



## APPENDICES FOR CHAPTER 3

APPENDIX 3.1 NON-EUROPEAN  
LANGUAGES FORMING  
PERFECTS WITH STATIVE  
AUXILIARIES

APPENDIX 3.2 “YOUNG  
ANTERIORS” FORMED WITH  
OTHER AUXILIARIES

APPENDIX 3.3 SAMPLE OF  
“OLD ANTERIORS”

APPENDIX 3.4 ANTERIOR TO  
PERFECTIVE / PAST

## APPENDICES FOR CHAPTER 3

The following appendices provide more in-depth information on the languages analyzed in Chapter 3. As mentioned there, I collected as many of the original sources used by Bybee, Perkins, and Pagliuca (1994) as I could obtain, and have organized the data according to the arguments presented in the chapter.

### Appendix 3.1 Non-European languages forming perfects with stative auxiliaries

An examination of the non-European languages that form perfects with stative auxiliaries illustrates how typologically similar they are.

**Baluchi**, an Iranian language spoken in Pakistan, Afghanistan, and Iran (Elfenbein 1966), forms a present perfect with a past participle (past stem of the verb + *əg* / *ə*) + personal endings (< BE.PRES):

(1)     *šwt - əg - wn*

go.PST - PPP -1SG

‘I have gone’

The present perfect is used to express a “past action or event whose results, effects, or reference still exist in the present context” (Barker and Mengal 1969: 334); when there is no present result, a past tense is used. This construction, then, can be classed unambiguously as a young anterior. Barker and Mengal (1969: 334) observe that the personal markings derive historically from BE, so that the construction follows the familiar pattern of BE + PPP, but they add that the form is no longer analyzable as a compound. Grammaticalization has clearly occurred.

Bybee and colleagues also list as an example of a young anterior the past complete, formed with a past stem of the verb + *ət* (< BE.PST) + personal endings (< BE.PRS) (Barker and Mengal 1969: 337–38):

(2)     *šwt - ət - wn*

go.PST -BE - 1SG

‘I had (already) gone’

The past completive is also used to form the copula – auxiliary verb (1969: 337):

(3) *ət-      ət – wn*

be.PST –BE - 1SG

‘I had (already) been’

The past completive refers to one-time events occurring before another event and that are strongly completive in meaning (Barker and Mengal 1969: 338). It is, however, unclear why the past completive is classified as a young rather than an old anterior: it shows extensive grammaticalization and a closer connection with the past than the present perfect does. Whatever its designation, this construction provides remarkable evidence for the layering effect of grammaticalization, since it contains three instances of BE, at various stages of grammaticalization. **Maithili**, an Indo-Aryan language spoken in Bihar north of the Ganges, has developed a number of compound verb forms (Jhā 1958: 460), among them the “instantaneous perfects” of transitive verbs formed with a past participle in *-al* + the 3SG of BE (*√ach*)<sup>1</sup>:

(4) *kahalāh<sup>ū</sup> āch<sup>i</sup>*

‘I have just said’

This is an impersonal formation, as witnessed by the use of the 3SG of *√ach* (Jhā 1958: 526).

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<sup>1</sup> See Jhā 1958: 468–74 for an illuminating explanation of the operation of honorific marking in Maithili, attested earliest in the perfects and optatives, which led to an extremely complicated system of “attraction” in the participial constructions. This system takes into account the roles of other actants in the utterance and marks this relationship on the verb, so that, for example, *hām<sup>a</sup> jāēb<sup>a</sup>*, with 1sg. marking on the verb, simply means ‘I will go’, but *hām<sup>a</sup> jāebai*, with 3sg. marking on the verb, means ‘I (who have some connection with him) will go’ (Jhā 1958: 470).

Maithilī also forms present perfect indefinites in similar fashion: for transitive verbs, using a past passive participle in *-ane* (< *-al*) and for intransitives, using the aforementioned past passive participle in *-al*; both of these participles appear with a present indicative form of BE (*√ach*):

(5) *dekh<sup>a</sup>ne chī*

‘I have seen’

(6) *sūtāl<sup>a</sup> chī*

‘I have slept’ (= ‘I slept sometime before and still continue to sleep’)

(Jhā 1958: 460; 526–27)

Jhā distinguishes the two usages here: the instantaneous perfect better expresses the sense of the present perfect, while the present perfect indefinite refers more precisely to continuous present situations. Bybee et al. (1994: 67; 80) classify the Maithilī present perfect indefinites as resultatives and old anteriors, presumably because of the grammaticalization that the transitive PPP has undergone; the two perfects are otherwise formally similar. The subtle differences to be noted between the instantaneous and indefinite perfects of Maithilī illustrate the difficulty of positing an evolutionary relationship between them.

**Tigre**, a Semitic language spoken in Eritrea, forms complex perfects using particles and auxiliaries. A form with a meaning similar to the English present perfect is formed with a past tense<sup>2</sup> verb + conjunction *ka* + auxiliary *halla* ‘be, exist’:

(7) *wademmu mənla mə‘əl laha ‘asək aze kāynat ’ət ’ənta tarfat ka-hallet*

and - cat from the - day that till now treacherous while being remained CONJ-BE-3SG

‘And from that day until now the cat has remained treacherous’ (Raz 1983: 73)

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<sup>2</sup> Raz calls this form a “perfect” but explains that a perfect is used “to express existence or action which is regarded as completed in the past (the preterite)” (Raz 1983: 69).

Similar constructions are also built with the auxiliaries *‘ala* and *ṣanḥa* (‘already’ < ‘wait’ as a lexical item) to form past perfects (Raz 1983: 73–74).

Tigre also uses these three auxiliaries + a participle to form complex perfects; the auxiliary *halle* ‘be’ is, again, used to form a present perfect:

- (8) *həta kəbub qobə‘ lābsat hallet*  
 she round hat put-on-ACT.PTCP.F.SG. BE-3SG.  
 ‘She has put on a round hat’ (Raz 1983: 74)

This construction, formed here with an active participle, is remarkably similar to the perfects of those eastern European languages which use BE + past active participle.

**Mano**, a Niger Congo language spoken in Liberia near the Mani River, also provides good evidence of a stative auxiliary-style perfect formation. Becker-Donner reports (1965: 42) that the auxiliary *kè* ‘do, make, be’ + progressive refers to an action beginning in the past and extending up to the present, but no examples are given; when the action is completely finished, then the A-form of *kè*, *kèá* is used:

- (9) *płeí é kèá yì á lă*  
 village it was there it place  
 ‘the village that earlier had stood in this place’ (Becker-Donner 1965: 42)

These A-forms, which mark the first or second verb in a series, imply completion of the action before another action (Becker-Donner 1965: 38) and are listed as old anteriors in Bybee et al. (1994: 331).

The auxiliary *nyè* ‘be at an end, be finished’ also forms a sort of a perfect:

- (10) *yě bā ká á nyè*  
 ‘if you have given it there’ (Becker-Donner 1965: 43)

One would have expected the authors to identify this latter form as an anterior or a completive, but it is not mentioned at all.

**Buriat**, a Mongolian language spoken east of Lake Baikal in Siberia, has an extensive array of verbal nouns that are used to form many types of compound verbs; these may also be used as verbal adjectives and as finite verbs with personal endings, as well as pure nouns (Poppe 1960: 61). Bybee et al. (1994: 56; 329) list the Buriat young anterior as being formed with an imperfective verbal noun in *-aa* + past tense verb *-han*, e.g., *jabaa-ham* ‘I had gone’.<sup>3</sup> This form has a pluperfect meaning, however, so that a more appropriate example of a Buriat perfect with an anterior meaning with present relevance would be the perfective gerund in *-aad* + the auxiliary verb *bai-* ‘be’, not mentioned by Bybee and colleagues:

(11) *jeered baina*

‘he has already come’ (Poppe 1960: 103)

To sum up this brief examination of young anteriors formed with stative auxiliaries (usually BE), it appears that there are even more examples of this formation in the languages Bybee and colleagues survey than they recognize. Young anteriors constructed with stative auxiliaries plus non-finite verbal forms, while favored by the Indo-European languages, are thus not exclusive to them.

### Appendix 3.2 “Young Anteriors” formed with other auxiliaries

A brief look at the perfect systems of each of the representative languages given in Table 3.2 of Chapter 3 will provide us with some idea about the ways that perfects tend to be formed in the languages of the world other than according to the European pattern.

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<sup>3</sup> Poppe lists *-han* both as a defective past tense verb used with predicative suffixes (1960: 74) and as a formative of the verbal noun of the perfect (1960: 65).

**Margi**, an East Chadic language, uses two auxiliaries derived from ‘come’ and thus represents languages that form young anteriors with auxiliaries of movement. Bybee et al. (1994: 327) list the following four auxiliaries collected in Hoffman (1963: 221–25; spellings here follow Hoffman):

*màká* ‘just, just now’

*kwíá* ‘quickly, already’

*hỵivàr* ‘to have done before’ (prob. < aor. of *hyà* ‘get up, come from’ +

PROGRESSIVE) or *hỵághàrà* ‘to have done before’ (prob. < aor. of *hyà* ‘get up, come from’ + adverbial present of *ghàrà*, dialectal variant of *ghèdǎ* ‘have done before’ < ‘come from’ )

*ṣ́ávàr/ ṣ́ághàrà* ‘to have done before’ (parallel to previous pair, but with aux. *sì* ‘come’)

Margi, then, forms its auxiliaries especially from adverbs meaning ‘just’ or ‘already’ or from verbs meaning ‘come’:

(12) *nì hỵivàr ḷ̀ù Dlàkù*

‘I have gone / been to Duhu before’ (Hoffman 1963: 224)

**Bongu**, a language of NE Papua New Guinea, forms a present perfect that Hanke (1909: 86) compares to that of Greek, referring to an enduring action that is completed in the present:

(13) *ad'ĩ ginman*

‘I have come’ (Hanke 1909: 51)

Pluperfects are formed with the verb *guratar* ‘finish’, as is the futurum exactum:

(14) *ad'ĩ gine gurateman*

‘I had come’ (Hanke 1909: 53)

Only the latter form is mentioned by Bybee et al. (1994: 329), whereas the former seems to fit the designation of “young anterior” with current relevance more aptly.

**Motu**, a language of central Papua New Guinea, uses a number of particles to express verbal meaning. The invariable particle *vada*, when placed before the continuous present, forms a perfect present:

(15) *vada na kara-ia - mu*

PERF 1SG. do –it.ACC - CONT.PRS

‘I have done it (and am still doing it)’ (Lister-Turner and Clark n.d.: 14)

*Vada* “adds to the sense of cessation of doubt” and can also be added to the simple future and the imperative to mean “definite intention or determination” and “removal of doubt,” respectively (Lister-Turner and Clark n.d.: 14; 16; 18). It appears, then, that *vada* means ‘definitely,’ and is not confined to use as a marker of the perfect. The form *do-* ‘still’ also forms a perfect continuous present:

(16) *doini na kara-ia - mu*

still 1SG. do –it.ACC-CONT. PRS

‘I have been (and am still) doing it’ (Lister-Turner and Clark n.d.: 15)

**Guaymi**, a Chibchan language of Panama, uses several bound auxiliaries to form verbs, among them *–ni* for the perfect, referring to an action that has ended but has a result continuing to the present (Kopesec 1975: 24):

(17) *kuge ye tigani ni yegwe*

palabra esa **ha**-sido-escrita persona esa

‘That story **has** been written by him’



Bybee et al. (1994: 328) also include the Guaymi verbal suffix *-ra* ‘already’, which refers to completed action (Kopsec 1975: 45), as a marker of a young anterior. It is attached to the auxiliary when one occurs, or to the finite verb otherwise. When a nasal occurs in the preceding affix, as with the perfect, it is also nasalized to *-na*:

- (18) *reunión ye brä neganinaga.*  
 reunión esa en-contraste **ya**-ha-sucedido  
 ‘That meeting has **already** taken place’

The fact that this suffix can occur with a perfect makes it seem more adverbial than verbal in function, however.

An additional example from the “Other” category, the “*tah*-perfectives” of **Karok**, can be briefly mentioned as well, since they illustrate the imprecise match of some of these categories to the categories as conceived by Bybee and colleagues. In Karok, a Hokan language spoken in northwestern California near the Klamath River, the perfective morpheme *tah*, which may appear as a separate word or as what Bright calls a profix, is attached to a suffixless stem and refers to “completed action” (Bright 1957: 123). This usage pertains to conversational contexts only; it does not appear in narratives. The positioning of the *tah*-perfective among the young anteriors seems at first glance to be well motivated, since it is often translated as ‘already,’ ‘by this time,’ or ‘by now’ (Bright 1957: 138). An examination of the glosses provided by Bright reveals, however, that the meaning of this form does not coincide exactly with that of the perfective, anterior, or progressive, but lies somewhere in between:

- (19) *t=uʔi·k*  
 ‘he has hit it (sometime recently); he is hitting it (a single blow, right now)’

Bright (1957: 123–24) comments on the difficulty of glossing suffixless verbs in Karok, since their interpretation will vary widely according to context. A suffixless, prefixless form such as *ʔuʔaṽ* ‘he eats’ can mean ‘may he eat,’ ‘let him eat,’ ‘let him not eat,’ and ‘he has eaten,’ as well as ‘he ate’ in a narrative context. While it may be possible to accept the *tah*-perfective as a young anterior, it seems more likely that it is an unmarked narrative form whose analysis was biased by the various translations. Whatever its status, it does not fall neatly within the expected boundaries. It is not a prototypical young anterior.

Besides the *tah*-perfective, Karok also has an “anterior tense”, =*he·n* with nominal predicates, =*ahe·n* with verbal predicates, to refer to time previous to the past (whether marked by *–at* or unmarked) (Bright 1957: 125):

(20) *mukúnta·t* ‘their mother’: *papihne·fičʔári·m mukúnta·t=he·n*

‘the dead coyote **had been their mother**’

Bybee and colleagues frequently classify bound forms referring to the pluperfect as old anteriors, since they are more grammaticalized and lie closer to the past tense than present perfects; it is not clear why this category is not so classed, as well.

To sum up this section on “other” young anteriors, those formed with less European-style auxiliaries and particles are more numerous than those formed with stative auxiliaries, use more bound morphemes (especially in the “other” category), and are more variable in their construction. Semantically, there is wider variation, as well, with less of the anterior value resident in the non-finite verbal portions of the string, and more placed on the lexical value of the particle or adverb-like formative. In general, then, we can conclude that young anteriors constructed with stative auxiliaries, similar to and including those from Indo-European languages, most convincingly meet

the criteria of “young anteriors” set by Bybee and colleagues; other anteriors behave less like a category, and conform to the pattern less coherently.

### Appendix 3.3 Sample of “Old Anteriors”

Examining each of the “Old Anteriors” given in Table 3.3 of Chapter 3 in some detail will allow us to assess the validity of the distinction between old and young anteriors, and to test Bybee and colleagues’ hypothesis that the old anteriors are showing signs both of antecedent stages, whether deriving from resultatives, completives, COME, or young anteriors, and of stages which are expected to follow, the pasts or perfectives.

As we have seen in the previous section, **Margi** forms young anteriors from unbound morphs meaning ‘come’ and ‘just’ or ‘already.’ To form what Hoffman calls its pasts, and what Bybee and colleagues call its old anteriors, Margi combines bound prefixes and suffixes: *a-...-(e)rì* :

(21) *nì à -fǎl- órí*

I PST-dance - PST

‘I danced’ (Hoffman 1963: 197)

(22) *jàń ḡwándó ndà àbár, mámčí ázèbàrì*

‘then they thought that (his) blood had come out’ (Hoffman 1963: 200)

Hoffman (1963: 199) notes that this construction “indicates an action in the past or a present or past state resulting from such action,” and that it thus often corresponds to the pluperfect of English; in promises, it can also refer to future action. The “past” of Margi, then, seems appropriately assigned to the category of “old anterior.”

As mentioned above, **Maithili** forms present perfect indefinites with a past participle + BE: *sūtāl<sup>a</sup> chī* ‘I have slept’ (Jhā 1958: 460; 526-7), which Bybee et al. (1994: 67) identify as resultatives and old anteriors. The participles of these indefinites do appear to be more grammaticalized than those of the instantaneous perfects, but the indefinites do not seem to be semantically better suited to be classed as old anteriors (see Appendix 3.1): both instantaneous and indefinite perfects use BE as an unbound auxiliary with a past participle, but the indefinites refer to a continuous present situation, rather than being aligned with pasts or perfectives, as expected for old anteriors.

**Mano**, as described above, uses an “A-form” (*kḗá*) to imply completion of the action before another action, similar to the European pluperfects (Becker-Donner 1965: 38). Semantically, this construction seems appropriately classed as an old anterior, that is, as intermediate between young anterior and past, referring as it does to completion of an action before another action (Becker-Donner 1965: 38). However, the old anterior *kḗá*, is actually built on the young anterior form *kè*, which implies that the young anterior existed before the old anterior. The old anterior does not seem to have been in the pipeline longer.

**Baluchi**, in addition to the young anteriors examined in Appendix 3.1 – the present perfect and past completive – also forms a past perfect and a past perfect completive, considered by Bybee and colleagues to be old anteriors. These forms are also clearly built on the young anteriors:

Young Anterior: Present perfect: PPP (past stem + - *əg* / *ə*) + personal endings

Old Anterior: Past perfect: PPP (past stem + - *əg* / *ə*) + past of copula-aux + personal endings

(23) *šwt - əg -ət - wn*

go.PST-PPP –BE - 1SG

‘I had gone’

(Barker and Mengal 1969: 336)

The past perfect refers to time before the past, or simple remote past time.

Young Anterior: Past completive: past stem + *ət* (< BE.PST) + personal endings (< BE.PRS)

Old Anterior: Past perfect completive: past stem + *ət-ət* + personal endings (< BE.PRS)

(24) *šwt - ət - ət - wn*

go.PST – BE - BE -1SG

‘I had [must have] gone’

(Barker and Mengal 1969: 341).

Barker and Mengal (1969: 340–41) note that *ət-ət* may simply be a reduplication of *ət*, and go on to comment that the semantic value of the past perfect completive is twofold: it may refer to remote past completion (‘had already gone long ago’) or to the probability of some distant past event (‘must have gone long ago’).

The perfects of Baluchi, then, certainly provide evidence of the operation of grammaticalization in the layering of auxiliariation that has occurred. One must again wonder, however, whether the present perfect should not be regarded as the “oldest” anterior in the series, rather than those designated as old by Bybee and colleagues, since it represents the most synthesized, grammaticalized form on which the others are built. All of the morphological elements used to form the anteriors are listed as bound by Bybee and colleagues, but those of the simple present perfect are more integrated and less transparent than those of the more elaborate perfect formations. As seen in Mano, then, the “young” present perfect appears to have been in the pipeline longer than the “old” past perfect completive.

**Southern Agau**, a Central Cushitic language spoken in northern Ethiopia, forms a “perfect indefinite” (also called “compound form”), which refers especially to past actions which have effects remaining in the present:

(25) *desa* ‘I have studied’

(Hetzron 1969: 13; 27)

It is unclear what is “old” about this anterior; it seems more aptly called a young anterior.

When these compound forms appear with the verb *yasəŋ* ‘have / take with oneself,’ they refer to anteriority, a time before another event, similar to the English past perfect:

(26) *əmpəl əmpálo biré ǵáyayasamá kasáta kúsŋúnà*

‘they decided that one [of them], after **having untied** one ox, should go away’

(Hetzron 1969: 27–28)

These forms, then, show an interesting resemblance to the HAVE perfects, and are suitably classed with the old anteriors.

**Kui**, a Central Dravidian language, forms a perfect by adding what Subrahmanyam (1971: 160) calls a “past adverb” (also called a “perfect verbal participle”) to the future tense of *man* ‘be’:

(27) *ānu tāk-a mai*

1SG walk-PERF.PTCP BE.FUT

‘I have walked’ (Subrahmanyam 1971: 160)

The pluperfect is formed similarly, but with a past tense of *man* ‘be’:

(28) *ānu tāk-a mas*

1SG walk-PERF.PTCP BE.PST

‘I had walked’ (Subrahmanyam 1971: 160)

These forms, then, follow a familiar pattern of BE + participle to form an anterior, and it is therefore difficult to understand why they should be considered old anteriors instead of young. Likewise, it is unclear why Bybee et al. (1994: 79; 330) class the past tense morpheme *-it* (Subrahmanyam 1971: 157) as an old anterior when it seems to fall clearly into the category of simple past.

A similar observation can be made with regard to **Karok**: it seems that Bright's designation (1957: 67) of "past" for the morpheme *-at* is preferable to Bybee and colleagues' label "old anterior" (1994: 79, 331). Presumably, Bybee and colleagues characterize it as an anterior because it can be used with PLUPERFECT meaning; however, Bright (1957: 67) calls this form "the most general marker of past time," and so it seems reasonable to regard it as such.

**Yagaria**, a non-Austronesian or Papuan language spoken in the Central Highlands of Papua New Guinea, forms a past tense in *-d-*, which is possibly related to the word *hadó*, referring to completeness (Renck 1975: 115), and which may include reference to results in the present:

(29) *eli - d - i - e*  
 take – PST – 3SG. –INDIC

'he has taken', and therefore 'he is holding it' (Renck 1975: 92)

As seen in the *tah*-perfectives of Karok mentioned earlier, the semantic range of this suffix is extremely broad: it can refer to "all past actions, be they completive, perfective or habitual" (Renck 1975: 115). Bybee et al. (1994: 94), in fact, consider the semantic value of this suffix to be potentially wider than any other past or perfective gram in their study. They draw from this fact the following provocative yet controversial conclusion:

This Yagaria suffix, then, may be an example of a gram that is traveling through all the stages of anterior, resultative, perfective, and finally past. (Bybee et al. 1994: 94)

It is possible that the breadth of meaning found in this suffix implies directionality, especially if it is derived from an unbound completive form. However, it also seems possible to view the semantic value of the verb as, simply, broad. Compare the present tense of German, which can translate the habitual present, the progressive present, and the future tense of English. The fact that English here makes more semantic distinctions than German does should not be construed as evidence that German is proceeding down a path of development from one meaning to another. The breadth of semantic reference in German represents, rather, archaism. It seems possible to view the Yagaria category of past likewise: it may be correct to classify this category as an old anterior, since it represents a cross-section of anterior and past, and since it uses a highly grammaticalized marker. But it may, on the other hand, also be possible to view the category simply as a perfective or a past, very broadly conceived.

Completive aspect can also be marked on past or present tense verbs in Yagaria by means of the morpheme *-lo-* / *-le-*:

- (30) *dote'ne do – lo – na ge hu- d - i - e*  
 food eat – COMPL – 3SG word say - PST – 3SG - INDIC  
 ‘after he had eaten, he spoke’ (Renck 1975: 110)

Bybee and colleagues do not overtly include these completive markers among their anteriors, though these markers do reinforce the anterior value of the verb, and seem correctly included in the category. On the other hand, they do classify the aspectual continuative marker (*-mo* / *-me*) + “auxiliary” (*u-* / *o-*) as a young anterior (1994: 328):

- (31) *hoya eli – me i - d - a - e*  
 work make-ACT go-PST-3PL-INDIC



‘they worked for a long time’ (Renck 1975: 133)

The identification of this marker as an anterior does not seem appropriate, since the continuous action of the past apparently does not have an effect on the present.

In summary, the forms classed as “Old Anteriors” by Bybee and colleagues are often questionable as members of this category, and only provide evidence for a connection between “Young Anteriors” and “Old Anteriors” in one third of the cases (see additional conclusions in Chapter 3, subsection 3.3.3.2).

Bybee and colleagues place great stock in the dynamic quality of the anteriors: the old anteriors are assumed to be intermediate between anterior and perfective. But while the young anteriors, especially those formed with stative auxiliaries, constitute a credible if non-unified semantic group, old anteriors do so much less convincingly, and thus call into question the inevitability of this predicted path of development.

### **Appendix 3.4 Anterior to Perfective / Past**

A number of African languages provide convincing evidence for the development of statives, completives, and motion verbs into pasts, presumably through the intermediation of the anterior:

The **Kru** languages, spoken on the southwest Ivory Coast, distinguish four aspects: perfective (called a “factative” by Marchese 1986), imperfective, progressive, and perfect. While Bybee and colleagues do not analyze the Kru languages in detail, they do mention the example of one variety, Lozoua Dida, where the perfect auxiliary became a perfective, a development that provides support for their analysis (Bybee et al. 1994: 86). This innovation, in fact, seems to have had more widespread distribution than the authors acknowledge: Marchese (1986: 33–39) assumes that

Proto-Kru had a bare stem perfective, but that a marker of the perfect-like “permansive,” a low-toned *à* suffix, apparently replaced this marker in many varieties of Eastern Kru, becoming a new perfective, and providing evidence for the anterior > perfective shift predicted by Bybee and colleagues. Marchese (1986: 37) suggests that this change was precipitated by the introduction of a new perfect auxiliary in Eastern Kru, which caused the perfect suffix to be reanalyzed as a perfective. If this analysis is correct, Eastern Kru could be seen as providing convincing evidence for the ANTERIOR > PERFECTIVE phase of the model of Bybee and colleagues.

**Ewe**, a Kwa language spoken in Ghana, also provides some evidence for this shift. In Ewe, the usual way to refer to past events is by means of the aorist, which can, however, also refer to present or future events (Westermann 1907: 65). But, as Heine and Reh (1984: 130) point out, in the Dahome dialect the verb *kɔ* ‘be / have finished’ has apparently developed into a perfect marker which eventually became a past:

(32) *m- kɔ - sa*

I - PST – sell

‘I sold’

(Westermann 1907: 139; Heine and Reh 1984: 130)

**Standard Swahili** developed a past tense based on the copula *li*:

(33) *a – li – kwenda*

he –PST (< COP) - go

‘he went’

(Heine and Reh 1984: 130)

**Bari**, an Eastern Nilotic language, followed a very similar pattern, using the copula as a prefix to the verb to mark the past:

(34) *nan a - kən*

I PST (< COP)– do

‘I did’

(Heine and Reh 1984: 130)

Another Eastern Nilotic language **Teso**, developed an auxiliary and eventually a past tense from COME (SG. *-bu* / pl. *-potu*):

(35) *a-bu etelepat ko-lot ore bian*

he-come.PST boy he-go home yesterday

‘The boy went home yesterday’

(Heine and Reh 1984: 129; 185)

Bybee and colleagues also claim that **Atchin**, an Austronesian language spoken on the island of Malekula, New Hebrides, provides support for the path of development COME > ANTERIOR > PERFECTIVE / PAST. The evidence, however, may be less decisive than the authors claim. Atchin marks the past with *ma* (< COME), the future with *pa* (< GO) and indefinites with verbal pronouns referring to past, present, or future, depending on context (Capell and Layard 1980: 73–75). Capell and Layard go on to note that *ma* is “still indefinite” in the nearby varieties of Vao and Wala, a statement that Bybee et al. (1994: 56; 86) construe to mean that these neighboring dialects use the indefinite marker as an anterior, and that this dialectal distribution provides evidence for an ANTERIOR > PAST development in Atchin. On the one hand, this is a cogent argument, given that, according to their model and as illustrated earlier, COME often develops into an anterior, and ultimately into a past. On the other hand, the reconstruction of an anterior may not be as clearly warranted as Bybee and colleagues claim, since the glosses for Atchin verbs identified as indefinite do not in general make reference to anteriority:

(36) *no* 1SG. INDEF

*ina no ter-ter*

‘As for me, I am brave.’

(37) *ko* 2SG. INDEF

*ko wuretun?*

‘You are speaking the truth?’

(38) *ro* 1DU.INCLUS.INDEF

*ro wä Tsan*

‘We shall go to Atchin.’

(39) *or* 3DU. INDEF.

*or tabu tsile watsin*

‘They-two have finished cooking now.’

(Capell and Layard 1980: 76–79)

The argument of Bybee and colleagues rests on the validity of COME as a sure sign of anteriority in the indefinites; the data, however, do not support this interpretation.

After presenting evidence from Germanic, Romance, Mandarin, and the languages discussed earlier in the book, the authors go on to state the following:

The evidence, then, for the passage of anterior to perfective or past is quite strong and distributed across various language families.

(Bybee et al. 1994: 86)

As demonstrated here and in Chapter 3, however, it is an overstatement to call this evidence “quite strong” and to imply that it is universally distributed. While the evidence from the Kru and Bantu languages seems convincing, the evidence from Austronesian Atchin is less so; while universal

propensities exist in Mandarin (Chapter, 3, Section 3.4), there is reason to doubt the hodological, path-like nature of the development. And, as explored in Chapter 10, the semantic shift of anterior > past in the languages of western Europe should not be seen as an array of separate developments, but essentially as one development which has spread areally, emanating, I claim, from Parisian French into surrounding varieties.

## Conclusions

A fuller set of conclusions is given in Chapter 3, Section 3.5, but several conclusions concerning the data presented in these appendices can be proposed:

- As we have seen, a fairly frequent strategy for expressing YOUNG ANTERIOR is to combine stative auxiliaries with verbal non-finite forms, as found in the European languages; in fact, more than half of the languages that engage in this strategy in the sample of Bybee et al. (1994) are Indo-European languages. Another somewhat frequent method of expressing YOUNG ANTERIOR is with structures meaning ‘finish.’ This strategy occurs relatively more often in non-inflectional languages than in inflectional ones. Most young anteriors, however, fall into the category for which the lexical source is unknown. These perfects are less unified semantically or formally in their construction. While they do demonstrate the widespread distribution of the anterior meaning, they do not conform to a unified pattern or show the “inner coherence” of a category.
- The least convincing part in the argument of Bybee et al. (1994) that a universal path exists from anterior to perfective / past is the assertion that “young anteriors” become “old anteriors” – a claim for which the evidence is weak.

- Languages may well follow the path of development for anteriors and related structures predicted by Bybee et al. (1994: 105) (RESULTATIVE / COMPLETIVE / MOVEMENT > ANTERIOR > PERFECTIVE / PAST), but other developments are also possible; it is also possible that no change occurs at all.