 'will have eaten', Armenian γ나կե ē tinēla 'will be gone', Turkish ǒtmış olacak 'will have died'. Correspondingly, —PAST (+PRO (+POST*)) items instruct the addressee to situate the relevant limit of the event before an O2 foreseen at a past O1, e.g., Modern Greek tha ἔξι ghrάphi 'would have written', Bulgarian štēsē dē e čēl 'would have read', Armenian γ наկե ē tinēla 'would be gone', Turkish gitmiş olacaktı 'would have gone'. Since no competing nonpostterminals are available, these combinations are not simply —PAST (+POST?) items transposed into different time strata. They are absent in many languages, notably in those possessing defocalized —PAST (+POST*) items.

As was noted above, auxiliaries involved in complex constructions may themselves take part in +INTRA and +POST oppositions. Examples of the latter are the English distinctions has been vs. was and has become vs. became. The —PAST (+POST) items may, as expected, be used to avoid the implication of a specific occasion and do not readily combine with specific time expressions, whereas the competing +PAST (—POST) items are historically oriented. Combined with items signalling a +INTRA or +POST perspective, the —PAST (+POST) auxiliary expresses that the perspective on the event has been valid. The +PAST (—POST) auxiliary suggests
that the perspective was valid on some past occasion. For example, it is possible to distinguish between ‘has dwelled in an intra- or postterminal state’ and ‘dwelled in an intra- or postterminal state’, e.g., Estonian on ahtud tegemas ‘has been doing’ vs. oll tegemas ‘was doing’. Swedish har varit gjord vs. var gjord. Correspondingly, dynamic auxiliaries taking part in +POST oppositions allow the speaker to distinguish between ‘has entered’ and ‘entered’ an intra- or postterminal state, i.e., to express that the perspective on the event has become valid or became valid on some past occasion.

Certain peripheral constructions involving +POST elements have developed into more central items. Most of them are inessive and illative constructions based on the non-dynamic and dynamic copula types ‘be’ and ‘become’ and implying ‘dwelling in’ and ‘entering into’ a postterminal state. Dynamic intraterminal constructions were mentioned in Section 7.1. Only a few possible postterminal counterparts can be hinted at here. Illative-dynamic poststatales have a modest distribution in European languages, often restricted to lexicalizations, e.g., become interested, get married. There are also genuinely paradigmatic items. Combinations implying ‘entered a postterminal state’ (‘became having V-ed’) are East Armenian gnacac eey ‘went’, Turkish açmış oldu ‘opened’. The dynamic auxiliaries are +PAST (−POST) items of verbs meaning ‘be’, ‘become’, or ‘have’. The combinations in questions are not dissimilar to older past anitgers such as French est fait ‘had done’ or Italian fu uscito ‘had gone out’, whose auxiliaries were +PAST (−POST (−INTRA)) items. Passive combinations are, e.g., Estonian sai tehda, Swedish blev gjord, Turkish yapılımış oldu ‘got done’. Dynamic items of this kind often have the meaning of ‘to ipso’, e.g., Turkish gitmiş oldu ‘thus / therewith went’ (Johanson 1971: 312). Unlike the corresponding non-dynamic items, they are incompatible with adversials meaning ‘already’, which refer to a state obtaining at O. This is also true of the Romance anterior past types, e.g., French fut partit ‘had left’. Combinations provided with postterminal auxiliaries and implying ‘has entered a postterminal state’ are, for example, East Armenian gnacac e eey is has gone, Estonian on sananud tehda has become done. Among combinations implying ‘had entered a postterminal state’ are for example, literary Italian ebbe canto had sung, Turkish gitmiş olimıştu has gone, East Armenian gnacac e eey ‘had gone’.

As was noted above, +PLUR and +DISP markers (signalling pluri-occasionality, habituality, disposition) may combine with ±POST in the sense of ‘has usually done’ and ‘tends to have done’, e.g., Lithuanian būdavo rašęs ‘used to have written’, Armenian gnacac e linn ‘is usually gone’, Maltese ikun kibek, Turkish yazmış olur ‘will / tends to have written’.

8.10. Defocalization of postterminals

Postterminals are subject to successive functional shifts with gradually diminishing degrees of focality, increasing historical orientation, weaker O-relevance. Items characterized by a more diagnostic orientation get more event-oriented functions. This defocalization drift is taken here to include the diachronic steps (1) high focality → (2) low focality → (3) nonfocality. Semantic fusion in combined items is often observed. High-focals tend to develop into less focal items, acquiring increasingly general (historical) and finally modal (irreal, conditional) functions or disappearing. In particular, innovations of higher focality encroaching on the area of −PAST (+POST) items lead to constant system changes; compare the similar encroachment upon −PAST (+INTRA) items by high-focal intraterminals (7.8).

Well-known examples of the development are found in Classical Greek, where the old high-focal Perfect developed into a diagnostic + historical item, or in Persian, where a high-focal [ma]nā kirtam ‘I have done’ developed via a low-focal [ma]nā kirta into a nonfocal kirtam (Kuryłowicz 1956: 29–30). The evolution of Romance Perfects includes corresponding diachronic stages; see, for example, the scheme laid down in Harris (1982). Turkic defocalization developments have been dealt with in Johanson (1971, 1993, etc.). The origin of Maltese kitbe ‘has written’, written, opposed to jikteb ‘writes’ (cf. Standard Arabic – INTRA kataba and +INTRA yaktuba) is an old +POSTRF item (corresponding to the Akkadian so-called Pernasive, which later on defocalized to a −PAST (+POST) item and pushed the old Imperfect (yaktuba) into modal functions. The high focality has been renewed by participial +POSTRF items of the type riqeh ‘is asleep’ (with a limited set of verbs), Standard Arabic creates +POST (−INTRA) items by means of the particle qad, e.g., qad kataba ‘has written’. Graves (this volume) presents three Macedonian items of a postterminal nature or origin, occurring side by side and opposed to each other in various ways in the individual dialects: (1) a recent esse item formed with a passive participle, (2) a possessive construction, and (3) an old esse item formed with an active participle. These constructions do not constitute three PF items in a synchronic sense, but hold different positions along the focality scale. In the North, item 1 is high-focal, e.g., umren ‘is dead’, 2 is limited to possessive cases, and 3 is low-focal. In the South-West, item 1 is losing its focality, 2 is low-focal, and 3 is a nonfocal indirective. Item 2 is generally gaining ground from 3 and has replaced it in some dialects.

Defocalization is, as we have noted, due to semantic generalization, leading from narrower to increasingly broader uses. Items developing along such lines become capable of covering more and more situations, taking over functions of older, lower items, gaining ground from them and eventually superseding them. Even if higher focals thus may seem to “take the place” of lower ones, they do not replace them.
in the sense of assuming the same values. A higher item with relatively specialized functions typically extends its use to subsume both its own old functions and certain functions of a lower item. Narrow uses are typical of young items created to renew the expression of a certain function. High-focals represent earlier stages of semantic development than lower items, which have a wider functional range and the ability to cover functions typical of higher items.

It would be misleading to refer to defocalization as perfectivization. The development of PF items into “perfective pasts” in languages with a PFV vs. IPFV opposition (Bybee & Dahl 1989: 74) is not a result of defocalization. First, the development of a -PAST (+POST) item into a PFV of the nonintraterminal kind depends on the presence of an opposing +INTRA item and does not belong to the defocalization process. Secondly, defocalization never leads to the emergence of PFV items of the adterminal kind. This seems natural, since a device denoting the transgression of a limit is not likely to become a device denoting the mere attainment of the same limit. There is no defocalization path leading from a PF item to a perfective of a Slavic type. Certain Slavic +T-marked postterminals have developed into +AD pasts, but their adterminality derives from their transformativity, not from the former postterminal (“Perfect”) value. A further reason to distinguish PFV items of the adterminal and the nonintraterminal kind is that their paths of development are quite different.

8.10.1. From high-focal to low-focal

Some of the numerous shifts from high-focal to low-focal postterminality have already been mentioned. For example, the Old Georgian Perfect was high-focal, whereas the modern Georgian one is more event-oriented and vacillates between diagnostic and historical uses. Armenian exhibits two items representing the two stages of development (cf. Maslov 1988). It was also noted that, when higher focals are defocalized, high-focal postterminality is often renewed by new pronominal items; compare the analogous renewal of high-focal intraterminality. Thus, the former high value of Persian kram ‘done’ was renewed by kartak am ‘I have done’, which developed into kanda am (Kuryłowicz 1956: 29–30). The latter item does not express “the action perfective pure et simple”, but is simply a low-focal -PAST (+POST) item.

The Turkic items in -gän and -miš seem to have been renewers of focality, possibly filling the place of an older finite item in -ip (Kormušin 1984: 44). As they turned into low-focals, high focality was renewed by periphrases such as -ip turur, -miš turur and -gän turur, which later on developed into constative low-focals themselves (Johanson 1993, 1995). In most Turkic languages, the originally high-focal postterminal in -miš is not used any more. Interestingly enough, however, several modern Iranian languages, when accommodating copies of Turkic verbs to native morphosyntactic frames, use do and be constructions plus a -miš form of the copied (typically transformative) verb, e.g., Zaza kandarmiš kârd ‘persuaded’ (cf. Doerfer 1993).

The Mongolian items in -jugu, -gsan and -lugu also seem to have been high-focals. In Literary Mongolian, the item in -lugu expressed “a fact of completed action, and the situation thus established” (Grønbech-Krueger 1955: 36). The corresponding Kalmyk item in -la exhibits constative, complexive functions.

Whereas Turkic, Mongolian, Iranian, and some Caucasian languages display rich renewing developments of focal postterminals, Germanic, Romance, Slavic and Fino-Ugrian languages are rather unproductive in this respect. For example, since the postterminal periphrasis esmi+ participle in -I was defocalized and finally replaced the Aorist, no North Slavic language has developed any reasonably grammaticalized new focal category.

It has already been stated that, when high-focals become low-focals, they are not restricted to [+t] actional phrases any more, but rather operate freely on all actional types. An interesting fact is the weak defocalization of the Calabrian and Sicilian Perfects, which have retained a higher degree of focality and still only operate on transformative. The ambivalent diathetic orientation has been given up in some languages. Compare, for example, the Old Turkic type yırtq ‘torn’ (preserved in Turkish yırtık) with modern Turkic passive forms such as Turkish yırtmaq ‘torn’. In several Indo-European languages, possessive ‘have’ items have expanded to operate on more actional types than they did as high-focals, gradually encroaching on the territory of essive items, e.g., English is gone > has gone. There are several examples of this development in Romance languages, e.g., Spanish somos idos > hemos ido ‘we have gone’ (cf. also Catalan, Portuguese and Romanian). The defocalization of the Indo-European possessive type was also accompanied by other syntactic changes. The participle lost its adjectival character and its agreement with the object, became part of the verb phrase and mostly changed its place in the sentence, e.g., Old Icelandic heftr bôkina lema ‘has the book in a read-through state’ > heftr leiti bôkina ‘has read the book’. This development is also assumed for Late Latin: habet litteras scriptas ‘has the letter in a written-down state’ > habet scriptum litteras ‘has written the letter’.

Constative readings are already found in the highest parts of the low-focal sector. Graves (this volume) reports that even the new Macedonian high-focal may, though not characteristically, be used with experiential meaning. Thus, if -PAST (+POST) items are observed to have “non-resultative” uses with [-t] actional phrases, we cannot exclude the possibility that they have retained a higher focality degree; cf. Tumoli’s discussion (this volume b) of past tenses in Old Russian.
8.11. From low-focal to nonfocal

Focal postterminals are, as we have noted, found in large parts of Europe. They are by no means limited to some maritime areas in the western parts of the continent, but are also present in Finno-Ugrian, Turkic, Caucasian, and other languages. On the other hand, the drift to nonfocality is also a widespread phenomenon and not an areal feature limited to a coherent inner part of the western half of the continent.

This ultimate defocalization coupled with the disappearance of a former $\text{+PAST} (-\text{POST})$ item ("preterit loss") has been described in various ways. It is traditionally often said that an original "perfect" comes to be used as a "perfectum historicum" and finally turns into a "historical tense" or a "past tense". If focal postterminality is thought to be reference to two temporal strata, transition from low-focality to nonfocality is taken to be a loss of this double reference. The development is sometimes also conceived of as a retrospective expansion of the present space of time. The change from focal postterminals to past is a universal tendency also reflected in ontogenetic development, namely in child language acquisition (see Antinucci & Miller 1976, cf. Givon 1982: 151).

The generalization of a low-focal and the disappearance of the corresponding $\text{\neg POST}$ item means the loss of the $\text{\pm POST}$ opposition. Postterminals involved in this defocalization process may be more or less progressive. An item X is more progressive than an item Y, if it takes on $O^\ast$-independent functions in more contexts than Y does. There are generally transitional stages with promiscuous uses of the former $\text{+POST} \text{ vs. } \text{\neg POST}$ items and with residual higher functions observable in the $\text{+POST}$ items.

The tendency towards total defocalization is observed in many older languages including Old Indic, Latin, etc. As for the Classical Greek Perfect, the tendency led, from the Alexandrian period on, to promiscuous use and transition to a nonfocal item. The Perfect took a step down the focality scale, assumed event-oriented functions, fused with the Aorist and was superseded by it (Browning 1983: 30). The result of similar developments is found in several modern European languages. As for Slavic, it is present in Russian, Belarusian, Ukrainian, Czech, Polish, Rusyn, and also largely characteristic of Slovene, Croatian as well as most Serbian varieties. The development has been delayed in Sorbian, possibly under German influence. However, in Lower Sorbian, the former $\text{+PAST} (-\text{POST})$ item has practically disappeared. Upper Sorbian and literary Lower Sorbian exhibit promiscuous use, the so-called Perfect being a $\text{+PAST} (-\text{POST}^\text{NP})$ item that can always be substituted for the former $\text{+PAST} (-\text{POST})$ item (Paške 1981: 262–263). Among Germanic languages, German and Yiddish are most strongly affected. The Dutch Perfect is found in the lowest part of the low-focal sector, being more progressive than the English or Scandinavian counterparts but more conservative than the Southern German one, since it has not yet ousted the $\text{+PAST} (-\text{POST})$ item. The Afrikaans counterpart is clearly more progressive. Romance postterminals exhibit various degrees of defocalization. Their progressivity seems to increase along a line stretching from Galician and Portuguese to Castilian Spanish, Catalan, and Occitan and to Italian, French, Romanian, and Romansh. Thus, the Spanish type $\text{ha hablado} \text{ `has spoken' }$, in the middle of this continuum, is observed to occupy more and more of the functional territory of the type $\text{hablado} \text{ `spoke' }$. On Sardinian, see Bossong (1993). Nonfocals are also found in Hungarian, Maltese, Romance and varieties of Albanian. In several other languages, postterminals seem to be encroaching on the territory of nonpostterminals, e.g., the Estonian Perfect, possibly due to Russian influence.

The functional distribution often exhibits a good deal of regional variation. In several languages, the loss of $\text{\pm POST}$ oppositions predominantly affects certain regional varieties, e.g., South German, North Italian, Daco- and Istro-Romanian, or Gheg dialects of Albanian. In dialects tending towards defocalization, the $\text{\pm POST}$ opposition is mostly rare in colloquial language (Italian, Serbo-Croatian, Romanian) but preserved in more formal registers and stylistically marked contexts. The old Catalan $\text{+PAST} (-\text{POST})$ item (escriví "wrote") is also mostly limited to written and literary registers. However, the latter reduction is not due to defocalization of the $\text{+PAST} (-\text{POST})$ item (ha escrit "has written"), but to the introduction of the $\text{+PAST} (-\text{POST})$ periphrasis va + infinitive (va escriure "wrote"). Moreover, if a $\text{\neg POST}$ opposition is given up, it is not always the former $\text{+PAST} (+\text{POST})$ item that generalizes. It is also possible that the former $\text{+PAST} (-\text{POST})$ item develops into a more general item referring to past events both historically and diagnostically (Section 11.6.1).

With the change to nonfocality, the meaning of a postterminal generalizes to cover the widest range of diagnostic and historical interpretations. The loss of the specific meaning component of $O^\ast$ relevance makes the items compatible with more contexts. However, the generalization does not lead to the precise expression of more functions. If a relatively specialized item X extends its use to subsume both its old functions and the functions of an item Y, this generalization leaves both the old X and Y functions without adequate expressions. Unless focality is renewed by some other item, the nonfocal may also continue to cover cases of $O^\ast$ relevance. Thus, even if the Russian Past might be claimed to cover meanings typical of a "Perfect" (Maslov 1980: 51, 53), these meanings are not explicitly expressed. It can only be concluded that this generalized Past is also used in cases where some other language would use a focal postterminal. A nonfocal can never replace a $\text{+PAST} (-\text{POST})$ item in the sense of taking over its value. While it may refer to the event historically, it is no genuine "temps historique". Only if focal postterminality is renewed by other means may it evolve into a nonpostterminal past.

The statement that a low-focal postterminal, e.g., in the sense of a PF item, develops into a nonfocal is problematic if the latter is taken to be a PFV item. Thus, in the Functional Grammar as initiated by Dik (e.g., 1989), this would mean that a higher
operator ("perfect") develops into a lower one ("perfective"), which is at variance with other known diachronic tendencies. But this is only a pseudo-problem. First, nonfocal postterminals are, per se, not PFV items in an adterminal or a nonintraterminal sense. Secondly, even if they develop into PFV items in new oppositions, the problem of a higher operator developing into a lower one does not arise. In a Functional Grammar model of this kind, PFV should, as I have argued, be taken to be a higher operator on a par with PF (Johanson 1996).

When low-focals lose their focality, the development seems to start with [+t] actional phrases, whereas residual focal uses may be observed with [-t] actional phrases. For the development of the Old French Perfect, see Schwenter (1994). The uses with [-t] actional phrases have constative readings, which may mean that constativity is the last domain given up by focal postterminals. Note that the American English Perfect, while obviously losing some of its focal uses, is still stable in constative functions. The relatively weakly defocalized Portuguese Perfect, which was formerly also used with [+t] actional phrases, is now essentially restricted to [-t].

The situations are partially similar in Galician and varieties of American Spanish. Constative readings may thus be transitory to the nonfocality stage. Constative interpretations are possible with all low-focal items and with both [+t] and [-t] actional phrases. On the other hand, constative interpretations without "resultative" shades of meaning are typical of +POSTLP x [-t]. It is obvious that they are only a result of interaction with actional values and do not represent any independent cardinal stage in the defocalization drift.

Sensitivity to temporal distance may be decisive for the first step leading from +POSTLP to +POSTNF. This step is often taken in contexts referring to events temporally remote from O. Comrie supposes a gradual "relaxation of the degree of recentness required for the use of the Perfect" to have been a key part of the Romance development (1976: 61). Postterminals of the lowest focality degree are often used in ways that seem to motivate definitions as "remote Past", "Tempus der Ferndistanz", or "mythic Past", etc., as a Turkic -miš and -gün items, constatives in -ipdir etc., Kalmyk constatives in -la.

There have been similar losses of postterminal oppositions of the pre-past stratum. Varieties in which a former -PAST (+POST) is defocalized are also likely to exhibit corresponding general pluperfects. However, the loss of the opposition may be accompanied by compensatory developments. As we noted, the loss of the French Simple past led to the loss of the Past anterior. In certain spoken varieties, however, the latter has been replaced by the "passe surcomposé" a eu lu. Similar products are the South German Pluperfect hat geschrieben gehabt 'had written', the Serbosc type bio je ikao 'had gone', and the Albanian so-called Perfect II, typical of Gheg varieties whose former Perfect has become a nonfocal, e.g., ka pasë qenë 'had been' (Buchholz & Fiedler 1987: 133). In varieties of this kind, other types of supercompound items for the pre-past and even prepre-past stratum are also found (literally 'had had V-ed'), e.g., French avait eu vu 'had seen', German hatte gelesen gehabt 'had read', Albanian Gheg dialects kishte pasti ardhë 'had come'.

9. Adterminality

9.1. Definition

The last viewpoint oppositions to be dealt with in more detail are those of adterminality vs. nonadterminality, present in North, East and Western South Slavic languages. They are of an aspectual nature, though intricately interrelated with actionality. ±AD distinctions represent rather atypical varieties of the general PFV vs. IPF distinction assumed by many linguists.

Adterminality (+AD) is signalled by perfectives. However, the presence of a viewpoint value +AD in a given verb presupposes a partner verb with the same lexical meaning, e.g., Russian +AD postroit' vs. -AD stroit 'build'. Thus, not all morphological perfectives signal +AD. Hermann even avoided the term "Aspekt" because of its use for Slavic perfectives and imperfectives, which are not always, as he noted, "subjektiv geschieden" (1927: 228). As already stated, many perfective verbs represent modes of action and are thus not ±AD partners. On the other hand, many verb pairs are genuine ±AD partners although they may be translated into other languages by different lexes, for example, Russian dobivats'ja by English strive after and dobij'tja by attain. The opposition is absent in verbs that do not form aspectual pairs. Such verbs are referred to as imperfectiva tantum and perfectiva tantum (e.g., Belarusan znam'c 'disturb' and abmarovac'c 'publish', respectively) or are even claimed to represent both aspects (e.g., arandavac'c 'lease').

Adterminality, +AD, envisages the event ad terminum, in the attainment of the relevant limit of its actional content. Since it operates on transformatives, this limit is a crucial one, generally the terminus finalis. By contrast, nonadterminality, -AD, disregards the attainment of a relevant limit. +AD denotes that the transformation is brought about, whereas -AD does not deny or exclude it. Note that, as always with viewpoint notions, the phases that are not highlighted are only latent, not necessarily inexistent.

Adterminality is not identical to transformativity, which only implies a limit to attain but not the very attainment of this limit. Whereas [+t] implies the presence of the crucial limit in the actional content, +AD signals its realization in an event. The difference is thus by no means a gradual one. Much confusion has been caused by the compatibility of [+t] and +AD as well as their special interconnections in Slavic systems. As noted above, it is necessary to distinguish the viewpoint operator (aspect) from the operandum (actional content) but possible to assume that [+t] and +AD may merge into portmanteau markers. Thus, Russian-type perfectives
are combined $+$AD- and $+$T-markers, expressing $+$AD $\times$ [+I]. The corresponding imperfectives signal neither $+$AD nor [+I], thus standing for a nontadnergual perspective on events. By definition, systems of this kind lack the combination $^*$+$AD $\times$ [−I].

How does our definition relate to other assumptions regarding aspect oppositions of the Russian type, as discussed from Jakobson (1932) on? The [+I] actional content of imperfectives in the sense of a possible transformation rather seems to correspond to what is sometimes called the `event-unit' (Barentsen 1985: 59–60; "handelingsheenheid"). $+$AD has a certain affinity with the feature "totality", which presents the 'event-unit' as one total whole. But the $+$AD opposition does not concern completion to the effect that $+$AD characterizes an event as unfinished. $+$AD neither affirms nor negates completion. The aspectological literature offers numerous examples of $+$AD verbs in sentences implying that the event has really been brought to an end, e.g., Polish czytał tę książkę 'has read this book'. Nor is a well-defined 'result' of the event a pertinent feature of $+$AD. Both $+$AD and $+$AD may get a more or less resultative reading according to the context.

The idea of asymmetry in the markedness structure $+$AD being the semantically marked and $+$AD the semantically unmarked member of the opposition is of basic importance and conforms to a long tradition going back to A. X. Vostokov (Jakobson 1932). For example, it excludes the possibility that morphologically unmarked imperfectives such as Russian pisar 'write' are taken to possess zero markers signalling a positive aspectual content. $+$AD represents negation of the $+$AD value and irrelevance towards it, often simply implying occupation with the event. The $+$AD past is often said to have a 'simple denotative' or 'general factual' function, the event being referred to in a generalized manner. Comrie attests that Russian $+$AD items can be used when the speaker is simply interested in expressing the bare fact that such and such event did take place, without any further implications, and in particular without any implication of progressive or habitual meaning (1976: 113). This statement does not mean that imperfectives signal 'totality' and is thus not incompatible with Comrie's totality view of perfectivity. According to Dahl (1985: 76), Comrie's claim that IPPFV pays essential attention to the internal structure clashes with the idea that it sometimes expresses "the bare fact that such and such an event did take place".

$+$AD is widely used for events dissociated from a sequential setting, e.g., Czech číst knihu četla 'She has read this book'. It is only natural that the direct adverbal view of the limit is more fertile in sequential settings, but there is no reason to claim that the opposition is neutralized outside them. Since the attained transformation signalled by $+$AD suggests a transition to a new situation beyond the transformation, $+$AD is typically used for temporally situated events conceived of as linked to a preceding and / or following event, as leading from one situation to another. On the other hand, $+$AD is rather indifferent to situational change. The relevance of sequential connection as a feature of discourse organization will be further discussed below. It is, however, important to emphasize that $+$AD distinctions are relevant with non-set events as well, the decisive point being whether the event is envisaged in its very attainment of the crucial limit or not.

It is often claimed that $+$AD typically denotes single events and that negation is more characteristic of $+$AD than of $+$AD. Such features concern the aspectual content, the object of aspectual characterization. As we have seen, a serial reading as well as a negation may lead to recategorization [+I] $\geq$ [−I]. Since [−I] is not typical of actional phrases expressing single actions, $+$AD does not typically refer to global events with subevents. However, perfectives of certain Slavic languages, e.g., Czech, behave differently with respect to the representation of repeated events and may also be used for [+ser] readings.

### 9.2. Temporalization

A $+$PAST (+AD) item normally situates the $+$AD perspective at an L that is anterior to O and coincides with the attainment of the crucial limit, e.g., Russian napisal 'wrote, has written', Belarusian procytali, Polish przeczytali 'read, has read, had read', $+$PAST (−AD) items, which are not concerned with any crucial limit, only signal anteriority, e.g., Russian pisal 'wrote, has written, was writing, had written, had been writing', Belarusian cytał, Polish czytał 'read, has read, was reading, has been reading, had read, had been reading'. Most Slavic languages only possess one single past tense, which thus has several English translation equivalents.

The non-past stratum is more complicated. One problem concerns presentness related to O. $+$PAST situates the aspectual perspective at a point that is anterior to O. With $+$PAST (−AD) items, this point can coincide with O, the natural vantage point from which an ongoing event is observed, e.g., Russian piset pis'no, Polish pisie list 'is writing, writes a letter'. The final limit is not included in the view offered here, no matter how extended the event is. $+$PAST (−AD) items such as Serbo-Croatian piše 'writes, is writing' are characterized by the natural intraterminality of O-presentness and might thus even be represented as a $+$PAST (+INTRA) (−AD) items. Like other nonfocal $+$PAST (+INTRA) items, they display usages that burst the narrow "nunc" perspective, being used for uni-occasional events in progress at O, pluri-occasional events, temporally unlimited events, events referred to as a type, universally valid facts, past events, ficticious, scheduled, intended, potential events, etc.

$+$PAST (−AD) cannot be applied to events in progress at O. The meaning of aspecttemporal items of this structure is incompatible with the description of something going on at encoding time. $+$AD cannot be applied to events current at "nunc", as it is incapable of envisaging a present cursus. It might be thought that the presen-
tation of the event as a totality necessarily implies O'-posteriority of the crucial limit to attain. More adequately expressed, however, adterminality envisages the very attainment of a future crucial limit and thus projects that limit directly into the future. It is a well-known fact that perfective presents of Russian, Polish, Czech, etc. do not express current events any more, but are regularly used with future – not necessarily ‘immediate’ future – time reference, which has become their main function. The so-called incapability of presentness of –PAST (+AD) items (“Gegenwartsunfähigkeit des perfektiven Präsens”) has been taken to be a central criterion of aspect. +AD is totally incapable of primary deixic presentness, cannot be anchored in the present time sphere. Some kinds of presentness which will not be discussed here, namely those represented by so-called historical and performative presents, are less dependent of the O' perspective and may allow a –PAST (+AD) presentation envisaging the cruel limit.

Thus, –PAST (+AD) items actually serve as a special kind of prospectives. If they interact, as Russian napisat’ ‘will write’, with periphrastic imperfective futures such as budet pisat’ ‘will write, will be writing’, they may be said to function as –PAST (+PRO (+AD)) items, opposed to –PAST (+PRO (–AD)) ones. Compare the Modern Greek Aoristic Future, e.g., tha ghrapsi ‘will write’, which is a –PAST (+PRO (–INTRA)) item opposed to a –PAST (+PRO (+INTRA)) item, e.g., tha ghráfi ‘will write, will be writing’. It differs considerably from the Slavic –PAST (+AD) type of future time reference in signalling prospectivity by means of a special marker tha and not directly envisaging the future attainment of a crucial limit.

9.3. Combinability

The use of ±AD oppositions is impossible in certain contexts. Thus, the use of +AD is blocked with phasal verbs such as ‘begin’, e.g., Russian *nâčinaet napisat’ pis’ma ‘starts writing a letter’. It is possible to begin an action that contains a crucial limit, but not to begin the attainment of this limit. This is clear evidence of the aspecual nature of +AD.

The combinability of ±AD with time expressions has already been briefly commented on in Section 7.2.4. –AD items exhibit certain restrictions with punctuality but may combine with punctual expressions that do not refer to the crucial limit, e.g., Russian v dva časa rabotat’ ‘was working at two o’clock’. However, they do not combine with expressions meaning ‘suddenly’, e.g., *vnezapno stojat tam ‘stood there suddenly’. This is one of several differences between IPFV items of the +INTRA and –AD types.

–AD items may, like intraterinals, cooccur with adverbials expressing that the initium is not later than O (‘already’) or that the finiss is not earlier than O (‘still’). Russian uče pisat’ ‘was already writing’, vse eče pisat’ ‘was still writing’. However, +AD in uče napisat’ would suggest pre-past: ‘had already written’. ‘In X time’ expressions (Russian za X vremja), which measure accomplishment time and identify the actional phrase as [+t], require +PAST (+AD) items, which subsume the value [–t], e.g., Russian počili ćak išle za čita at ‘repaired the car in three hours’. Compare the similar use of –PAST (–INTRA). Attemporal ‘since X time’ expressions (Russian uče X vremja), which measure the time between the initium and O, require –AD, e.g., Russian uče dva goda tam žili ‘had been living there for two years’. Compare the corresponding uses of +INTRA items.

‘X times’ expressions may be limiting, and +PAST (+AD) can thus be used to represent the whole global event with its final limit, e.g., Russian napisat’ mne tri raza ‘wrote to me three times’. Compare the similar use of +PAST (–INTRA). However, if the final limit is unimportant to highlight, –PAST (–AD) may also be used, e.g., pisat’ mne tri raza, which would of course be impossible with a +PAST (–INTRA) item. ‘For X time’ expressions, which measure the temporal extension and identify the actional phrase as [+t], require, in languages such as Russian and Polish, –AD items, which subsume the value [–t]. To present a past event as extending over a period of time, Russian uses +PAST (–AD), e.g., dolgo pisat’ ‘wrote for a long time’. As we have seen, however, this is a case where +PAST (–INTRA) items are used, since a +INTRA view is infertile with exact indications of the outer measures of the event. Bulgarian, as expected, uses the imperfective +T-unmarked Aorist, e.g., stoja dálko na prozoreca ‘stood for a long time at the window’. It was noted above that these different choices show an essential incongruity between IPFV items of the +INTRA and –AD types and that ‘for X time’ expressions by no means necessitate a “perfective” view. On the other hand, a durative event may be presented as a totality by means of delimitative or performative modes of action: ‘spent [a certain time period]’. V-ing’.

9.4. The way to ±AD

It has already been noted that the sources of ±AD systems are transformatives and nontransformatives, represented morphologically by +T-marked perfective and –T-unmarked imperfective verb stems respectively, and grouped together into pairs. +AD items are thus formed by means of prefixes or suffixes from stems that do ipso become –AD items. There are also cases of suppletivism, e.g., Polish +AD wzięć vs. –AD braci ‘take’. Secondary imperfectives (see below) are formed with suffixes from perfective stems or with vowel changes in the primary stem, e.g., Polish zarobić → zarabiać ‘gain’.

Many aspectologists assume a stable basic distinction of perfectivity vs. imperfectivity, present in all older and modern Slavic languages. With respect to grammatical values, this alleged stability or unity is highly questionable. There is no
uniﬁed “Slavic style aspect”, and general deﬁnitions of a Slavic perfectivity such as “l'action dans sa totalité, comme un point, en dehors de tout devenir” (Saussure 1916: 161–162) conceal substantial differences. Modern Slavic languages use formal perfectives for both +T-marking and adterminality. While the dichotomy serves ±AD distinctions in languages such as Russian, it is at least known to be “less aspectual” in certain West and South Slavic languages. It will be argued in the present contribution that the type found in Bulgarian belongs to the domain of actionality. The two types represent different semantic values and cannot be said to be essentially equivalent.

There is thus also little justiﬁcation for assuming a “Sprachbund”, an areal group of Slavic, Baltic, German, and Hungarian, which would have grammaticalized “perfectivity” in a uniform way. The Slavic languages do not represent a uniﬁed type, and German does not even employ +T-marking in the systematic way as Hungarian, Bulgarian, Lithuanian, Georgian or Ossetic does. The systems mentioned certainly display basic morphological analogies. For example, the Slavic formation types are partly paralleled in Baltic languages. Of course, a “Sprachbund” does not need to be homogeneous, and may display different degrees of development in its parts. However, the different interpretations of the morphological data at the semantic level leave us with a poor basis for establishing linguistically interesting common features.

+T-marking, even if it is systematically applied, remains within the domain of actional content. On the other hand, +T-markers may develop diachronically into viewpoint operators. The exclusively +T-marking perfectives represent an earlier stage of semantic development than the +AD-signalizing ones found in certain Slavic languages. The Russian-type development led from (i) lexeme derivation to (ii) +T-marking to (iii) aspect formation. A mode of action without aspect-temporally determining force developed into a viewpoint operator; an actional distinction turned into ±AD opposition. The perfectives extended their function from marking actional phrases for [+t] to determining them aspectually as +AD. The +T-markers came to mark +AD × [+t], a development into what Mourekk (1895) called “true perfectivity”. The marked category not only implied a crucial limit to attain but also envisaged the attainment of this limit. The viewpoint operator imposed an additional semantic constraint on the meaning it operated on. A portmanteau marker combined transformativity, which just aims for totality, with adterminality, which actually involves it. The unmarked items became nonadterminals, implying no crucial limit to attain and consequently no attainment.

This decisive step is often ignored in the discussion. It has not been taken in Hungarian, Latvian, Lithuanian, Kartvelian, Ossetic, etc. Though the +T-marking systems of these languages are often referred to as perfective vs. imperfective distinctions, they have not developed into ±AD oppositions. The Bulgarian distinction is still an actional one, the perfective functioning as a +T-marker (marker of “pre-

del’ nost’”; Tommola 1984). The presence of an imperfective Aorist and a perfective Imperfect in Bulgarian has sometimes been used as an argument against the aspectual nature of the Imperfect vs. Aorist opposition. On the contrary, it should rightly be considered evidence against treating the perfective vs. imperfective dichotomy as a viewpoint distinction. Similarly, the Hungarian +T-marking preverbs are not aspectual markers or “perfectivizers” in an adterminal sense. The distinction between megír “writes (to ﬁnish writing)” and ír “writes” is one of actional content. It has been suggested that a Russian-type aspect system is in the process of development in Hungarian. Conrie, who rightly considers Hungarian less developed than Russian with respect to a perfective vs. imperfective opposition system, supposes that the Hungarian preverbs are developing into markers of perfectivity (1976: 93–94). However, Csató (1994: 232–237) shows that +T-marking is decisive in assigning correct interpretations to the Hungarian aspect-temporal forms and “provides a better characterization of the function of Hungarian verbal preﬁxes (which derive transformatives) than does their characterization as perfectivizing” (Conrie 1994: 299).

Though the difference between actional and aspectual categories is by no means gradual, there may of course be gradual diachronic developments from pure +T-marking into +AD. The starting point of the Slavic development is a Proto-Slavic system comprising the aspect-temporal categories Present, Perfect, Imperfect, Aorist, and, in addition, a rather unrestricted [±t] duality (perfective vs. imperfective). This system was restructured in most Slavic languages with the loss of the Imperfect, the Aorist, and the −PAST (±INTRA) opposition holding between these two items. Moreover, the Perfect mostly lost its −PAST (+POST) function and developed into a +PAST item. The [±t] distinction, semantically very different from the ±INTRA and ±POST distinctions, could not compensate for their loss or, as it is sometimes claimed, take over their roles. In languages such as Russian, the [±t] distinction developed into a ±AD distinction, in the past strata in the following way: (i) pisal −PAST (+POST) × [−t] > +PAST (−AD); (ii) napisal −PAST (+POST) × [−t] > +PAST (+AD).

These changes seem rather natural in the light of the affinities between certain actional and aspect-temporal categories. Thus, +INTRA items such as Imperfects have affinities with [−t], and −INTRA items such as Aorists with [+t]. As already stated, [+t] was constitutive for the Classical Greek Aorist. +T-marking may be more important with some aspect-temporal categories than with others. It is hardly astonishing if the affinities also lead to mergers. A system of free combinability of viewpoint operators and actional contents may change to the effect that [+t] is largely restricted to −INTRA, and [−t] to +INTRA. Thus, the Slavic Aorist is, in languages that have preserved it, predominantly perfective. In Sorbian, the Aorist is used with perfectives and the Imperfect with imperfectives (Sewc 1968: 171–172). These past tenses hold an intermediary position between an older Slavic type, represented by
Bulgarian, and a new type, represented by Russian. Their development is a parallel to the merger of transformativity with adterminality in languages of the Russian type.

9.5. Differences between +AD- and +T-markers

The two types of perfective vs. imperfective distinctions, as represented, for example, by Russian and Bulgarian, differ clearly in their functions. +AD signals aspect based on actionality, since +AD presupposes and subsumes the actional value [+t]. This does not imply any dominance of actional values; the aspECTual values always have scope over the actional ones. The Bulgarian-type use of perfectives and imperfectives is purely actional and concerns the [+t] parameter. Here, too, as we shall see, aspectoactional parameters interact to the effect that the viewpoint values (+INTRA, +POST) have scope over the actional ones. A few comments should be made here on the use of morphological perfectives and imperfectives as +AD and +T and the differences between them.

First of all, adterminal items display a much more general and systemic use than +T-markers do. It has already been noted that one indication of a completed grammaticalization process is a higher degree of generality of use.

There are thus never one-to-one correspondences between adterminals and +T-markers. For example, though Ossetic +T-marked items are often claimed to be equivalent to Russian perfectives, faš-kodia 'did' corresponds to sdelat, whereas the simplex koda corresponds to both sdelat and sdelat (Miller 1962: 139).

Another difference mentioned above is the blocking of +AD with phasal verbs such as 'begin', as it is not possible to begin the very attainment of a crucial limit. A +T-marker easily combines with such verbs, since it is quite natural to start an action directed towards a crucial limit. Thus, Polish verbs expressing the beginning or end of an activity or process combine with imperfectives. The Lithuanian perfective exhibits far fewer such constraints, and Hungarian +T-marked actional phrases also rather freely occur with phasal verbs, e.g., Lithuanian ėmė apstrasti 'began to give up (a habit)', Hungarian kezdett megboldolnii 'began to go crazy'. Many speakers also accept Hungarian kezdett megírni 'started to write (to completion)'. All this shows us, again, that the Lithuanian and Hungarian items in question are not +AD items.

9.5.1. Capability of future time reference and incapability of presentness

It was also stated above that -PAST (+AD) cannot apply to an event in progress and gets future time reference if related to Os, e.g. Russian napíšeš pis'mo 'will write a/the letter', perejedt most 'will cross the bridge', Czech napíše 'will write'. It should, however, be noted that all finitransformatives easily suggest future time reference with -PAST items. At O, a telic event can only be viewed in its course or during its ongoing preliminaries, and this view implies that a possible accomplishment can only occur in the future. In other words, a goal-oriented event is bound to the Os perspective with the natural implication of posteriority. This kind of future reference is, for example, a natural reading of Classical Greek Present forms of [t-f] verbs, e.g., nómáí 'go, come'. This is universally valid for the non-past of finitransformatives, in particular for [t-f, +mom] actional phrases. The possible preliminaries are observed in the deictic present, but the crucial limit must lie, if anywhere, in the future. The question 'What is going on right now?' is answered more satisfactorily by nontransformative items. Thus, to express 'is writing a letter', Lithuanian uses rašo laišką, i.e., the +T-unmarked ("imperfective") item rašo rather than the +T-marked ("perfective") parašo. Finnish uses the -T-marked lukki kirja 'is reading / reads the book' (with participle object), whereas the -T-unmarked lukki kirjan 'reads and finishes reading the book' (with the object in the total case) has future time reference.

However, the decisive criterion of +AD is not the capability of future time reference but the total incapability of presentness. The notion of adterminality in the primary deictic "nunc" perspective means a more direct future projection. The object of observation is, again, not an event moving towards a crucial limit, but it is the very attainment of that limit. Note that Lithuanian perfectives such as parašyt' 'write (to completion)' do not share the total "incapability of presentness" typical of Russian or Polish perfectives such as napíset', napíšač. Their main non-past function is not to express prospective. The Latvian so-called perfective Present behaves similarly. In the same way, the Present of a +T-marked Hungarian actional phrase just suggests that the possible completion can only take place in the future, e.g., megírja a levelet 'writes is writing (to complete) the letter'. Similarly, the Bulgarian perfective Present does not display the future time reference typical of -PAST (+AD) items.

To express prospective, languages such as Lithuanian, Hungarian and Bulgarian use special items. Hungarian uses the fog Future with both transformatives and nontransformatives, e.g., -PAST (+PRO) × [+t] meg fogja lőni a levelet 'will write (to complete) the letter'. Bulgarian possesses a special Future, consisting of the particle še + Present and predicting events of both transformative and nontransformative actional contents, e.g., -PAST (+PRO) × [+t] še doide 'will come'.

Georgian -PAST items determined by +T-markers get Readings in the sense of 'does (to completion) and tend, as expected, towards future time reference, e.g., dačer 'tu l'čeriras', in which case they may be translated by Russian perfectives, e.g., napíšeš 'you will write' (Vogt 1971: 183–184). Hungarian non-past items such as ámegy a hídön 'crosses the bridge' can, like German überschreitet die Brücke, express an ongoing telic event, projecting its conclusion into the future. If the Russian perfective were +T-markers, we would expect them to behave similarly. However, perejedt most 'will cross the bridge' adds the +AD meaning, directing the attention directly to the event in its actual conclusion. Note also that the Hungarian and Ger-
9.5.2. +AD-marking of global events and +T-marking of subevents

A further important criterion is how performatives relate to global events and possible subevents. Adterminality envisages the whole event as such, whether it consists of one single event or subevents. +T-marking, however, may also be used for the actional characterization of the subevents. As we have seen, a transformative actional phrase may be quantitatively reinterpreted as [+ser], which removes the crucial limit and makes it more capable of presentness. If it still contains a +T-marker, it is in order to assign transformativity to the subevents. Thus, in their primary reading as denoting O'-oriented single events, Finnish and Estonian transformative actional phrases with total objects are interpreted as having future time reference, e.g., Estonian kõpsetab koogi ‘will bake a cake’. When a [+ser] reading removes the limitation and makes the whole actional phrase more capable of presentness, the +T-marking total object specifies the actional properties of the subevents. If Russian perfectives were +T-markers, they would be expected to function similarly. However, they do not signal [+t] of subevents, but operate, as +AD markers, on the actionality of the global event. It is the attainment of the crucial limit of the global event—not of the subevents—that is envisaged by a +AD operator.

O'-oriented +T-marked non-past items typically refer to an ongoing global event that is not completed itself but consists of telic subevents. Thus, the Bulgarian combination ~PAST (+INTRA) × [+t] mainly expresses repeated events. Similarly, Lithuanian, Latvian, and Hungarian perfectives can refer to ongoing global events, the +T-marking only signalling the transformativity of the subevents, e.g., Latvian katru dienu urchaks pa vestulei, Hungarian minden nap megté egy levél ‘writes (and finishes writing) a letter every day’. Here, the function of the ‘perfectives’ is not to denote habituality, but to characterize the subevents actionally. The pluri-occasional reading arises from the [+ser] reinterpretation. The pluri-occasional global event, seen in progress at O', is a set of events, each of which is actionally characterized as [+t]. The Bulgarian, Lithuanian, Latvian, and Hungarian perfectives are thus not +AD categories. Only +T-marking perfectives may express the telic character of subevents. For the sentence just cited, the imperfective Present would be the only choice in Russian: kačdyj den’ pišet odno pis’mo. Here, the ~AD aspect operates on a [+ser] actional content used to denote a pluri-occasional global event. There is no device to mark the subevents for [+t] actionality. Adverbials expressing unlimited repetition such as ‘every day’ (Lithuanian kasdien, Russian kačdyj den’, etc.) combine with +T-marked actional phrases but not with ~PAST (+AD) items. If Russian perfectives were strictly +T-marking, they would also be used to assign transformativity to subevents. If the Bulgarian, Lithuanian, Latvian, and Hungarian ‘perfectives’ were adterminals, they would only be used to envisage the attainment of the endpoint of the global event, which is incompatible with the present perspective.

9.5.3. Imperfectivization

Slavic secondary imperfectives derived from prefixed stems may, as we have seen, function as ~T-markers. Obligatory secondary imperfectivization is sometimes considered the major criterion for Slavic aspect grammaticalization, and it indeed seems to provide arguments for the presence of ±AD oppositions.

In languages such as Russian, ~T-marked items of this kind have developed into aspectual imperfectives. From a simple imperfective pisyat ‘write’, a perfective perepisyvat ‘rewrite’ is derived by means of a transformativizing preverb that also modifies the lexical meaning. The non-past item perepisyvat ‘will rewrite’ exhibits the incapability of presentness to be expected from a ~PAST (+AD) item. As should also be expected, a secondary imperfective item per-pis-yat, derived from per-pisat, does not share this incapability, since it is a ~AD item: perepisyvat ‘rewrites’.

The Lithuanian +T-marked per-ryšyti ‘rewrite’ corresponds to both +AD perempisyt and ~AD per-pisyvat and is thus obviously not a ~AD item. The item per-raš-iništi ‘rewrite, copy (repeatedly)’ is still an iterative here. Georgians use for ‘rewrite, copy’ a +T-marked verb, which, like all finite perfectives, naturally suggests future reference in non-past items, e.g., gadačers ‘will rewrite’. The Russian secondary imperfective Present, however, is a ~AD item with full capability of presentness, e.g., per-pisyvat ‘rewrites, is rewriting’. The Georgian lexeme is just a transformative, and it even lacks a lexically adequate nontransformatively equivalent, the only ~[t] counterpart available being the simple čers ‘writes, is writing’.

10. Interaction of viewpoint operators with phase structure types

10.1. Typical realizations

The interdependence of viewpoint operators and the actional contents they apply to has been emphasized above. The choice of aspectoactional combinations produces different types of interactional readings. Inherent phase structure properties in terms of [+t], [+dyn], [+nom] and other distinctions determine the realizations. The typical realizations of post-, intra- and adterminality with finitransformative, initio- transformative and nontransformatively actional phrases can be roughly illustrated as follows:
The relevant limit of nontransformatives is marked with $\times$, and the crucial transformational limit of transformatives with $\circ$. The symbol $\bullet$ stands for the viewpoint, and dots (...) mark the variable space within which it may be situated.

Grammatical viewpoint categories always interfere with actional semantics, and it is important to describe the specific connections. Different aspects operating on one and the same actional content produce different actional readings. As we have noted, some of the interactions in narrative discourse allow textual interpretations of 'entry', 'dwelling' and 'exit'. Such readings are, as has been stressed, not identical to the functions of phasal modes of action, e.g., ingressivity. The latter signal properties of a given action as such, whereas aspects signal the conceptualization of an event as an occurrence of the same action, as action taking place. Viewpoint operators do not select certain phases, as phasal devices do. They do not pick out certain portions of the actional content, but may just give prominence to phases typical of the respective actional classes.

Thus, actional distinctions cannot compensate for viewpoint distinctions, as their functions are different. For example, a system without a $\pm$INTRA or $\pm$AD opposition does not express any PFV vs. IPFV duality in a systematic way. Certain complementary distributions of viewpoint operators over actional classes do not prove any functional identity. Even elaborate systems of actional devices cannot make up for the lack of viewpoint operators. They may have roughly similar effects with respect to the representation of non-transitional and transitional events in discourse, but cannot express viewpoint meanings. Viewpoint semantics does not only serve to describe events in terms of 'situation' vs. 'situation change'.

10.2. Realizations of $\pm$INTRA

The $\pm$INTRA opposition imposes viewpoint values on actional phrases of different phase structures. It has been stressed above that $[\pm t]$ is not equal to $\pm$INTRA and that, for example, the Bulgarian imperfective vs.perfective and Imperfect vs. Aorist distinctions are of different kinds. If perfective and Aorist are both defined as expressing "boundedness", whereas imperfective and Imperfect are both taken to express "non-boundedness", the combinations "imperfective Aorist" and "perfective Imperfect" get contradictory meanings that are impossible to account for. The combinations of $\pm$INTRA and $[\pm t]$, the latter sometimes signalled by presence vs. absence of +T-marking, do not represent complex aspectual meanings, but different predictable aspectual realizations of viewpoint values operating on different actional contents. The interactional meanings become unintelligible unless the basic categories are defined independent of each other.

10.2.1. $+$INTRA

+$+$INTRA highlights the cursus of the actional phrase meaning in a much more explicit way than the $-AD$ kind of IPFV. The view 'from within' yields textual readings of 'dwelling in the event'. $+PAST (+$INTRA) items are thus not propulsive, but have a restraint effect in narratives, denoting events that form a temporal or expiatory background for the main events. Their textual behaviour is often similar to that of $+PAST (-AD)$ items. Interaction of this cursus-oriented aspect with inherent phase structures may yield different processual, progressive, stative, preliminary and other readings.

10.2.1.1. $+$INTRA $\times [-t]$

Intraterminality is most naturally applied to nontransformatives. The values $+$INTRA and $[\pm t]$ are highly compatible, though by no means identical. $+$INTRA needs a cursus of some saliency to operate on, which is the case with $[\pm t]$ items. Events expressed with $[\pm t]$ items may of course be conceived of as having limits, though none is crucial. $+$INTRA $\times [-t]$ views the event within these limits, without any emphasized beginning or end. It is not enough to define the result of this interaction as a mere 'state', since introspection is an essential element. Still, $+PAST (+$INTRA) $\times [-t]$ may exhibit a textual behaviour roughly similar to that of $+PAST (-AD) \times [-t]$: cf. Modern Greek éghrafe ghrámeta 'wrote / was writing letters' and Russian pisal 'wrote'.

$+$INTRA signals that something is going on at an O. The combination $+PAST (+$INTRA) $\times [-t]$ tells us that a portion of the action is already achieved at Os. Dik's observation on English progressives holds for $+$INTRA $\times [-t]$ in general: if it is truly said that, at some point of time, an atelic state of affairs obtains, for example, he is painting, it may be concluded at some later point that this state of affairs "has obtained": he has painted (1989: 94). Whether a past event expressed by $+PAST (+$INTRA) can afterwards be interpreted as having occurred or not is a matter of actional content, the decisive factor being compatibility with the notion of partial realization.

+$+$INTRA combines with both $[-t, +dyn]$ and $[-t, -dyn]$ actional phrases. With the latter, it denotes a static dwelling in the event, without internal progression, e.g., French savait, Turkish bilbyordu 'knew'. With $[-t, +dyn]$ actional phrases, it may
yield readings of a dynamic dwelling in the event, with possible internal progression, e.g., French travaillait, Modern Greek διάλειφ, Turkish çalışıyordu ‘was working’. Note that these readings are not necessarily progressive in the sense of a high-focal intraterminality.

+INTRA can operate on an actional content that is homogenized in the sense of [+tf] + [+hom] > [-t], e.g., Finnish on korjaamassa kelloa ‘is repairing the clock’, where the actional phrase korjata kelloa is homogenized by the partitive, and the +INTRAHF operator marked by -massa. It can also operate on an actional content that is homogenized in the sense of [+tf] + [+ser] > [-t], in which case the intraterminally viewed global event consists of repeated and possibly pluri-occasional subevents. Pluri-occasionality yields processual readings of so-called habitual iteration, to which we shall return.

As we have noted, +INTRA is not meaningful with specifications of the entire temporal extension, e.g., French *écrivait deux heures. (An adverbial such as pendant deux heures would rather measure the period of intraterminal observation.) The Bulgarian imperfective Imperfect, which signals +PAST (+INTRA) × [-t], is not used in sentences denoting uni-occasional events with delimitative ‘for X time’ adverbials. This restriction is only intelligible if the Imperfect is defined as +INTRA and not simply as IPVF, since –AD items freely combine with ‘for X time’ adverbials. With pluri-occasional [+ser] readings, imperfective Imperfects are also compatible with ‘for X time’ expressions, if the specification of the temporal extension refers to each subevent, e.g., пее к песента три минути ‘used to sing the song for three minutes on each occasion’ (Lindstedt 1985: 205). +INTRA × [-t] does not combine with ‘in X time’ adverbials when the reference is uni-occasional. Under [+ser] readings, however, the combination is possible: in this case, the accomplishment of each telic subevent is measured, e.g., Bulgarian +PAST (+INTRA) × [tf] + [+ser] > [-t] пее к песента за три минути ‘used to sing the song in three minutes on each occasion’.

10.2.1.2. +INTRA × [+ti]

Since [+ti] actional phrases denote both a transformation and a following posttransformational phase, the combination +INTRA × [+ti] signals an introspective view of an event excluding its crucial starting point, the very transformation. +PAST (+INTRA) × [+ti] may thus highlight the cursus phase of the lexical meaning, the posttransformational stative phase of the actional content, e.g., Modern Greek katalêve ‘understood (= was aware of)’, krivō ‘was hiding, hid (= kept himself / herself out of sight)’, Turkish durdyordu ‘was standing, stood’. These readings contrast with –INTRA readings suggesting initial attraction (10.2.2.1.1).

Note that the non-dynamic posttransformational phase highlighted by +INTRA × [+ti] combinations may be objectively identical to the one highlighted by corresponding +POST × [+ti] combinations, e.g., is hiding = has hidden, understands = has understood, Classical Greek rhigè ‘I shudder, with fear = èrriga ‘I am terrified’, Turkish oturuyor ‘is sitting’ = oturmuştur ‘has sat down’ (cf. 10.3.1.2). The two options may differ with respect to focality. As was noted above, Maltese qad-marked intraterminals are less focal than high-focal +POST items of the same initiotelective transformational verb, e.g., qed jorqad ‘is (usually) sleeping’ vs. rieded ‘has fallen asleep, is asleep’.

Note also that the distinction possible between (i) hid and (ii) was hiding becomes impossible if the +INTRA item is high-focal and thus does not apply to all actional phrases. The English past item understood is ambiguous between (i) and (ii), since *was understanding is blocked for (ii). In languages lacking ±INTRA distinctions, [+ti] actional phrases are systematically ambiguous, e.g., German erkannte (i) ‘became aware of’, (ii) ‘was aware of’.

10.2.1.3. +INTRA × [+tf]

The combination +INTRA × [+tf] signals an introspective view of an event excluding its crucial endpoint, the very transformation. It is found in all ±INTRA languages. Thus, the Georgian “determined Imperfect” denotes an event “qui se déroulait dans le passé vers un but, un terme” (Vogt 1971: 189). Among the Kartvelian languages, Svan readily applies +T-marking to intraterminal transformationalatives. +INTRA × [+tf] is also expressed by the +T-marked Bulgarian perfective Imperfect. However, +T- marking is relatively dispensable in Present tenses. Thus, Lithuanian may use the simple Present, e.g., mirta ‘dies’, jeina ‘enters’. The Kartvelian use of +T-marking preverbs in the Present emerged rather late.

The combination does not tell us whether the crucial limit is actually reached after the viewpoint or not. This fact has often been misunderstood. It has been called an “imperfective paradox” that an utterance containing an “imperfective telic” verb can be true even if it is known that the endpoint was never reached (Dowty 1977). It would be more correct to state that if a telic event expressed by a [+tf] item is said to be in progress at some point, it cannot later be concluded with certainty that it has been achieved (cf. Dik 1989: 94). The combination +INTRA × [+tf] may thus produce preliminary readings of partial realization, preparation for completion, imminence, inclination, futuretivity, constancy, etc. (Johanson 1971: 202–206). The readings vary according to the semantics of the actional phrase and the context.

It may seem that intraterminality is incompatible with momentaneous finiterminals and that the latter are thus monoaspectual, combinable with –INTRA only. There appears to be little need for +INTRA × [+tf, +mod], an inside view of an actional content consisting of a limit alone, without a salient cursus to look into. The combination +INTRA × [+tf, +mod] is nevertheless used, referring to the time immediately before the crucial limit of which the action consists. It may thus have
imminential meaning, implying that the event is just about to occur, or propinquitative meaning, implying no-achievement. Such meanings are often produced by high-focal intraterminals (Section 10.2.1.5).

Intraterminality is far more frequently applied to non-momentaneous finitemorphics, e.g. Modern Greek Imperfect +PAST (+INTRA) x [+tf, -mom] pëthe'ne ‘was dying, was close to death’, Turkish bogušiyordu ‘was drowning’, Georgian kydeboda ‘il mourut’ (as opposed to +PAST (−INTRA) mokvda ‘il mourut’; Vogt 1971: 182). The combination +INTRA x [+tf, -mom] envisages the event in a phase preceding the crucial limit and only shows preparatory preliminaries. Questions concerning completion are aspectually irrelevant. Turkish Ali bogušiyordu ‘Ali was drowning’ leaves it open what happened after the introspection, whether the event was thwarted or not. Knowledge to the effect that the participant did not drown suggests a propinquitative reading of ‘was on the verge of’. The combination is often used conatively, denoting the mere attempt to reach the crucial limit. Verbs such as ‘try’ may be used to translate it. Conative readings are favoured by actional phrases with the feature [+controlled], implying that the first actant referent has the power to influence the realization, e.g. the imperfect form de conatu in vajérebdi mas ‘j’essayas de le convaincre’ (Vogt 1971: 182). Italo-Croatian uses a construction copied from the Italian stava per periphasis, e.g., stojasĭa za umbri, ma nįa umbra ‘was dying, but did not die’ (Brec 1992: 117). Compare the above-mentioned Russian imperfectives with conative readings, e.g., ubezjad ‘tried to convince’.

Neither the propinquitative-conative readings nor the interpretation of successful achievement is conveyed by +INTRA x [+tf, -mom] as such. If the actional phrase may be interpreted as [+tf, -mom] or as [+tf, +mom], it may remain unclear whether the event has already begun or is only intended, e.g., Lithuanian jau buvo bešėnings ‘was about to go out’, Italo-Croatian stojasĭa za partit ‘was on the point of leaving’ (Brec 1992: 117). Note that the Hungarian +T-unmarked Past mostly does not get preliminary readings with [+tf] actional phrases, e.g., +a beget hali ‘the patient was dying’. This would be natural if it were an IPFV item opposed to the +T-marked Past, e.g., a beget meghalt ‘the patient died’. A similar effect is, however, possible with spatially limiting adverbials and intraterminality signalled by a +T-marker placed after the verb, e.g., ment ki az udvarra ‘was on his way out to the courtyard’. Compare similar cases of +INTRA operating on spatial limitation such as Modern Greek pîje nea xiljîmetro ‘was walking a kilometre’ (vs. pîje nea xiljîmetro ‘walked a kilometre’; Hedin, this volume).

10.2.1.4. +INTRA x [+t] + [+ser] > [−t]

Intraterminality may, as we have noted, operate on [+ser] actional phrases denoting pluri-occasionality. The reading [+ser] may be due to a quantitative reinterpretation without any overt signal. The objective property of repetition is not a sufficient reason to use a +INTRA operator, but the decisive criterion is the inside view, which can be applied to both uni- and pluri-occasional global events. The global event is presented by +INTRA regardless of the actional properties of the subevents. If the latter are telic and basically represented by [+t] actional phrases, the combination +INTRA ? [+t] + [+ser] > [−t] is used.

Examples of +PAST (+INTRA) ? [+tf] + [+ser] x [−t] are Turkish her gün saat altıda kalkiyordu, Bulgarian stavaše vskē den v šest časā ‘got up every day at six o’clock’. The basic phase structure may be [+tf, +mom], e.g., Romanian exploda a bomba ‘a bomb used to explode’, Modern Greek to ōtrikes ‘used to find it’. The basic structure may also be [+ti], e.g., Turkish her gün orada otuuyordu ‘sat i was sitting there every day’.

+T-marking languages may use the presence and absence of marking to characterize the subevents. Absence basically stands for global events whose subevents are atelic. Thus, Bulgarian +T-unmarked +PAST (+INTRA) items, imperfective Imperfects, are regularly used for intraterminally viewed global events consisting of atelic subevents. An intraterminal perspective on a global event consisting of telic subevents is usually expressed by +T-marked +INTRA items. The distribution of functions in this aspectoactional interaction is clear-cut: +INTRA marks the global event aspectually, and +T marks the actionality of each subevent for [+t]. Thus, a Bulgarian or Macedonian +T-marked +PAST (+INTRA) item, a perfective Imperfect, may apply an intraterminal perspective to a whole set of unrestrictedly repeated telic subevents, e.g., in Bulgarian subordinate clauses such as veski pâti štorn ja posledneše ‘each time he glanced at her’. Bulgarian −PAST (+INTRA) x [+t], the perfective Present, typically expresses pluri-occasional telic events. +T-marked Imperfects are typically used in the same way in Kartvelian, e.g., Georgian and Svan. Italo-Croatian uses +T-marked +PAST (+INTRA) items to express an intraterminal view on a sequence of telic events, e.g., Sa vržaša jašč, rivaša nona, za sklina a njimi ponesaša mblifta gor ‘He used to ride away, arrive, get off and bring milk up to them’ (Brec 1992: 110).

A similar view on global events with repeated telic subevents is achieved with +T-marked Present items, e.g., Bulgarian sutrin čeleze, večer se vârne ‘leaves in the morning and returns in the evening’ (Stanov 1976: 31); compare the Lithuanian example already quoted: kudien pašaro po vieną laiką ‘writes (and finishes writing) a letter every day’. The Lithuanian or Bulgarian kind of “perfectivity” is thus by no means incompatible with present time reference. There is nothing contradictory about a sequence of telic events viewed in the natural intraterminality of a Present tense. On the other hand, it is clear that ±AD languages cannot use their quite different kind of “perfectivity” in such cases, but only –PAST (−AD) items.

However, the type of aspectoactional interaction discussed here is relatively limited. Bulgarian +T-marked habitual Imperfects are rather rare and can be replaced by unmarked ones (Maslov 1959: 272). Thus, the latter may also be used for intraterminal...
nally viewed global events consisting of telic subevents. Italo-Croatian +T-marked Imperfects are replaced by unmarked ones in the speech of the younger generation (Breu 1992: 115–116). Such simplifying steps towards the expression of pure aspect at the expense of actional characterization of subevents bring the systems closer to the Romance and Turkic ones. This simplification is formally opposite to the one that has taken place in +AD languages, where the +T-marking perfectives are formally maintained but have come to function as +AD operators. On the other hand, the developments are similar inasmuch as +AD also expresses aspect without regard to actional properties of possible subevents.

10.2.1.5. Combinations with +INTRA^HF

Intraterms of different focality degrees interact differently with certain actional contents. High-focals are especially sensitive to the phase structure properties of [+ser], [+dyb] and [+t] actional phrases. If they spread to combine with the remaining phase structure classes, [+t], [+dyb], and [+ser] actional phrases, they are eo ipso low-focals.

+INTRA^HF items are usually more restricted with respect to [+ser] than low- and nonfocals. Preaspectuals often reject pluri-occasional readings, e.g., German *war am Trinken 'was drinking (on one occasion)'. The English progressive was drinking tends more to uni-occasional than Spanish *bebía or Turkish içiyordu 'was drinking', drank'. If used pluri-occasionally, it suggests a narrower presentness in the sense of temporariness, e.g., *war drinking coffee every day.

+INTRA^HF prefers to operate on [+dyb] actional phrases. High-focal intraterminality is particularly fertile with dynamic contents implying internal evolution. +INTRA^HF items are often strongly preferred to represent ongoing dynamic – transitional or dynamic non-transitional, i.e. processual – events implying gradual change, particularly processual observable in gradually produced effects, e.g., is improving. Such combinations are often accompanied by expressions of graduality and speed, meaning 'little by little', 'slightly', 'rapidly', etc. To represent ongoing events expressed by [+dyb] actional phrases, items of lower focality are sufficient, e.g., the English Simple Present. A simple present is often sufficient to imply a narrower "nunc" if the event is of a mental nature. Irish so-called stative verbs such as stílim 'I think, I am thinking' may have PROG meaning without being used in the special +INTRA^HF form. Combinations such as English *was knowing, Maltese *qed jaf 'is knowing' are usually blocked. Most preaspectual items show the same constraint, e.g., German *war am Wissen 'was knowing'. Even in cases of rather narrow temporariness, many Romance and Germanic +INTRA^HF items refuse to operate on [+dyb] verbs of spatial location such as hang', sit', stand'. The same holds for postverbal in some Turkic languages (Johanson 1995). Preaspectual progressives used with [+dyb] actional contents often have derogative connotations. Some high-focals avoid passives, since non-agentive roles are often linked with [+dyb] actional contents.

When the expression of high-focal intraterminality is renewed in a language, it does not affect [+dyb] actional phrases. On the other hand, when lower intraterminals lose focality, becoming more and more restricted to nonfocal or modal uses, +INTRA × [+dyb] combinations tend to retain low-focal functions longer than others. The former East Armenian Present tense is modal today, except with a few verbs, e.g., giten 'I know'. The present-day use of Turkish so-called Aorist, formerly a category of higher focality, is often less modal with [+dyb] verbs than with others, e.g., ister 'wants', biliş 'knows'. Similarly, the Lezgian da-form preserves its older meaning with verbs such as k'anda 'wants', cîda 'knows' (Haspelmath 1994: 276). Such residual meanings obviously result from aspectoactional interaction.

It is, however, necessary to stress the relative nature of the ability of high-focals to operate on more or less dynamic actional contents. Some relatively high focals more readily accept less dynamic actional contents than others. The Icelandic vera be' + Present Participle periphrasis is less restrictive than the vera að + Infinitive construction, e.g., er sofnandi 'is asleep'. Portuguese high-focals are relatively open, e.g., esta a gostar 'is liking' (Oliveira & Lopes 1995: 107). Maltese high-focals combine with most [+dyb] actional phrases to express temporariness. The same holds for certain English high-focals, e.g., is feeling young. There is no absolute 'unmarked present time context' in which high-focals are obligatory. If high-focals of two languages differ in their use in certain cases of low actional dynamicity, this means that the defocalization drift has advanced further in one of the items, not necessarily that the events denoted are conceptualized differently in terms of 'state', 'process', etc.

High-focal intraterminality is fertile with non-momentaneous transformatives and less fertile with momentaneous ones, though it may yield imminential or propinquative readings (see below). The combination +INTRA^HF × [+t], and -mom occurs in many languages with preliminary readings: a preliminary phase preparing for the attainment of the crucial limit is viewed as going on at an O, e.g., Icelandic er (alveg) að sofn 'is (just) falling asleep'. But +INTRA^HF × [+t] may also refer to events likely to occur in the immediate future without any meaning of ongoing preliminaries, the intraterminal viewpoint being situated immediately prior to the crucial limit ('is / was close to V-ing' , 'is / was about to V'). In such languages, +INTRA^HF items are the only device for expressing imminence with transformatives. Imminential readings occur from +INTRA^HF operating on [+mom] actional contents, e.g., Icelandic er að fara 'is leaving / about to leave', Danish er ved at kære 'is departing / about to depart', Portuguese está a ganhar 'is winning / about to win'; cf. Comrie's 'prospective' aspect (1976: 64–65). Transformatvie phasal verbs such as begin and finish either do not combine with high-focals at all or get imminential read-
ings, e.g., Icelandic vera að + byrja ‘begin’. Some high-focals are ambiguous with respect to imminence and ongoing process, e.g., is leaving, whereas others are unequivocally imminential, e.g., German ist im Begriff abzufahren ‘is [on the point of] leaving’. Certain preaspects prefer the feature [+controlled] to express an ongoing process, whereas non-agentive and non-purpose actional phrases tend to express imminence, e.g., Swedish Tåget häller på att gå ‘The train is about to leave’ (not *already leaving’). High-focal intraterinals may thus yield distinctive meaning and eventually develop into perspectives.

Preaspectsual high-focals often suggest proinitiative readings (‘be close to V-ing, but not V’), usually with [+t] actional phrases, e.g., Danish var ved at dr, men ... ‘was on the verge of dying, but ...’. The Lithuanian construction ‘was’ + be-prefixed Present Participle typically expresses a thwarted event (Mathiassen 1996). For Yiddish ikh holt buym shraybn ‘I am about to write’, see Ebert, this volume.

10.2.2. –INTRA

Nonintraterinals, which combine with all kinds of actional phrases, are unmarked for intraterinality and thus have negatively defined values. They present an integral view of the event, suggesting, unless the contrary is stated otherwise, that the event is carried out and comes to an end. I have referred to them as “pseudoperfectives”, since they differ essentially from adterinals, “perfectives proper”, but exhibit a partly similar textual behaviour (Johanson 1996). +PAST (–INTRA) items are propulsive and thus used in narrative texts to indicate the succession of events. Interacting with +INTRA and +POST items, they may express situation changes occurring on the basis of ongoing situations. On the other hand, they are not explicitly limit-oriented as +AD items are. They do not give any special prominence to limits in the meaning of the actional phrase and may indeed suggest rather cursus-oriented readings. This fact is often ignored in attempts at reducing +AD and –INTRA to a common PFV denominator under the assumption that IPFV items are cursus-oriented and PFV items limit-oriented.

10.2.2.1. –INTRA × [+t]

The values –INTRA and [+t] are, though not identical, highly compatible with each other. As –INTRA does not deny the inclusion of the crucial limit into the view, the combination +PAST (–INTRA) × [+t] thus typically refers to accomplished pastelic events. Transformative –INTRA items are partly similar to adterinals in their textual behaviour. Nonintraterminality is sufficient to produce this similarity. In narrative discourse, –INTRA × [+t] may suggest readings of ‘entry’ into the event and ‘exit’ from it (“terminal attraction”; Johanson 1971: 211), but there may also be more cursus-oriented readings.

10.2.2.1.1. –INTRA × [+t]|T|

With initiotransformatives, –INTRA items may suggest, among other interpretations, an initial attraction, putting an accent on the initial crucial point and highlighting the transformation. +PAST (–INTRA) × [+t] combinations with initium-oriented ‘entry’ readings are, for example, Turkish yattu ‘lay down’, bili ‘(suddenly) knew’, Modern Greek kataλαυ’ ‘understood (= became aware of)’, kriftki ‘hid (= put himself / herself out of sight)’, East Armenian aćeć ‘(suddenly) hated, began to hate’. These readings contrast with the corresponding +INTRA readings dealt with above (10.2.1.2).

Some Italo-Croatian verbs, e.g., znać ‘know’ and imat ‘have’, have copied the [+t] phase structure of corresponding Italian verbs, e.g., sapere, avere, and thus get analogous initium-oriented readings with +PAST (–INTRA) items (‘learned’, ‘got’), where other Slavic languages such as Russian or Serbian use imperative modes of action. Verbs such as čuti ‘hear’ and vić ‘see’ are also used as [+t] verbs, e.g., sa čuća ‘heard’, sa vidjī ‘caught sight of’ (Breu 1992: 115).

As was stressed above, however, initial attraction should not be confused with explicitly inceptive or imperative modes of action. It is an important fact that +PAST (–INTRA) × [+t] items also have more cursus-oriented readings without special attention given to the initium, e.g., Turkish oýru ‘sat (for a period of time)’. It would thus be wrong to claim that it is the function of –INTRA items to select the initium with verbs of this type, as is often assumed for PFV items. The idea that the ±INTRA opposition produces pairs of stative vs. imperative meaning appears to be an unjustified objectivization of the aspect distinction in question.

10.2.2.1.2. –INTRA × [+T|F]

With finitotransformatives, –INTRA items may suggest, among other interpretations, a final attraction, putting a certain accent on the final crucial point and thus highlighting the transformation. +PAST (–INTRA) × [+t|f] combinations with finis-oriented ‘exit’ readings are, for example, Modern Greek pethane ‘died’, exite ena spiti ‘built a house’, Italo-Croatian ponija ‘brought’, Maltese hærèg ‘went out’, Turkish kitabi okudu ‘read the book’, Portuguese escreveu a carta ‘wrote the letter’. These are all examples of –INTRA × [+t, +mon]. As for the combination –INTRA × [+t|f, +mon], it can, since there is no salient cursus, only refer to the crucial limit of which the event consists, e.g., Portuguese ganhou ‘won’, Modern Greek vrike ‘found’. But it is not monoaspectual, and the combination +INTRA × [+t|f, +mon] is also possible.

–INTRA × [+t|f] combinations do not produce PFV items of the +AD type, explicitly highlighting the finis. They just report that the event has obtained, not excluding the crucial limit from the view. The narrative behaviour of +PAST (–INTRA) × [+t] is partly similar to that of +PAST (+AD) items. Both types are propulsive and
may express a transition to a new situation. This is considered a main PFV property. But –INTRA is not a PFV of the +AD type, highlighting the crucial limit. +PAST (–INTRA) × [+tf] does not select the final phase, as PFV pasts are supposed to do. The accent on the finis should not be confused with implicitly signalled egresivity. The possible interpretation of the event as an accomplished whole results from the inherent phase structure. The Maltese Simple Past expresses completion with transformative only. Modern Greek ἐγγραψε ἐνα γράμμα 'wrote a letter' corresponds to Russian +PAST (+AD) написал письмо only in the case of undivided object reference. Hungarian Pastises operating on [+tf] actional phrases differ clearly from +PAST (+AD) realizations and are interpreted by De Groot as “complete / perfective” situations (1984). A past tense of a finittransformative requires no qualified terminality to suggest readings of ‘completion’, ‘accomplishment’, ‘achievement’. Readings of ‘result’, ‘consumption’, ‘exhaustiveness’, etc. are also effects of contextually determined transformativity (Johanson 1971: 208–213).

The question whether [+tf] is supported by explicit +T-marking or not is relevant for languages such as Lithuanian, Bulgarian, Macedonian, Italo-Croatian, and Georgian. Thus, the Bulgarian perfective Aorist contains two features that can be assigned distinct functions: the viewpoint operator –INTRA gives a nonintraterminal view of an event whose actionality is specified by +T-marking. The Georgian Aorist, a +PAST (–INTRA) item opposed to the +PAST (+:AD) Imperfect, exhibits two variants, of which only one is a +T-marked transformative, e.g., dacera ‘he wrote’ (and finished writing), and an unmarked form cera (of very limited use today). The item is thus part of two oppositions, one aspeutical and one actional:

+INTRA × [+t] cera ‘was writing’

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–INTRA × [+t] dacera ‘wrote’ vs. –INTRA × [+t] cera ‘wrote’

The opposition between +T-marked and +T-unmarked –INTRA items is typical of Georgian and Laz (Zan), but not of Svan, which is consistent in +T-marking transformative. +T-marking of +PAST (–INTRA) × [+tf] combinations is sometimes not needed, since the actional phrase is obviously [+tf] anyhow, e.g., Lithuanian mere ‘died’, pradejo ‘began’. However, +T-marking is often required with actional phrases denoting actions that may be either telic or aletic, e.g., Lithuanian parašė ‘wrote’ (and finished writing) as opposed to a less goal-directed rašė ‘wrote’. As was noted above, Italian influence has led to decreasing +T-marking of some verb categories in Italo-Croatian.

Note again that a +T-marker, unlike the viewpoint operator +AD, operes on basic events. In cases of –INTRA × [+t] + [+ser] > [+t], i.e., when nonintraterminality is applied to the expression of a global event consisting of repeated occurrences of telic subevents, +T-marking naturally signals the actionality of each subevent, e.g., Bulgarian napravi tova njakolko puta ‘did this several times’.

As we have noted, ‘in X time’ adverbials, which measure accomplishment time, naturally combine with transformative phrase under uni-occasional readings. When +PAST (–INTRA) is applied to an actional phrase determined by an ‘in X time’ adverbial, the actionality is thus usually [+tf], e.g., did it in ten minutes. Delimitative and perdurative modes of action require a specification of the time interval filled with the event and thus produce transformative actional phrases meaning ‘spend [a certain time period] V-ing’, the basic action being aletic. The time-specifying expression is no mensural adverbial of the ‘for X time’ type. For example, the +T-marker of the Bulgarian perfective Aorist signals the [+tf] actionality of a temporally delimited aletic event, e.g., +PAST (–INTRA) × [+tf] pospo dva časa ‘spent for two hours’. Since the actional phrase is [+tf], corresponding Russian delimitatives and perduratives only choose the +AD aspect, e.g., +PAST (+AD) tam profil tri goda ‘spent three years there’. Compare +PAST (–AD) items based on transformative and provided with ‘for X time’ adverbials, e.g., žil tri goda tam ‘lived there for three years’.

10.2.2.1.3. –INTRA × [–T]

Nonintraterminals may also operate on nontransformatives, which is not possible with the adterminal type of PFV items. –INTRA × [–t] suggests integral readings of realization of a portion of the actional content without special attention to limits. Even an event lacking salient limits has its initium, cursus and finis: none is excluded from the view. As a result of the weak terminality value of –INTRA and the vague phase structure of [–t], the combination allows various initium-, cursus- and finis-oriented readings, e.g., ‘(and then) read’, ‘read (for some time)’, ‘read (and then)’. It thus has a propulsive function in narrative discourse. In its general textual behaviour, however, it is more similar to the nonadterminal type of IFPV than to the adterminal type of PFV.

Even –INTRA × [–t, –dyn] is indeed a possible combination, e.g., French contint ‘contained’, Turkish bekledi ‘waited’, Modern Greek ellipse ‘lacked’. Static verbs are often claimed to be “monoeaspeutical”, i.e., not to combine with PFV items. The combinability may be reduced, e.g., in Modern Greek, where a few [–t, –dyn] verbs such as kiero ‘know’, perięxo ‘contain’, periménos ‘wait’ lack Aorist forms (Sasse 1991b: 15), but, on the whole, the constraints concern the +AD type of PFV rather than the –INTRA type.

Since –INTRA items lack the marked holistic nature supposed to be typical of PFV, they cannot stress totality as the adterminal counterparts do. There is thus no basis for a clear-cut ‘progressivity’ vs. ‘ocasality’ duality with [–t, +dyn] actional phrases. –INTRA × [–t] expresses a portion of nontransformative actional content without any marked phase meaning. Due to the negative viewpoint value, it may get slightly limit-orientated readings, a weak initial or final attraction. Thus, items such
as Turkish ağladi and Albanian qau (from ağla- and qan 'weep') may put a certain accent on the initial, 'and then' cried, burst into tears', and thus be translated by inceptive, e.g., Russian zaplakal 'began to cry'. The combination often expresses the mere occurrence of a past event of some duration ('for a certain time'), e.g., Modern Greek dhilippe' worked', Turkish okudu 'read', Italian scrisse 'wrote', Maltese kitb 'wrote'. Ito-Croatian +T-unmarked +PAST (−INTRA) items may get 'for a while' readings, e.g., dop ja sa rabija (jena mal) 'then I worked (a little)' (Breu 1992: 115). This is a kind of cursus-orientation that does not present the cursus from a point of view established in the middle of it.

−INTRA × [−t] does not specify whether the entity denoted by a possible direct object is totally affected (finished, consumed, etc.) or not. Undivided reference to the entity is neither signalled nor excluded. Without a limiting object, the action phrase remains nontransformational and cannot be +T-marked. In the Bulgarian sentence Čete moe knigi ot dva do četiri časa 'We read books from two to four o'clock' (Lindstedt 1985: 149), the [−t] actional content of četa remains +T-unmarked, since it is not limited to [−t] or by the object or by the adverbial specifying the temporal extension of the event. The event is characterized as having occurred in an integral and goaldirected way, which excludes +T-marking. There is no reason for "perfective" interpretations of such cases. The −INTRA type of PFV, e.g., Modern Greek +PAST (−INTRA) ἐγραπὲς ἴσχυσα 'wrote letters', is thus rather similar to the −AD type of IPFV, e.g., Russian +PAST (−AD) писа́л пи́сма. This is quite natural, since both represent an unmarked way of presenting a [−t] event, which is not the case with the +AD type of PFV.

+PAST (−INTRA) × [−t] is naturally compatible with 'for X time' expressions of temporal extension, specifying the length of the portion of action, e.g., Maltese raqad il-żurnata koll-ha 'slept the whole day', Kalmyk xorā časas amn čam čas kārtl gazet umn 'read newspapers from two to five o'clock'. Note that the actional content is not limited by such expressions but remains nontransformational. A well-known example is Classical Greek ebasileuse triskonta été 'reigned for thirty years', French règne trente ans, Bulgarian caruva trijset godini, Turkish otuz yil hikmet sirda, etc. With durational for 'X time' adverbials, +PAST-marking languages such as Bulgarian and Georgian typically dispense with +T-marking and use unmarked, unqualified +PAST (−INTRA) × [−t] items.

+PAST (−INTRA) × [−t] may represent a nonintraterminal view of global event consisting of an unlimited or limited series of atelic or telic subevents. Readings with telic subevents presuppose recategorization [+t] + [+ser] > [−t], e.g., Bulgarian često se napiva 'often got drunk' (Ivančev 1971: 133–134), na dva pâti minova 'passed twice' (Maslov 1981: 250). The reason for choosing +PAST (−INTRA) is certainly not that the series was discontinued afterwards, which is equally possible with +PAST (−INTRA), but rather that the global event is not viewed from inside. As was stressed above, not even habitually repeated events need to be presented from an internal point of view but can also be envisaged in an integral way.

−INTRA × [−t] naturally excludes +T-marking. As for actions that may be conceived of in different ways, +T-unmarked verbs are used to distinguish atelic conceptualizations from goaldirected ones, e.g., Lithuanian uses rašė 'wrote', Bulgarian jado 'ate'. Lack of +T-marking only concerns the actional content. It may also mean that transformativity is not an essential or fertile notion with a given actional content and context. Bulgarian plain Aorists such as spa 'slept' are simply nonintraterminals suggesting, as opposed to Imperfects, an integral view of the event. Verbs that refuse +T-markers have contents that are less fertile with transformativity. An item such as ožgadva 'had dinner' simply lacks a +T-marker signalling transformativity, while its aspectual meaning arises from the −INTRA value.

Telicity of the event thus does not necessarily require +T-marking of the actional phrase that denotes it. +T-unmarked +PAST (−INTRA) items are ideal for expressing general-factual meanings without stressing goal-directedness and accomplishment, for signalling mere occurrence or occupation with the action ('has been / was engaged in V-ing'). +T-marking may be dispensed with in constative, expository, characterizing, type-referring utterances, in contexts where notions of completion and situation change are not essential ('has [some time in the past] V-ed').

+PAST (−INTRA) without +T-marking in a case such as Bulgarian Dnes učileť me nákazav 'Today the teacher punished me' (Stankov 1980: 97) implies that the event is referred to in an integral, generalized way and that no crucial limit needs to be pointed out in the given context. +T-unmarked +PAST (−INTRA) items may also stand for telic events with subsequently cancelled results, e.g., Köj e otrvăr čantata mi? 'Who opened my bag [which is no longer open]?'.

There is no need to stress the attainment of a transformation the result of which has been reversed.

Note that +PAST (−AD) items, which do not signal any crucial limit either, may be used to refer to telic events in similar ways. The situation may be similar in languages lacking systematic ±INTRA and ±AD distinctions. In Hungarian, an accomplished telic event may well be referred to without +T-marking, e.g., tegnap tru á levelet 'wrote the letter yesterday'. The +T-marked version megírta a levelet 'wrote (and finished) the letter' adds the goal-directedness of the accomplished action. +T-unmarked items are allowed, if the notion of goal-directedness is unessential.

10.3. Realizations of ±POST

Next, the interactions between +POST items and inherent phase structure types will be commented on. Their main discourse-pragmatic functions in narratives are rupture and retrospection for purposes of temporal or explicatory backtracking. It
should be kept in mind that viewpoint operators are not defined as devices selecting phases of the lexical meaning of actional phrases. With finitransformatives, the phase highlighted by +POST is never part of the lexical meaning. Thus, ‘have died’ is not part of die. With initiotransformatives, however, the posttransformative viewpoint may well be situated in the statal phase of the lexical meaning. Thus, ‘having sat down’ is part of the content of Turkish atur- ‘sit down + sit’.

Most of the cases discussed below are realizations of high-focal postterminal with certain phase structure types. Some of them will be compared to corresponding combinations with high-focal intratemporal. The different values and their realizations are interrelated and understandable within the respective systems, but they cannot easily be explained by means of fixed functional stations based on situation types. If such analyses lead to the result that closely related realizations turn up at different stations such as ‘resultative’ and ‘progressive’, their interconnections become invisible.

– POST items will be largely disregarded, as they combine freely with different actional phrases and the resulting combinations do not exhibit any striking peculiarities. Note, however, that +PAST (−POST) items (French passé simple, Italian passato remoto, etc.), which are often taken to be PFV items, readily combine with [−t] actional phrases, whereas this is excluded with PFV items of the adterminal kind.

10.3.1. +POST × [−t]

Postterminality is particularly suited for transformatives. Thus, Armenian, +POST\text{\textsuperscript{HF}} × [−t] items typically combine with [−t] verbs such as halvel ‘thaw’, barkinai ‘get angry’, as well as with expanded [−t] actional phrases containing basic [−t] verbs as anel ‘do’, gret ‘write’. +T-marking languages may use +T-marked items. However, as we have noted, +T-marking may be more or less important with different aspect-temporal items. Marking is often less relevant for highly focal postterminals that pay no or little attention to the action behind the postterminal state. The Classical Greek Perfect could easily dispense with +T-markers void of lexical meaning. Whereas the Aorist apexhan ‘died (off)’ from (apo)thnisk- ‘die (off)’ was +T-marked, the Perfect might lack +T-marking: têthnêke ‘has died, is dead’. Under the influence of other forms, however, +T-markers were often attached to the Perfect forms as well. Similarly, the Georgian passive high-focal postterminal ceria ‘it is written’ remains unmarked, whereas the more event-oriented Perfect almost always carries a +T-marking preverb. As we have noted above, when low-focals lose their focality, the development typically begins with [−t] actional phrases.

10.3.1.1. +POST × [+t]

+POST × [+t] produces a perspective post terminum finalem. Since +POST items can denote an event whose relevant limit is situated earlier than that of the preceding event, the combination with [−t] may reverse the linear order of events. If the action is conceptualized as having an inner goal, completive readings are produced. The inner goal may be signalled by +T-marking, e.g., Bulgarian perfective Perfect –PAST (+POST) × [+t] napisal ‘has written’. –PAST (+POST) × [+t] suggests that the event has effects relevant to a past O. High-focals refer to the posttransformative state, e.g., Classical Greek kēkētai ‘has been named and’ is called, gegraptai ‘is [already] written’, egēgraptos ‘was [already] written’, kēkētai ‘has acquired’ > ‘possesses’, Maltese jisnu ‘is named’, feg ‘is healed’, East Armenian lavacac ĝ ‘is healed’, Karachai ketibdi ‘has left (and is still gone)’, Romany his anphaudlo ‘was tied’. Low-focals may, even when they denote telic events, lack +T-marking in contexts where the constative, summarizing, type-referring statement of the occurrence of the event itself is more essential than the notion of completion, e.g., Bulgarian vîdal e ‘has (at least once) been seen’. This is typical of postterminally characterized events not conceived of as occurring in particular settings. Compare the analogous use of +PAST (−AD) items instead of +PAST (+AD) ones and of +T-unmarked +PAST (−INTRA) items instead of +T-marked ones.

10.3.1.2. +POST × [+t]

Combinations of postterminality with initiotransformatives produce a perspective post terminum initialem. A [+t] actional phrase denotes both a transformation and a following posttransformational phase. The +POST × [+t] combination is often misunderstood as an interaction of PFV with ‘stative’ verbs. However, [+t] verbs are neither stative nor inchoative. The combination is only intelligible as the effect of a postterminal view of an actional content that combines a dynamic transformative phase with a non-dynamic posttransformational one.

The latter may thus be objectively identical to the phase highlighted by a corresponding intratemporal. The relation is particularly clear with high-focals. +POST\text{\textsuperscript{HF}} × [+t] expresses a state that has come about through an initial transformation. This state may correspond to the cursus of the same actional phrase, the state highlighted by a +INTRA × [+t] item. A statement meaning ‘is in the state of having sat down, is seated’ may refer to the same objective situation as a statement meaning ‘is in the state of sitting’. Similar equations are ‘has learnt’ = ‘knows’, ‘has got fond of’ = ‘likes’, ‘has stood up’ = ‘is standing’, ‘had lain down’ = ‘was lying’. Some Maltese initiotransformatives have special high-focal participial items that focus on the posttransformational state obtaining at O, thus covering situations that might alternatively be expressed by high-focal +INTRA items, e.g., riqted ‘has fallen asleep’
regular and due to the inherent phase structure. Finitransformatives such as ömsaf or ifr are interpreted as ‘has / had dressed’ = ‘is / was dressed’ (compare Turkish giyinmiş / giyimis) or ‘has / had come’ = ‘is / was (there)’ (compare Turkish gelmiş / gelmiş). On the other hand, initransformatives such as sif are interpreted as ‘has / had sat down’ = ‘is / was sitting’ (compare Turkish oturmaş / oturduşu).

In the same way, the Kalmyk item in ad bāna is sometimes thought to have both PF and progressive meaning (‘has done’, ‘is doing’), depending on the verb type, but it always expresses a dwelling in the postterminal state, the only variable being the phase structure. Similarly, the Maltese postterminal active participle expresses a posttransformational state with certain verbs. With [+t] verbs such as ragg ‘fall asleep, sleep’ and rikeb ‘mount, ride’, we get −PAST (+PSTHF) × [+t] realizations, e.g., rieqed ‘is sleeping’ < ‘has fallen asleep’, rikeb ‘is on horseback’ < ‘has mounted’. The same situation applies to motion verbs meaning ‘get moving, move on’ such as meza ‘set out, walk’. Thus, mieri ‘is walking’ represents a +PSTHF aspect of a [+t] actional content and refers to a posttransformational phase of this content, obtaining as a state at O. It may be tempting to claim that the participle encodes ‘progressivity’ in such cases. However, although progressive interpretations are suggested by the English translations (‘dressed’ > ‘wearing’, etc.), this is not a progressive item in the sense of a high-focal intratinal. +PSTHF items differ from +INTRAHF items by lacking internal dynamicity and not being capable of future time reference. +PST × [+t] combinations competing with +INTRA × [+t] ones lack the gradient necessity for implying internal dynamicity. For example, in Armenian, only the latter type combines with expressions such as aveli u aveli ‘more and more’, kamaq-kamaq ‘little by little’.

10.3.2. +PST × [+t]

When a +PST operator applies to a [−t] actional content, the initial limit is the relevant one. With the combination −PAST (+PST) × [−t], the event has at least begun prior to O and may also overlap it. +PAST (+PST) × [−t] suggests a past O. If an actional phrase such as read a book is interpreted as [−t], lacking an inner goal of the action, its combination with −PAST (+PST) implies has read (some pages of) a book. +T-marking languages dispense with +T-marking in such cases. Bulgarian thus uses its imperfective Perfect for −PAST (+PST) × [−t].

But there are also certain constraints on the combination +PST × [−t]. The ban on high-focal postterminals with nontransformatives has been mentioned already. There is little need for representing a state post terminum if a crucial limit is lacking. In a few languages, however, items known as high-focal postterminals can also be used with [−t] verbs, e.g., Kalmyk kelsn bilä ‘was speaking’. The relevant limit is, as expected, the initium. The nontransformatives are thus treated very much like initio-
transformatives. Similar situations are found in several Eurasian languages outside the boundaries of Europe.

Certain traces in Indo-European languages are also reminiscent of this phenomenon. Here, some postterminal participles may get different temporal readings according to their internal phase structure. Passive postterminal participles may get nonanterior readings with [−t] verbs, e.g., German ist geliebt ‘is loved’, but anterior readings with [+t] verbs, e.g., ist gefunden ‘has been found’. If we use Esperanto as a metalanguage, this gives the following German–Esperanto equivalences: ist gefunden = estas trovita ‘has been found’, war geschrieben = estis trovita ‘had been found’. ist geliebt = estas amata ‘is loved’, war geliebt = estis amata ‘was loved’. The participles of [−t] verbs are thus clearly postterminal in the sense of the initium being the relevant limit. (Note, however, that languages such as English and French have developed passives with which [+t] verbs also get nonanterior readings, e.g., is found, est trouvé.)

The applicability of +POST to [−t] increases with lower focality degrees, but there are often restrictions on combinations with [−t, −dyn] actional phrases. This is, for example, true of the Modern Greek possessive Perfect. +POST items are also excluded with Archi verbs such as hubus ‘blow’, gebus ‘dance’, and arba ‘think’ (Kibrik 1983: 113). As was noted above, when low-focals lose their focality, [−t] actional phrases are usually the last to be affected. Thus, the Portuguese and Galician Perfects are largely restricted to [−t], with constative uses summarizing the event at O². These are clear examples of an interaction with an actional value. As we have seen, [−t] combinations often produce constative (“experiential”) readings of low-focals. Finally, defocalized −PAST (+POST⁰ (−INTRA)) items such as the Maltese Perfect are, of course, fully combinable with [−t] actional phrases. They are often classified as PFV items, though their properties are very different from those of PAST (+AD) items.

10.4. Realizations of ±AD

There is a good deal of interdependence between ±AD and [±t] actionality. As we will see, there is no freedom of choice if the global event is referred to with a [±t, +mom] or a [−t] actional phrase. The former case requires +AD, the latter case −AD. Adverbials expressing temporal punctuality such as Russian vдруг ‘suddenly’ naturally require +AD. Incompatibility with such adverbials is, however, only typical of the −AD variety of IPFV, not of the +INTRA variety (Section 7.2.4).

10.4.1. +AD × [±t]

Adterminality suggests strong limit-orientation, envisaging the event in its attainment of the crucial limit. It thus presupposes [±t].

+AD is particularly suited to operate on finitransformatives: +AD × [±t, −mom] gives strong prominence to the finis and may also yield readings that imply an exit from the event. The actional phrase denotes an action heading for completion, and the viewpoint operator signals the attainment of it. The combination does not favour [+ser] readings. An actional content referring to the lowest quantity of a telic event requires +AD, e.g., Polish umarł ‘died’. Russian perfectives such as poslал ‘send’, razbuditi ‘waken’ or vстать ‘get up’ express a total event and its conclusion. The +AD meaning requires that the actional content of napisal pis’ma be interpreted as [−t] including a limiting object, a set of letters referred to as a whole: ‘wrote (and finished) the letters’ (undivided reference to the set). As we have noted, [±t] does not combine with ‘for X time’ adverbials. Thus, +AD × [±t] napisal pis’ma ‘wrote the (whole) letter’ cannot be modified by adverbials such as долго ‘for a long time’ or два часа ‘for two hours’. Since [±t, +mom] actional contents lack a salient cursum, +AD × [±t, +mom] envisages nothing more than the crucial limit itself in the moment of transformation. There is no −AD option. +AD × [±t] gives strong prominence to the initium, signalling the attainment of the initial crucial limit. It may thus suggest the entry into the event, e.g., Russian оперся на стол ‘leant over the table’. For the realizations mentioned, terms such as “resultative”, “egressive”, “punctual”, “progressive”, and “inceptive” should be avoided, since they easily lead to confusion with modes of action (4.2).

10.4.2. *+AD × [−t]

Adterminality does not operate on nontransformatives: *+AD × [−t]. This is an intelligible constraint on the freedom of aspect choice, since there is no use for items signalling the attainment of a limit not present in the actional content.

Thus, [−t, −dyn] actional phrases only combine with −AD. Russian [−t, −dyn] verbs, whose lexical meanings do not imply clearly delimited extensions, are imperfecta tantum, for example, prinadelzat ‘belong’, sostojat ‘consist’, znат ‘know’. However, this is no reason to take [−t, −dyn] actional phrases to be “monospectral” in principle, in the sense of IPFV being the only option. It has already been noted that −INTRA × [−t, −dyn] is a possible combination.

The situation may seem different with [−t, +dyn] actional phrases. Russian perfectives can express past events such as прозвил три года в Москве ‘spent three years in Moscow’. The possibility of choosing прозвил here instead of был is often regarded as evidence for mutual independence of aspect and actionality. However, this option requires a delimitative or percutive item that provides the actional content with a crucial limit indicating the minimal-maximal extension. Perduratives such as прозвил combine with menalural expressions specifying the length of the whole period of time. Such modes of action constitute [±t] actional phrases, which are naturally compatible with +AD. The resulting combinations sum up the event as a totality.
reaching the final crucial limit. Adterminality is thus by no means incompatible with expressions of duration as such. However, there is no option $^*+\text{AD} \times [-t, +\text{dyn}]$. This fact sharply distinguishes $+\text{AD}$ from PFV items of the $^*-\text{INTRA}$ type, which suggest integral readings with $[-t, +\text{dyn}]$ actional phrases.

10.4.3. $-\text{AD} \times [-t]$  

Nonadterminality envisages the event without highlighting a crucial limit. $-\text{AD}$ items exclude limit-orientation and suggest a cursus-orientation which, however, is much weaker than with $+\text{INTRA}$ items. In its textual behaviour, a $+\text{PAST}$ ($-\text{AD}$) item such as Russian pisal 'wrote' thus corresponds both to the intraterminals was writing, écrivait and to the nonintraterminals wrote, écrivit. Nonadterminality has a natural affinity with nontransformativity. If the global event referred to is expressed with a $[-t]$ actional phrase, $-\text{AD}$ is normally required.

Applied to $[-t, +\text{dyn}]$ phrases, $-\text{AD}$ presents the event as a static stretch of action without any salient natural limits, e.g., Russian visel ‘hung’. The combination is typically expressed by imperfectiva tantum. This does not mean that static nontransformatives are “ascetically indifferent” in general, as claimed by Bache (1982: 69). The claim that they are only referred to by IPFV items of $\pm \text{INTRA}$ languages, which use them freely with $-\text{INTRA}$ items.

Combinations of $-\text{AD}$ with $[-t, +\text{dyn}]$ actional phrases present the event as a stretch of action, without suggesting totality or attainment of any limit. On the other hand, they do not yield the 'progressive' readings possible with IPFV items of the $+\text{INTRA}$ type. In narrative discourse, $-\text{AD} \times [-t, +\text{dyn}]$ does not suggest any 'entry' or 'exit', but merely 'occurrence (for a period of time)'. It often simply denotes the lexical content, notably a content with which $+\text{AD}$ is rather indifferent. Since $+\text{AD}$ implies the involvement of a crucial limit, it is natural to interpret $-\text{AD}$ items as implying no such limit. The actional content of Russian pisal ("wrote") pis’mo ‘letter’ is thus prima facie interpreted as $[-t]$, without a limiting object referred to as an undivided entity. But $-\text{AD}$ is also used where the mere occurrence of the event, not its full performance or completion, is important. The event is referred to in a generalized manner without highlighting any phase. Such readings often occur in contexts where the event is conceived of as taking place outside a particular setting. Such an unqualified, "characterizing" manner of presentation is what might be expected from the unmarked member of a $\pm \text{AD}$ opposition. In similar cases, $\pm \text{INTRA}$ languages use unqualified $-\text{INTRA}$ pasts, and languages with $+\text{T}$-marking dispense with this device. Compare, for example, Russian $+\text{PAST} (-\text{AD}) \times [-t, +\text{dyn}]$ Ty pisal ej? with Turkish $(-\text{INTRA}) \times [-t, +\text{dyn}]$ Ona yazdam mi? ‘Have you written to her?’.

As $[+t]$ is incompatible with 'for X time' adverbials, any actional phrase is identified as $[-t]$ by occurring with them. Russian $-\text{AD} \times [-t]$ žil tri goda v Moskve ‘lived for three years in Moscow’ has a ‘for X time’ adverbial but no limiting object.

The event is characterized as simply having occurred for a certain period of time. In čitať knigi ot dvux do četyrej časov ‘read books from two to four o’clock’ (cf. Thein 1978: 33), the action denoted by the $[-t]$ verb čitać is not limited to $[+t]$by the object. The interactional meaning $+\text{PAST} (-\text{AD}) \times [-t, +\text{dyn}]$ is ‘a stretch of action took place’ without an idea of a crucial limit implied. The temporal extension is specified by the ‘for X time’ adverbial ot dvux do četyrej časov ‘from two to four o’clock’.

With $[-t, +\text{dyn}]$ verbs, both $+\text{AD}$ and $-\text{AD}$ are possible and their viewpoint values realized in a particularly clear way. If both $+\text{AD} \times [-t, +\text{dyn}]$ and $-\text{AD} \times [-t, +\text{dyn}]$ can be used to refer to a given situation, e.g., skazal and govoril ‘said’, the difference only lies in the view presented. It would be absurd to claim that the opposition is “neutralized” here or that $-\text{AD}$ is used “instead of” $+\text{AD}$.

Since $-\text{AD}$ does not highlight any limit, a $-\text{AD} \times [-t, +\text{dyn}]$ case such as Russian pisal pis’mo may certainly be used when the speaker is concerned with the internal structure of the event. It may textually even correspond to English ‘was writing a / the letter’ or German ‘schrrieb einen / an dem Brief’. But it does not present the event as a continuous, unfolding process of gradual achievement of the result (Maslov 1948: 313). $-\text{AD}$ items do not, as $+\text{INTRA}$ items do, describe the event with specific attention to its internal structure. Their way of presenting events is not particularly “unfolding”. On the contrary, it is essential for their use that they do not suggest any intraterminal meaning. Because the viewpoint is not explicitly intra terminos, $-\text{AD}$ readily combines with ‘for X time’ statements, e.g., pisal dva časa ‘wrote for two hours’, carstvoval tridcat’ let ‘ruled for thirty years’. This is unusual with $+\text{INTRA}$ items, since the idea of introspection is incompatible with the indication of the total temporal extension.

When $-\text{AD}$ operates on $[+\text{ser}]$ actional phrases denoting phiri-occasionality, the reading $[+\text{ser}]$ may be overtly marked or not. The global event is presented by $-\text{AD}$ regardless of the actional properties of the subevents. If the latter are telic and basically represented by $[+t]$ actional phrases, we get the combination $-\text{AD} \times [+t] + [+\text{ser}] > [-t]$, e.g., Russian čitať po knige v den ‘read a book a day’, pročitavat’ knigu ‘repeatedly read through a / the book’. The subevents may also be atelic, e.g., Russian $+\text{PAST} (-\text{AD}) \times [-t] + [+\text{ser}] > [-t]$ čitać čet’ knigu každjy den ‘read in this book every day’ or počitavat’ knigu ‘repeatedly read a little in a / the book’.

10.4.4. $-\text{AD} \times [+t]$  

While naturally operating on nontransformatives, $-\text{AD}$ can also apply to transformatives. The reason is that it expresses a perspective that neither considers nor negates the limits of the event. It does not signal non-completion, but may suggest this as a negative value. Even so, the combination $-\text{AD} \times [+t]$ is perfectly logical, since heading for a crucial limit is not equal to reaching it.
Whereas the Russian-type perfectives are portmanteau +AD– and +T-markers, the corresponding imperfectives are neither +AD– nor +T-markers and thus less distinct. Besides standing for −AD × [−t], they may also express a nonadnominal view of a non-momentaneous tic event. Our model includes the combination −AD × [+t], where the actional phrase is left +T-unmarked, though it denotes a tic event. This means that the combination +PAST (−AD) × [+t] may also be used for fully accomplished events. It neither highlights the transformation itself, nor excludes the unbridged achievement of the event. For example, Russian pisal pis'no 'write a / the letter’ may not only be interpreted as +PAST (−AD) × [−t], a process excluding the attainment of an inner goal, but also as +PAST (−AD) × [+t], an event including the total involvement of a limiting object. In ±INTRA languages, the latter reading is typical of +PAST (−INTRA) items. Though +AD is often claimed to be obligatory for telic events, the combination −AD × [+t, −mom] is perfectly possible.

With heterogeneous actional contents that imply both a statal and a dynamic phase, the Russian-type imperfectives get statal interpretations. With initiotransformatives, perfectives highlight the initium, e.g., opiraja ‘lean’, whereas imperfectives may give a similar prominence to the resulting state, e.g., opirala ‘was leaning’. These cases represent a contrast +AD × [+t] vs. −AD × [−t]. As for finitransformatives, +AD highlights the finis, whereas −AD × [+t] may, unless the event is conceived of as momentaneous, give a certain prominence to the preceding state.

−AD does not combine with [+tf, +mom] actional contents, as they only consist of the crucial limit that is to be attained. If −AD is applied to verbs that are basically [+tf, +mom], the nontransformativeizing feature [+ser] is added. The typical interactional meaning ‘repitition’ is an effect of this recategorization [+tf] + [+ser] = [−t]. Russian imperfectives such as nasoiti ‘find’ and vključat ‘switch on’ imply repetition if the basic event is conceived of as momentaneous. Thus, the aspect distinction has important actional implications with [+tf, +mom] actional phrases. Several Russian [+tf, +mom] verbs are unpaired perfectives and offer no −AD option, e.g., zapijat ‘start to cry’.

Russian +PAST (−AD) items can be used to refer to telic events the result of which has subsequently been cancelled. Thus, otkryval dver ‘(had) opened the door’ may be interpreted as a so-called ‘twoway action’ with the implication that ‘the door was closed again’. Such readings are also possible with momentaneous telic events, which demonstrates a certain affinity with [+ser] readings, but the common feature is simply that no crucial limit is highlighted. The claim that such imperfectives are in reality perfectives (Ferrand 1982) seems to be based on the equation of ‘perfective’ with ‘tic’.

Some possible cases of −AD × [+t] are problematic. It seems that −AD × [+tf, −mom] may get processual and preliminary readings suggesting a process that precedes the transformation. These readings are typical of Russian imperfectives such as brat ‘take’, davat ‘give’, padat ‘fall’, poslat ‘send’. Such verbs might be claimed to differ from their perfective counterparts, vzjat ‘take’ etc., by being nontransformative. However, they express a nonadnominal view of telic events, and their actional content might be taken to be transformative as well, the only difference from the perfectives residing in the viewpoint. Forms such as brał ‘took’ would thus not only represent −AD × [−t], but also the case −AD × [+t], though without +T-marking. By contrast with their perfective counterparts, vzjat etc., forms such as brał ‘took’ get preliminary readings that do not include the attainment of the point of transformation of ‘taking’, ‘giving’, ‘falling’, ‘sending’, etc., but only a stretch of action heading for the transformation. They may even express conation, the attempt to perform the telic action and to reach the crucial limit, e.g., ubelšil ‘tried to convince’; cf. Polish dogońał go, ale nie dogonili ‘tried to pass him, but did not succeed’ (Koschmieder 1934).

These imperfectives do not express “nones”, but just events excluding the crucial limit from the range of view. However, they are unusual both in meaning and shape. Their behaviour is similar to +INTRA items, and they differ from their perfective counterparts by stem-internal markers rather than by the absence of preverbs. It is possible that they should rightly be considered marked members of limited ±INTRA oppositions within an otherwise ±AD-dominated system. In that case, umirlat would be a +PAST (+INTRA) × [+tf] item meaning “was in the process of dying” as opposed to +PAST (−INTRA) × [+tf] item umer ‘died (ceased to live)”.

11. Main aspectotemporal types

11.1. Types discussed

Our discussions have so far focused on items marked for +INTRA, +POST and +AD and their respective opposition partners. If we disregard differences with respect to high and low focality, the above analyses yield a rather limited number of aspectotemporal types, which are listed here together with more traditional – and partly misleading – designations:

<table>
<thead>
<tr>
<th>Present</th>
<th>Imperfect</th>
<th>Aorist</th>
</tr>
</thead>
<tbody>
<tr>
<td>−PAST (+INTRA)</td>
<td>+PAST (−POST)</td>
<td>+PAST (+POST*)</td>
</tr>
<tr>
<td>+PAST (+INTRA)</td>
<td>+PAST (−POST)</td>
<td>+PAST (+POST*)</td>
</tr>
<tr>
<td>+PAST (−INTRA)</td>
<td>+PAST (+POST*)</td>
<td>+PAST (+AD)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perfective Present</th>
<th>Perfective Imperfect</th>
<th>Perfective Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>−PAST (−AD)</td>
<td>+PAST (+AD)</td>
<td>+PAST (+AD)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pluperfect</th>
<th>Imperfective Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>+PAST (+AD)</td>
<td>+PAST (+AD)</td>
</tr>
</tbody>
</table>
This list does not exhaust the number of main aspectotemporal types to be discerned in European languages. Some more complex ones, combining positive and negative viewpoint values, have already been touched upon above in a general way. The major additional types will be listed below.

### 11.2. \(+PAST\ (-POST\ (+INTRA))\)

Besides the intraterminal type \(+PAST\ (+INTRA)\), there is a \(+PAST\ (-POST\ (+INTRA))\) type that also takes part in a postterminal opposition, e.g., English was writing, opposed to \(+PAST\ (-POST\ (-INTRA))\) wrote and \(+PAST\ (+POST\ (-INTRA))\) has written. \(+PAST\ (+INTRA)\) items are semantically more general, since they are also used for past events that a \(\pm POST\) language would express postterminally.

### 11.3. \(-PAST\ (+POST\ (-INTRA))\)

Besides the postterminal type \(-PAST\ (+POST)\), there is a \(-PAST\ (+POST\ (-INTRA))\) type that also takes part in an intraterminal opposition, e.g., English has written, Armenian gretel, High (Hill) Mari sire. \(-PAST\ (+POST)\) items are semantically more general, being used for past events that a \(\pm INTRA\) language would express intraterminally. Some \(-PAST\ (+POST\ (-INTRA))\) items are semantically more general than others, for example, Estonian on teinud ‘has done’, since the competing \(+PAST\ (-POST\ (+INTRA))\) item is less strongly grammaticalized in the sense of having a rather limited use, e.g., Estonian oli tegemas ‘was doing’. Some \(-PAST\ (+POST\ (-INTRA))\) items have a relatively restricted use themselves, e.g., Irish tá taréis leahbra a scribh ‘has (just) written a book’ as opposed to the \(+PAST\ (-POST\ (-INTRA))\) item scribh sé leahbar ‘wrote / has written a book’.

### 11.4. \(-PAST\ (+POST\ (+INTRA))\)

In addition to \(+PAST\ (+INTRA)\) and \(+PAST\ (-POST\ (+INTRA))\), there is a third intraterminal type, \(-PAST\ (+POST\ (+INTRA))\), taking part in both a postterminal and an intraterminal opposition. Thus, the English so-called Continuative Perfect has been writing is opposed to \(-PAST\ (+POST\ (-INTRA))\) has written and \(+PAST\ (-POST\ (+INTRA))\) was writing. The complex construction serves to express a particular kind of interaction in which a \(+POST\) notion operates upon a \(+INTRA\) notion to express the \(O^i\) relevance of an intraterminally viewed event. The English type combines a progressive periphrasis with postterminal morphology, using a \(\pm POST\) distinction of the ‘be’ auxiliary: \(-PAST\ (+POST)\) has been vs. \(+PAST\ (-POST)\) was.

Note that this type, although taken to be a “\(v\)” item by Kuryłowicz (1956: 26), is by no means a high-focal in the sense of \(-PAST\ (+POST)\). Thus, has being dying is not equal to Classical Greek tēnēkē ‘is dead’. \(-PAST\ (+POST\ (+INTRA))\) is a special kind of postterminal, signalling that the point transgressed at \(O^i\) is the \(O^2\) of the intraterminal perspective. The event is viewed diagnostically and as having continuing relevance to the primary deictic centre \(O^O\). The intraterminal view highlights an integral portion of the event at an \(O^2\) consisting of one or more intervals of unspecified localization. \(O^2\), the vantage interval of \(+INTRA\), is situated within the limits of the event, and \(O^O\), the vantage point of \(+POST\), after the beginning of this interval. Since the localization is unspecified, this item, like other focal postterminals, does not readily combine with specific time expressions. The interpretation of the postterminal element as PFV and of the intraterminal element as IPFV can only lead to the conclusion that \(-PAST\ (+POST\ (+INTRA))\) items are aspectually self-contradictory or at least ambivalent.

The kind of retrospective intraterminality conveyed here suggests that the event, which has begun at some time in the past, continues right up to \(O^O\) and that the event itself, its effects, or its concomitants overlap this point. A sentence such as has been examining the case easily suggests, since it only refers to the involvement, that, despite all efforts in the past, the final limit of the examination has not yet been reached at \(O^i\). But has examined the case may also imply \(O^O\)-incursion, since a \(+POST\) operator only requires the initial limit to be transgressed unless the actional phrase is unequivocally finitermative. However, \(-PAST\ (+POST\ (+INTRA))\) items tend more strongly towards incomplete readings. The choice of an item that only highlights internal parts of a given event may, though the main function is mere introspection, get the pragmatic implicature that only part of the event has taken place, so that it is still unfinished at \(O^i\).

Similar contrasts are found in Irish. A \(-PAST\ (+POST\ (-INTRA))\) construction such as in tá taréis leahbar a scribh ‘has (just) written a book’ presents the whole event without isolating or highlighting any part of it. The choice of \(-PAST\ (+POST\ (+INTRA))\) tá taréis a bheith ag scribh leahbar ‘has been writing a book’ adds an extra dimension and focuses on the intervening periods of writing (Ó Baoill 1994: 209).

While \(-PAST\ (+POST\ (+INTRA))\) items operate on all kinds of actional phrases, nontransformatives and initiotransformatives are preferred. Restriction to the latter would mean consistent \(O^O\)-overlapping and the possibility of describing \(O^i\) as the orientation point for both the \(+POST\) and the \(+INTRA\) view.
11.5. Pluperfects

Besides simple +PAST (+POST) items, e.g., German hat geschrieben ‘had written’, postterminal items involved in an intraterminal opposition may occur in the pre-past stratum, e.g., English +PAST (+POST (+INTRA)) had been writing and +PAST (+POST (+INTRA)) had written. Distinctions between non-dynamic and dynamic items in the pre-past stratum have been mentioned above (8.3).

11.6. Historical pasts

European languages exhibit different types of historical pasts, event-oriented, propulsive preterites that may refer to events conceived of as occurring on specific past occasions. Some of them are commonly considered PFV items, whereas others are called “simple Past”. However, they are of rather different kinds. Most items are complex ones, deriving their values from several oppositions. Only one type is a general past in the sense of being applicable to any past event.

+AD, -INTRA, and -POST are obviously appropriate values for constituting historical pasts. +AD makes an item propulsive by highlighting the crucial limit and thus changing the situation. -POST makes an item particularly event-oriented and suited to refer to events conceived of as occurring on specific past occasions, in particular settings, pinpointed at specific intervals. -INTRA makes it particularly suited to present the event in an integral way. An item interacting with both a +PAST (+INTRA) and a -PAST (+POST) item is thus ideally suited to envisage an event directly and in its totality. Qualified historical items of this type often cooccur with definite past time adverbials. They are typically incompatible with markers of indefinite time and of unrestricted or very long periods, as well as with adverbials of the types ‘already’ (‘the relevant limit is not later than O’) and ‘not yet’ (‘the relevant limit is later than O’).

However, clear-cut +AD, -INTRA or -POST values are not required for the historical functions. Many items are suited as narrative pasts, for narrating sequences of discrete past events under the general conditions of linear successivity, without being “perfectives” in any qualified sense. The mere absence of intraterminality allows presentation of the event in an integral way. Several events presented one after another in a nonintraterminal past tense are most naturally interpreted as a sequence in the sense of ‘did x, and [then] did y’. Nonfocal postterminals and other generalized items are potentially event-oriented and applicable to specific past occasions.

Note that a past that does not compete with a postterminal can be both diagnostic and historical, covering all the focality degrees of a postterminal. On the other hand, a past that does not compete with an intraterminal can cover the focality degrees of an intraterminal. Thus, +PAST (-POST) Danish skrev, +PAST (-AD) Russian pisal, and Hungarian +PAST irt may all stand for a limited or extended “nunc” (“was writing, used to write, wrote”).

The sources of nonpostterminals, nonintraterminals, and more general items (without any ±INTRA or ±POST commitment) will not be discussed here in detail. Many items have long developments behind them, being expressed by bound elements with reduced shapes typical of old forms representing late stages of grammaticalization. In some cases, the sources are unidentifiable. Indo-European past items are marked by an augment, originally an independent word (< adverb), proclitically added to the verbal form. Turkic and Mongolian historical items in -di and in -ha[i] are old forms with highly eroded material shapes that are difficult to etymologize. If the item in -di goes back to a verbal noun provided with a possessive suffix, it might ultimately be traced back to a possessive high-focal postterminal. Similar possessive pasts are found in Finno-Ugric and Tungus languages (Benzing 1988: 48-49). But defocalization as such does not naturally lead to the creation of -POST items. There is no evidence that European +PAST (-POST) items that do not interact with +INTRA pasts have developed from postterminals (cf. the discussion in Bybee et al. 1994: 81-85). Nonfocal postterminals can only develop into -POST items, if new focal postterminals are created to interact with them. Nor is there evidence that European nonpostterminals go back to the same sources as PFV items of the adterminal kind, i.e. to completers or constructions with auxiliaries derived from directional and movement verbs.

11.6.1. +PAST (-INTRA)

Aorists of the +PAST (-INTRA) type, e.g., colloquial French a écrit ‘wrote, has written’, only interact with a +INTRA category and are indifferent to ±AD and ±POST. They may present past events both in a historical and a diachronic way, covering the domains of English -PAST (+POST) and +POST (-PAST) items, e.g., Turkish yazdı or Maltese kītied ‘has written, wrote’. Some Past of this type are, however, opposed to a Remote Past, e.g., the Kabardian item in -a (vs. the Remote Past in -a-fr-).

In a system involving a ±INTRA distinction, a -PAST (+POST) item may lose its focality and generalize into a +PAST (+POST (+INTRA)) item, taking over a function of the old superseded +PAST (-INTRA) item. The ±INTRA opposition is thus continued after a formal substitution of the unmarked member. For example, the Latin Perfect cantavit, serving to express both ‘has sung’ and ‘sang’, developed into a nonfocal postterminal and a nonintraterminal, covering the whole range of past uses except for cases that motivate an intraterminal view (cantabat). Similarly, most Romance reflexes of an originally high-focal postterminal type habet cantatum, e.g., North Italian ha cantato, have generalized to nonfocals, taking over the -INTRA values from old +PAST (-POST (-INTRA)) items, e.g., cantò and other reflexes of cantavit. Certain varieties, however, have preserved the passé simple, passato
remato, perfectum simplu, etc., as the -INTRA member of the opposition. In many non-Romance languages, the ±INTRA opposition similarly consists of an Imperfect and a +PAST (±POST (−INTRA)) item, e.g., in Italo-Croatian, where the old Aorist has disappeared and the former Perfect has lost its focality.

It has already been noted that, if a ±POST opposition is given up, it is not always the former -PAST (+POST) item that generalizes. The former +PAST (−POST) item may also develop into a more general item referring to past events both historically and diagnostically. In some South Italian dialects, the use of the former +PAST (−POST) item (Simple Past) has generalized at the expense of the former -PAST (+POST) item (Perfect), e.g., Calabrian fu ‘became, has become’ (also instead of è stato ‘has become’; Bosco 1924: 13). While the European Spanish type -PAST (+POST) ha hablado is encroaching on the functional territory of +PAST (−POST) hablado, the opposite tendency is observed in varieties of South American Spanish, e.g., in Chilean Spanish, where -PAST (+POST) (pretérito perfecto compuesto) is being replaced by +PAST (−POST) (pretérito indefinido). Similar tendencies are also met with in American English, where the Simple Past seems to be gaining ground from the Perfect. However, the Perfect is still present in these varieties. In Turkish, on the other hand, the item in -di, e.g., yazdi ‘wrote’, has almost generalized as a nonterminal past, whereas the finite item in -mis ‘has [apparently] written’ and the item in -mısır is, at least in the spoken language, a prescriptive, e.g., yazmış ‘has [presumably] written’ (Section 8.7).

A +PAST (−INTRA) item that does not compete with a postterminal can be both historical and diagnostic, covering all the focality degrees of a postterminal without being marked for them. Turkish items such as bitti or kalmadı, operating on transformative, do not only mean ‘ended, has ended’ and ‘did not remain, has not remained’, respectively, but may also refer to the posttransformational state without regard to the event: bitti ‘is finished, over’, kalmadı ‘is all gone, used up’. Similar examples are Latin +PAST (−INTRA) items (“Perfecta”) such as nōvit and cōnsuēvit, which may mean ‘knows’ and ‘is accustomed to’, respectively.

11.6.2. +PAST (−POST)

+PAST (−POST) items interact with a +POST category but are indifferent to ±AD and ±INTRA. This plain type is present in a few Germanic and Finno-Ugric languages, e.g., Norwegian skrev ‘wrote’, Finnish kirjoitti ‘wrote’, Latvian rakstīja ‘wrote’, Dutch werd geschreven ‘was written’, Swedish skrevs ‘was written’. Similar items are found in Slavic varieties that have preserved the old Aorist but lost the old Imperfect, e.g., Serbian pisao ‘wrote’. One of the two Basque Past tenses, formed from synthetical verbs only, is indifferent to ±INTRA and thus belongs to this category; e.g., ba-nengo ‘l stayed’. It can always be used when the analytical constructions would necessitate a choice between +PAST (−POST (±INTRA)) and +PAST (−POST (−INTRA)) items (Haase 1994: 284).

11.6.3. +PAST (−POST (−INTRA))

Nonpostterminals frequently compete with a +INTRA category as well, which produces a +PAST (−POST (−INTRA)) type of nonpostterminal and nonterminal items marked for anteriority. Thus, English wrote is opposed to the items +PAST (−POST (−INTRA)) was writing and +PAST (−POST (−INTRA)) has written. Other examples of +PAST (−POST (−INTRA)) items are Modern Greek έγραψε ‘wrote’, has written’, French écrivit, Portuguese morreu ‘died, has died’, Spanish entró ‘entered’, Catalan perdé ‘lost’, Romanian cărnă ‘sang’, Albanian vrau ‘killed’, Bulgarian влезе ‘entered’, Sami børudit ‘ate, has eaten’, High (Hill) Mari swirš ‘wrote’, Tatar бард ‘went’, Karachai дади ‘took’, Kalmuk kel ‘spoke’, Tati бж ‘wove’, Kirmanji hat ‘came’, Armenian գրվել, Lezgian кэна ‘wrote’.

In several languages, e.g., French, Italian, Romanian, Serbian, Albanian, the type is limited to certain varieties (8.10.2). The Basque item (“Perfective Past”) is restricted to analytical verbs (Haase 1994: 282).

The languages in question thus possess three items covering the simple past stratum: +PAST (−INTRA) Imperfect, a -PAST (+POST) Perfect, and a +PAST (−POST (−INTRA)) Aorist or Simple Past. This is also a frequent pattern in Indo-European languages bordering on the European area, e.g., Persian +PAST (−INTRA) mkbard ‘was doing, did’, -PAST (+POST) kardast ‘has done’ and +PAST (−POST (−INTRA)) kard ‘did’. Creole systems, e.g., Romanian ones, possess non-temporalized “neutral” −POST (−INTRA) items implying anteriority with transformative and nonantiquity with nontransformatives.

11.6.4. +PAST

A plain, generalized type with the simple value +PAST, not interacting with any other viewpoint category and signalling anteriority only, is found in some languages such as Hungarian, South German, Yiddish, and Ossetic, e.g., South German hat geschrieben ‘has written’. The Hungarian and Ossetic items are even general pasts, e.g., írt ‘has written, wrote, had written’, Ossetic džrđu ‘spoke, has spoken, had spoken’.

These +PAST items void of ±INTRA, ±POST and ±AD values cover all kinds of past events. They combine with transformative to the effect that unedited reference implies completion. If the referent of a direct object is totally involved in the actional content, it is limiting, i.e. understood to be totally affected with the realization of the event, for example, Hungarian kihovesta a könyvet ‘read the (whole) book’ (De Groot 1984). In the diagnostic dimension, they cover different focality
degrees of postterminals. Items operating on transformatives may often be used in adjective-like ways, denoting the posttransformational state, e.g., Hungarian fáradt +PAST fáradt 'has endeavored' → 'is tired'. Hungarian sokort 'is accustomed' is a lexicalized former high-focal postterminal, now functioning as a special expression of habituality.

Considered diachronically, these pasts are +PAST (-POST) items. It was noted above that -PAST (+POST) items may lose their focality, generalize, and out form +PAST (-POST) items. Several unqualified +PAST items have once been -PAST (-POST (-INTRA)) items, before the ±POST and the ±INTRA oppositions in question were lost. The defocalized Romanian Perfect seems to be developing this way, taking over functions of the vanishing Imperfect (Haase 1995: 142). On the other hand, plain pasts may of course develop into +PAST (-INTRA), +PAST (-POST), or +PAST (-POST (-INTRA)) items, if new ±INTRA or ±POST distinctions are created.

11.6.5. +PAST (-AD)

Most Slavic languages have lost their ±INTRA oppositions, and their former Perfects have turned into nonfocals without competing ±INTRA or ±POST items. Some of these Perfects have served as the basis for the creation of adterminality oppositions. Russian pisal 'wrote, was writing' and Czech spal 'slept, was sleeping' are basically postterminals that have lost their focality, generalized -PAST (+POST) = +PAST items, which have acquired the structure +PAST (-AD). They do not take part in any other viewpoint opposition.

If ±AD items are the only past items in a system, they are both diagnostic and historical. Though European nonadterminals lack linguistically relevant focality degrees, they do cover the various degrees specified by postterminals. Thus, +PAST (-AD) items are often used for what is expressed by -PAST (+POST) in ±POST languages. This is natural, since in both cases the very attainment of the relevant limit is unessential: the postterminal conveys the view after the limit has been reached, and the nonadterminal denotes a past event without reference to a limit. A past that does not compete with a +INTRA item can also cover all the focality degrees of an intraterminal. Thus, +PAST (-AD) Russian pisal may stand for a more or less limited or extended presentness in the past: 'was writing', 'wrote', 'used to write'.

11.6.6. +PAST (+AD)

+PAST (+AD) items only signal adterminality and do not interact with other viewpoint categories. An item such as Polish napisał or Czech napsal 'wrote' is basically a postterminal that has lost its focality but is marked for +AD. It is both historical and diagnostic, covering all the degrees of focal postterminals. Thus, Russian +PAST (+AD) ustal does not only mean 'has (had) got tired' but may also denote the posttransformational state without referring to the event: 'is tired'.

11.7. Relations to PF, IPFV, PFV

Let us finally add a few summarizing words on how the main aspectotemporal types relate to crosslinguistic types such as PF, IPFV and PFV.

Even if PF may be subsumed under the +POST domain, it only represents one sector of it. Many postterminals do not fit into the PF type. On the other hand, many items that appear in typical PF uses, e.g., +PAST (-INTRA) or +PAST items, are not postterminals. Postterminality has a broader crosslinguistic occurrence and higher degrees of independence, stability and combinability. PF items tend to occur in limited context types. On the other hand, they are constantly threatened by defocalization. It is not easy to establish PF as a universal type, particularly since 'current relevance' does not seem to be a sufficient criterion for all language-specific categories claimed to belong to it. Given its vagueness, it might not have acquired the status of a cardinal crosslinguistic type, had it not been for the English Perfect, which shows a remarkable correspondence to it.

PF is sometimes taken to constitute a special case of PFV to the effect that PFV signals completion of the event at O, whereas PF adds the notion of current relevance. However, not all PFV items satisate the criterion 'completion at O', and the only common temporal property of PFV and PF seems to be: 'at least E is reached at O'. At any rate, it should be clear that postterminality cannot be considered a subspecies of PFV.

The relationship between the main aspectotemporal types and the IPFV vs. PFV dualism can be summarized as follows.

IPFV roughly corresponds to two kinds of items with the values +INTRA and -AD, respectively. Their common property, manifested in similar textual behaviour, is a view of the event without regard to boundaries and with more attention to the internal structure. However, the two IPFV types differ from each other in essential respects. Most IPFV representatives are marked +INTRA categories; very few are unmarked -AD categories. Whereas +INTRA items view the event within the limits, -AD items attract attention to the internal structure by negating or ignoring the notion of an attained limit. The inclusive semantic relationship of IPFV and PROG only applies to the +INTRA type. The -AD type does not include any high-focal or progressive subcategory.

PFV roughly corresponds to two kinds of items with the values +AD and -INTRA, respectively. The unifying property, manifested in similar textual behaviour, is the view of the event as a totality including its beginning and its end, without attention to its internal structure. Both types are holistic, capable of presenting an integral
view of the event, and thus propulsive. Despite the analogies, however, the two types differ from each other in many respects. + AD pasts function as PFV items by virtue of a positive value implying a transformation, − INTRA pasts by negating the introspective meaning.

Despite all similarities, the general distribution of the two types of IPFV vs. PFV oppositions tends to be different (Johanson 1971: 88–100). As we have noted, − AD items have much in common with − INTRA items, both being suited for the mere statement of the occurrence of the event in a ‘general factual’ or ‘simple denotive’ sense. The conflation of several ‘perfective’ types has a long history, beginning with Curtius’ confusing equation of the Classical Greek Aorist with Slavic perfectives (1846, cf. Ruizérez 1954: 34). However, the semantic differences between the two opposition types are clearly motivated by their different values and cannot be explained as marginal Slavic idiosyncrasies (Maslov 1973: 82; Bondarko 1983: 117). They are certainly not satisfactorily accounted for by reference to the different morphological (inflectional vs. derivational) make-up. Nor is it sufficient as a synchronic definition to refer to “source determination”, pointing out that the specific grammatical meaning of + AD perfectives “follows directly from their richer lexical meanings” (Bybee et alii 1994: 89). What we observe here are substantial differences, based on different linguistic values, rather than minor details of realization.

Moreover, as we have seen, several other Past types in European languages are capable of suggesting a direct and integral view of the event and are thus used for propulsive narration of sequences of past events. Such similar roles should not lead us to equate the linguistic values. Only + PAST (+ AD) is marked, the other categories (“unqualified terminal pasts”) taking up the space left over by different competing marked categories in their systems. Some are − POST and − INTRA items opposed to + POST and + INTRA items. Others have no + POST or + INTRA items to contrast with, and are thus indifferent to post- and intraterminality respectively. If “perfectivity” is defined in this unqualified sense, the + AD type cannot be claimed to be typical of it. The different types discerned above may be summarized as follows, listed in descending order according to their degree of explicitness with respect to direct and integral presentation: + PAST (+ AD), + PAST (− POST (− INTRA)), + PAST (− POST), + PAST (− INTRA), + PAST.

11.8. System types, areal distribution

The viewpoint operator systems dealt with above are of varying complexity. Very often, older stages of development are relatively rich, whereas a reduction is observed in modern ones. Thus, the Proto-Slavic aspecttemporal system was comprehensive, including ± INTRA, ± POST, and ± PAST oppositions that yielded a − PAST (+ INTRA) Present, + PAST (+ INTRA) Imperfect, a + PAST (− POST (− INTRA)) Aorist, a − PAST (+ POST) Perfect, and a + PAST (+ POST) Pluperfect. There was also an actional + T-marking perfective vs. imperfective opposition, rather freely combinable with the members of the aspecttemporal oppositions. While most Slavic languages have lost this richness, Bulgarian and Macedonian have preserved and developed it. Italo-Croatian has a ± INTRA opposition Imperfect vs. Aorist (< Perfect) and a + T-marking system, whose values combine to form perfective Imperfects + INTRA × [+ t], imperfective Imperfects + INTRA × [− t], perfective Aorists − INTRA × [+ t], and imperfective Aorists − INTRA × [− t]. As for the Romance languages, Latin displays a richer system than its modern daughters. The rich Classical Greek system has been transformed into a not less rich Modern Greek system.

Germanic systems are usually restricted to ± POST oppositions and lack systematic + T-marking. Western Finno-Ugrian systems are rather similar to them, but have also developed different additional devices. As we have seen, this is even true of the considerably reduced and “apparently extremely simple Hungarian system” (Comrie 1994: 299), which has, for example, developed a systematic + T-marking. Numerous modern languages of the Caucasian region have elaborate systems of distinctions in the ± POST and ± INTRA dimensions. On the other hand, peculiarly scanty systems are found in some languages, e.g., within the Daghhestanian Andi group (Goloberi, Karata, etc.). Among the Iranian languages, Ossetic is a strikingly simple system, comprising one − PAST (+ INTRA) and one + PAST item. Turkic systems are, right from the Old Turkic period, highly well-equipped, including ± POST, ± INTRA, and ± POST oppositions. Many more recent Turkic languages have also developed a rather systematic actional + T- and − T-marking, which also affects members of aspecttemporal oppositions.

Questions of areal distribution, though occasionally touched upon above, will not be dealt with systematically in the present contribution. A comparison of the individual areas of reasonably grammaticalized ± INTRA, ± POST, and ± AD categories yields isoglosses that do not constitute coherent geographic areas. Both ± INTRA and ± POST are predominantly found in languages of peripheral areas, Islandic, English, Irish, Ibero-Romanian, Bulgarian, Macedonian, Modern Greek, eastern Finno-Ugrian, Turkic, Caucasian, Mongolian, etc. Languages void of well grammaticalized ± INTRA, ± POST, or ± AD categories (German, Hungarian, etc.) occupy a small, rather central area. Systems essentially restricted to ± POST (Scandinavian, Faroese, Frisian, Dutch, Baltic Finnic, etc.) are found farther north than systems essentially limited to ± INTRA (French, Italian, Romanian, Maltese, Turkish, etc.). The Slavic languages void of other categories than ± AD (mainly East and West Slavic) are distributed over a huge area in the eastern and central parts of Europe.

The distribution is not very strongly correlated to genetic groups. Though there are highly stable systems, e.g., within the Turkic group, contact-induced changes have played an important part. The languages of Western Europe exhibit certain structural similarities that can only go back to long contact. Some are obviously due
to influence of dominant colonial languages, in particular Latin. There are several typical spread zones, e.g., north, south, and west of the Black Sea as well as in vast parts of Eastern Europe, areas of long-standing contact between Indo-European, Turkic, Finno-Ugrian, and other elements.

Some contact-induced changes imply copying (some kind of "borrowing") of new items, whose effects depend on what items are already present in the recipient language. The Mari system is clearly influenced by the Turkic languages of the Volga region, and there is a considerable Azeri impact on Talysh and on the Dagestani Lezgian group. The Upper Sorbian system is rather similar to the German one. Irish has a $\pm$ INTRA, $\pm$ POST system that is strongly reminiscent of the English system. However, no evidence can be found for the alleged influence Romance on the Maltese system, which is very close to those of other Arabic dialects (Ebert, this volume). Many changes start with frequental copying, i.e. contact-induced decrease or increase in the use of a given item (Johanson 1992: 182–183). For example, the increase in the use of Latvian $+$ PAST ($-$ POST) items instead of compound $-$ PAST ($+$ POST) items may be due to influence from Russian, where $+$ PAST ($\pm$ AD) items cover all past events (Mathiassen 1996: 15). A system may also change so strongly that it comes very close to the model system. The Basque system has changed in a way that mirrors the oppositions – and in part the formal structure – of the systems of neighbouring Romance languages (Comrie 1994: 299). There are also long chains of contact-induced changes, e.g., the widespread loss of $-$ PAST ($+$ POST) and $-$ PAST ($+$ POST ($-$ INTRA)) items and their replacement by $+$ PAST, $+$ PAST ($-$ INTRA) and $+$ PAST ($\pm$ AD) items in Eastern and Central Europe.

Despite all differences in details, the overall similarities of the systems of viewpoint operators in European languages are rather striking. Occasionally, the available data of certain non-Indo-European languages, in particular Basque and some Caucasian languages spoken in residual zones, give an impression of underlying old deviant structures. However, it is by no means the present contribution to try to trace documented structures back to prehistorical ones.

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