Chapter 5, from `The Diachrony of Meaning' by Elly van Gelderen

Copulas

1 Introduction

Copula verbs are centered around a Theme argument and can vary in aspectual character. English has a very sizable inventory of copula verbs, which can be divided into those of duration (remain and stay), change of state (become and fall), and mood (seem and appear). Most copulas have been reanalyzed from unaccusatives and have a Theme. Although copulas revolve around a Theme which would fit with an inner aspect of telic or stative, there are copulas of all three aspectual kinds. I will show that the aspect of the copula is determined by Sorace’s (2002) continuum, with telic as the most unaccusative moving towards durative for less unaccusative verbs.

The reanalysis of these unaccusatives as copulas is due to their occurrence in an ambiguous context. For instance, intransitives are frequently modified by adverbs that may not (or no longer) be morphologically marked as adverbs and therefore reinterpreted as copulas with adjective complements. The transitives that reanalyze are also ambiguous at one stage in that they are frequently middles. The changes in these verb types suggest that the Theme role stays stable but that there are some changes in aspect.

The change from copula to auxiliary involves a preservation of some of the earlier features and a loss of the single remaining theta-role, namely the Theme. I include this change for the sake of a broader picture. I am not adding new data to what is known about the latter change.

Acquisition data (e.g. Becker 2000) show that children distinguish between stative and non-stative copulas very early on. Thus, they have been seen to use the copula in stative contexts but not in durative ones and this is not surprising given the central thesis of this book that inner aspect is one of the characteristics children use to categorize verbs. The use of change of state copulas by children has been less often examined. These occur after the age of 5 in the data from four children.
The outline is as follows. In section 2, I provide some background information on what I include under copula and provide a structural representation. In section 3, I list the Old, Middle, and Modern English copulas to see what has shifted in the inventory. I also examine the very extended paradigm of the verb ‘to be’ and what information is contained in it. Then, in section 4, I examine the change from unaccusative to copula and, in section 5, that of transitive to copula. Section 6 turns to the change from copula to auxiliary. Section 7 examines what acquisition data can tell us and and section 8 is a conclusion.

2 Copulas
Copula verbs have many functions cross-linguistically, such as linking subjects with locational and adjectival predicates. The diversity of what copulas are sensitive to in their clausal environment involves permanent/non-permanent, location/identity, and realis/irrealis. Copulas are always grammaticalized forms, from verbs, pronouns, or locative markers, that usually still have a more fully lexical counterpart in the stage of the language.

There is some debate as to what counts as a copula, e.g. Lyons (1977: 471) defines it as a “meaningless lexeme” and includes only the neutral ‘be’. I will use a broader definition that includes copulas with shades of modal, e.g. ‘seem’, and aspectual, e.g. ‘remain’, meanings. My definition of a copula is a structural one: linking a DP, AP, or PP to a DP in subject position, and assigning a Theme role to the latter.

Many possible structures for copulas have been suggested (for instance, Stowell 1978; Higgins 1979; Rothstein 1995; Moro 2000; Hoekstra 2004, Mikkelsen 2005, and den Dikken 2006). Frequent analyses involve a small clause, i.e. one without a verb, as in (1). Den Dikken has argued that the Small Clause is Relator Phrase, headed by a relator head, as in (2).

\[(1) \quad \text{VP} \]
\[\quad \text{V} \quad \text{SC} \]
\[\quad \text{be} \quad \text{DP} \]

\[(2) \quad \text{VP} \]
\[\quad \text{V} \quad \text{RelP} \]
\[\quad \text{DP} \quad \text{DP/AP/PP} \]
\[\quad \text{Rel’} \]
Another structural representation of a copula involves a Pred(icate)Phrase (Bowers 1993), the head of which is involved in theta-marking of the Theme that bears the grammatical subject role. Baker (2003) argues that the Pred makes the predicative function of nouns and adjectives possible. I will be using the PredP, as in (3), since it is the most transparent about theta-roles.

(3)  
```
  PredP
    /\      /
   /  \    /  \ 
  DP   Pred'
     \   /     \ 
      \ /     \
        Pred   DP/AP/PP
```

Many languages, e.g. Arabic, allow zero copulas in generic situations. When past or future needs to be added, the copula appears. In cases like these, it can be argued that the copula is in T. I will not consider zero copulas here.

3 Changing copulas

In this section, I will provide data on the verbs that function as copulas in the various stages of English (section 2.1). I will then examine changes inside the paradigm of the verb `to be’ (section 2.2) and the sources of Modern English copulas (section 2.3).

3.1 Increase

Curme (1935: 66-8) says there are 60 copulas in English and that “no other language shows such a vigorous growth of copulas” (67). Visser (1963: 213-9) lists over a 100 for the various stages, among them those in Table 5.1, which I have recategorized slightly and given with their Old English main meanings (from Bosworth & Toller and Clark Hall). I have also added some of
Visser’s quasi-copulas, such as *standan* ‘stand’, as in (4); not listed is *be* but see the next subsection.

<table>
<thead>
<tr>
<th>Old English aspect</th>
<th>durative: (a/ge/þurh)wunian ‘dwell, rest, be, exist’</th>
<th>(ge)bidan ‘abide, continue’</th>
<th>belifan ‘remain’</th>
<th>licgan ‘lie, be’</th>
<th>sittan ‘sit, be’</th>
<th>(ge)standan ‘stand, exist, be’</th>
<th>warian ‘remain’</th>
</tr>
</thead>
<tbody>
<tr>
<td>telic:</td>
<td>come, (ge)weorðan, (ge)weaxan ‘become’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stative:</td>
<td>þyncan/ðuncan ‘seem’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle English</td>
<td>durative: cliffian, (en)dure, dwell, hove, last, remain, rest, bego, begrow, run, make, hang, play, yawn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>telic:</td>
<td>become, fall, go, grow, turn, wane, blow, blush, break, fly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stative:</td>
<td>appear, (be)seem, prove, show, smell</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Early Modern English</td>
<td>durative: continue, hold, keep, persevere, persist, stay, wear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>telic:</td>
<td>(be)fall, commence, get, result, burst, flash, flush turn out/up</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stative:</td>
<td>come, loom, feel, ring, sound, strike, taste</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 5.1: Copulas in English from Visser (1963: 189ff)

(4) *stent ðonne ðeofscyldig se ðe hit on handa hæfð*

stands then thief.guilty he REL it on hand has

‘He stands guilty as a thief who has it on his hands.’

(DOE, Æthelred, Liebermann *Die Gesetze der Angelsachsen* 1903-16 220-26)

Looking at the above tables, we see a lot of possible durative copula types in Old English but fewer telic ones and especially fewer stative copulas. The latter is due to something we’ll see in section 3.2 namely that ‘be’ could be use for irrealis mood.

In Old English, there is only one specific copula specialized for mood and that is *ðyncan* ‘seem’, as in (5) and (6). This verb is very versatile in that it has an Experiencer in (5) and a clausal Theme in (6). In chapter 7, we’ll see that it is also used as visual perception copula.
(5) Ac hwelc  wite  sceal  us  ðonne  to  hefig  ðyncan?
   But which  punishment  shall  us  then  too  heavy  seem
   `But which punishment shall seem too heavy to us?’
   (OED, Gregory Pastoral Care, Hatton 255.2-3)

(6) Him þa seo  mænigeo  þurh  gemæne  word,  arlease  cyn,  andswarode:
   him  then  the  commoners  through  false  word,  honorless  kind,  answered
   þis þinceð  gerisne  and  riht  micel,  þæt  þu  ðe  aferige  of  þisse  folcsceare.
   it  seems  proper  and  very  right  that  you  yourself  take.away  of  this  land
   `The multitude of honorless people answered him that it seems very right that you leave
   this land.’ (DOE, Genesis 2478, Krapp 1931)

The history of English shows three kinds of copula and a lot of renewal. There is an increase in
copula types marking mood after Old English. The reason is that the Old English verb `be’ can
express irrealis mood but that it loses that later, as we’ll see next.

3.2  The verb `to be’

The verb to be  has a paradigm that is a combination of many different forms, as shown in Table
5.2 which has been discussed by many (e.g. Wischer 2010; Petré 2014). The s-forms may go
back to an old demonstrative *sa (hence accounting for the third person restriction for is) and
the be-forms to the reconstructed Indo-European intransitive *bheu `grow’. The wes(ende)
goes back to the intransitive *wes `remain, dwell’ and the passive weorðan (not shown in the
table below) goes back to *wert `turn’. Petré (2014: 91-2) lists slightly different possibilities but
that’s not important for the main point, namely that this paradigm is highly suppletive.

<table>
<thead>
<tr>
<th></th>
<th>Indicative</th>
<th>Subjunctive</th>
<th>Imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>ic  am ic  sie/beo</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>þu  art þu  sie/beo</td>
<td></td>
<td>wes/beo</td>
</tr>
<tr>
<td></td>
<td>he/o  is he/o  sie/beo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>sint/sindon PL  sien/beon</td>
<td></td>
<td>wesaþ/beoþ</td>
</tr>
<tr>
<td>Past</td>
<td>ic  was Past S  ware</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>þu  ware</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>he/o  was</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.2: The Old English forms of the verb *beon* `to be`

<table>
<thead>
<tr>
<th>Future/generic</th>
<th>We/ge/hi</th>
<th>Wæron Past PL</th>
<th>Wæren</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ic</td>
<td>Bu</td>
<td>Beom</td>
<td></td>
</tr>
<tr>
<td>He/o</td>
<td>Biþ</td>
<td>Bist</td>
<td></td>
</tr>
<tr>
<td>We/ge/hi</td>
<td>Beob</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Participles: Wæsende/beonde/gebeon

Although many of these verbs go back to old intransitives and keep some of the semantic peculiarities, by Old English, they are seen as one paradigm. Table 5.2 represents the Late Old English West-Saxon paradigm. Northumbrian restricts *b*-forms to the indicative (see Bolze 2013: 219).

In Old English, as can be seen from Table 5.2, the *b*-forms are used for irrealis (some would say +/-future) mood and generic situations and the *eam/eart/is/sint* and *w*-forms are mainly used for the present and past indicative. This is true whether the *b*-form is used as main verb, copula, or auxiliary. The example in (7) shows a number of these *be*-forms and one telic *gewearðan*.

(7) *Nu bið swyðe raðe ante cristes tima. ðæsðe we wenan*  future

Now be very soon anti christ’s time of which we think

*magan 7 eac georne witan. 7 þ bið se egeslicesta*  future

may and also willingly know. and that is the most awful

*pe æfre gewearð syððan þeos woruld ærost gesceapen wæs.*  telic past

that ever became since this world first created was.

‘Very soon now, it will be the time of the Antichrist which we think and know consciously about. It will be the most awful time that ever arose since the world was created.’ (Wulfstan, Homily 42, Napier 1883)

This mood-based division has been examined by various people (Jost 1909, Biese 1952, Campbell 1959, and Wischer 2010, all cited in Petré 2014), as has the change to the Middle English system where, according to Petré (2014), the *b*-form is used for plural indicative, as (8)
shows. For Petré, the reason for this change is the grammaticalization of shall as a future marker. Because the b-form is also used for generic statements that are in the plural, it is reanalyzed as a plural rather than an irrealis/generic marker.

(8) manige wise men ðar wæron gegaderade. ealle to smeagende

many wise men there were gathered all to ask
embe Godes cyrcan bote. ða beð innan Cent.

about God’s church’s compensation that are in Kent

‘Many wise men were gathered there, all to ask about the church’s compensation, who are in Kent.’


Currently, the paradigm shows a finite/non-finite split: be, been, being are the non-finite forms and the non-be ones are finite. I have formulated the changes as (9).

(9) Germanic mood > OE mood > ME number > ModE finite

This marking of the mood in the paradigm may mean that separate mood marking copulas are less necessary. The changes in the mood system affect the inventory of copulas, as seen in section 2.1.

After this description of the situation throughout the history of English, I’ll now turn to the type of verbs that copulas derive from. This is important for the main point of this book, namely the types of changes verbs undergo in terms of aspect and theta-roles.

3.3 Sources

Table 5.3 provides 41 current copulas and what type of verb they originate from or are polysemous with. Of the transitives, five are perception verbs but only in two cases does the transitive develop into a copula, namely in the case of feel and look. The other three verbs,
sound, smell, and taste, are introduced as copulas and transitives in an independent development in Middle English.

<table>
<thead>
<tr>
<th>Also unaccusative:</th>
<th>also transitive:</th>
<th>also labile:</th>
</tr>
</thead>
<tbody>
<tr>
<td>appear, remain, stay, drift</td>
<td>feel, sound, smell, look, taste</td>
<td>ring, continue,</td>
</tr>
<tr>
<td>persevere, persist, go</td>
<td>hold, keep, wear, get, prove,</td>
<td>grow, turn,</td>
</tr>
<tr>
<td>come (expensive), fall (flat)</td>
<td>strike, show, flash, bang (shut)</td>
<td>commence, wax,</td>
</tr>
<tr>
<td>loom, break, befall, seem, stand, lie, blush, rest, become</td>
<td></td>
<td>fly (open), burn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>blow (open)</td>
</tr>
</tbody>
</table>

Table 5.3: Copulas in Modern English

Some of the copulas in the table are more frequent and less specialized (e.g. feel, sound, appear, and remain) than others (persevere, blush, drift, and commence).

Looking back to the unaccusative and unergative continuum in Table 2.7, we see that the unaccusative verbs in Table 5.3 are all from the top half, i.e. the unaccusative side, and are spread evenly between these verb classes as Table 5.4 shows. The exceptions are the verbs go and appear. The former is currently a controlled motion verb but has older unaccusative meanings in the OED from which the telic copula is derived. The verb appear is both a change of state and stative verb and loses its telic aspect but retains the stative meaning in the stative copula use, as we’ll see in the next section.

<table>
<thead>
<tr>
<th>Sorace’s term</th>
<th>example</th>
<th>copular aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of Location</td>
<td>come, fall, befall, drift, go</td>
<td>telic</td>
</tr>
<tr>
<td>Change of State</td>
<td>break, blush, become, appear</td>
<td>telic</td>
</tr>
<tr>
<td>Continuation of a pre-existing state</td>
<td>remain, stay, persist, persevere</td>
<td>durative</td>
</tr>
<tr>
<td>Existence of State</td>
<td>stand, lie, rest, loom</td>
<td>stative</td>
</tr>
<tr>
<td>Uncontrolled process</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Controlled process (motion)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Controlled process (non-motion)</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.4: The types of unaccusative copulas

Note that there are no core unergative, e.g. swim, work, or walk, that are the source of these verbs and that the original level of telicity/durativity is reflected in the change.
In section 4, I examine three unaccusative verbs that are reanalyzed as copulas: they change from V to Pred but keep the Theme with an inner aspect that is compatible with the original level of telicity/durativity. Section 5 examines the transitives and labile verbs.

4  **Appear, remain, and become in Middle English**

In this section, I describe some of the changes involving the intransitives *appear, remain, and become*, namely copulas of mood, duration, and change of state, respectively. I develop an explanation based on Visser’s (1946; 1963) insights for these verbs.

In Middle English, the first intransitive to become a stative copula is *appear* (Visser 214-5)^1^. This verb comes into the language as an intransitive with the meaning of ‘be visible’, as in (10), and ‘become visible, come forth, be clear’, as in (11). So, with both stative as well as telic meanings.

(10)  **This Sterre ... that wee clepen the Lode Sterre, ne apperethe not to hem**

This star that we call the Lode Star, not appears not to them

‘This star, which we call the Lode Star, is not visible to them.’

(OED, 1366 Mandeville’s Trav. xvii. 180)

(11)  **Aperede an ongel of heuene in here slepe.**

‘(There) appeared an angel from heaven in her sleep.’

(OED, c1250  *Kent. Serm. in Old Eng. Misc. 27*)

It becomes a copula in the 14th century, as in (12), which are stative because the meaning is ‘was evil/conspicuous’ and not ‘became evil/conspicuous’.

(12)  a.  **And the Lord siȝ, and it apperide yuel in hise ȝen.**

‘And the Lord saw and it appeared/was evil in his eyes.’

(OED, a1425 *Wycliffite Bible* L.V. Royal Isa. lix. 15)

b.  Our greatness will **appear** Then most conspicuous.

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^1^ I ignore (be)seem since that is a continuation of the Old English.
With an adjective yuel `evil' in (12a), Visser argues that the sentence is ambiguous between modifying the (intransitive) verb or the subject nominal: “[t]he use of adjectives as predicative adjuncts is as old as the English language” (Visser 1963: 183). However, even with a PP, as in (11), it is ambiguous, i.e. because in here slepe in (10) can be an adjunct or subject predicate, it can reanalyze.

The features that are relevant in this change are shown in (13), with the main change probably going from change of state (‘become visible’) or stative (‘be visible’) to only stative aspect (‘uncertain mood’). Structurally, the change that could happen to (11) is represented in (14). The [u-Th] indicates that appear needs a Theme theta-role.

Another instance of an intransitive that turns into a copula is the verb remain which is borrowed as an intransitive from French in the 14th century. Its meaning in Latin is ‘stay
behind’, which is durative. In Table 2.7, it is more towards the middle of the continuum precisely because of its durativity.

The first instance that the OED provides is given in (15), with a meaning of ‘continue to belong, stay with’. The first instances given in the MED are from 1425, as in (16), with the same ‘stay behind’ meaning.

(15)  *To the part of this endenture remaynand to the forsaid Alexander.*

‘As for the part of this agreement remaining to the already mentioned Alexander.’ (OED, 1388, Robertson Illust. Topogr. & Antiq. Aberdeen & Banff 1857)

(16)  *Onely oo cow she hadde a-lyue remaynyng of that pestilence.*

‘Only one cow she had alive remaining of the plague.’ (MED, 1425, Found.St.Barth. 60/15)

Note that the grammatical aspect emphasizes the durative nature through the –*and* and –*yng.*

The first instance of *remain* as a copula is hard to give. Visser’s clearest example as a copula with an adjective is from 1528 and given in (17). Others, dating from 1513 are given in (18) and (19).

(17)  *the hole body of Christes holy church remaine pure.*


(18)  *Where remained behynd, the Lorde Ryuers the Kynges vncl.*


(19)  *those lordes of her honorable kinne, which as yet remained vnder arrest should vpon the matter examined, do wel ynough.*  (Richard III, idem).

The scenario provided by Visser (1963: 195) on how the intransitive reanalyzes into a copula is, as in the case of *appear*, structural ambiguity. In the intransitive use, Visser notes, there is often an apposition, as with *prisoners* is in (20). The intended meaning is that ‘they remained’ with a secondary predicate telling us how they remained, namely ‘as prisoners’. This nominal is not
clearly separate from the rest of the sentence and hence reanalyzable as the complement to
the copula.

(20) the Factour with the others did remaine prisoners
    ‘the perpetrator with the others remained, prisoners.’
    (Visser 1963: 195, Lichfield translation, 1582)

Since remain is often used in the conclusion of letters, a name would be following it as well,
again reanalyzable. This may very well be true although, if we look at actual examples, this use
is infrequent. For instance, the Paston Letters have 36 instances of a form of remayn but none
of these have a name following; see (21) for a more typical one from the year 1461.

(21) I am yor bedman and so shall remayn be the grace of God all the days of myn liff
    ‘I am your servant and so shall remain (I) by the grace of God, for all the days of my life.’
    (Visser 1963: 195, Gairdner’s edition II p. 66)

(21) in its own right is ambiguous as to what follows is a primary or secondary predicate.

Apart from the appositive uses of nouns after intransitives, there is another reason for
the instability of intransitives that was mentioned in connection to appear, namely, if an
adjective follows the verb, the adjective is ambiguous between modifying the (intransitive) verb
or complementing the copula. Visser (1946: 65) notes that, even in the 16th century, certain
adjectives could be used as adjective or adverb. Sentences (22) and (23) are such ambiguous
cases.

(22) All goodes ... brought to the seid Fayre ... remayneth vnsoold
    (MED, 1463, GRed Bk.Bristol, pt.2.p.61)

(23) Since which she was removed to Kimbolton, Where she remains now sick.
    (Visser 1963: 195, Shakespeare, Henry VIII, 4.1)
Even in Modern English, the sentences in (24) are ambiguous although usually the intonation will tell whether it is a copula with no break, as in (24), or an intransitive with secondary predication, as in (25).

(24)  
   a. They **lived** happy. copula  
   b. She **returned** rich.

(25)  
   a. They **lived**, happy. intransitive  
   b. She **returned**, rich

Many speakers feel uncomfortable putting an adjective next to an intransitive verb and have trouble deciding whether or not to put an –ly in (26ab) or not.

(26)  
   a. Does the clutch **feel** any different/differently?  
   b. Do not **go** gentle/gently into that good night.

A similar ambiguity of analysis between an intransitive with an adverbial PP and a copula with a complement PP occurs in many stages of the language. Thus, *lives* in (27a) could be either intransitive or copula, as opposed to *is* in (27b) which can only be a copula because *be* can’t mean ‘exist’.

(27)  
   a. She **lives** in Italy.  
   b. She **is** in Italy

The features involved in this change show a change, as in (28), where the features of continuation translate into durative aspect.

(28)  

<table>
<thead>
<tr>
<th>V (intransitive)</th>
<th>&gt;</th>
<th>Pred (copula)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>remain</strong></td>
<td></td>
<td><strong>remain</strong></td>
</tr>
<tr>
<td>[continuation]</td>
<td></td>
<td>[durative]</td>
</tr>
</tbody>
</table>
The reanalysis of intransitives as copulas is to be expected because intransitives rarely remain without some kind of adverbial. Let’s turn to the structural changes needed for reanalyzing *remain* in (29) from intransitive to copula. These are given in (30). So the VP is reanalyzed as PredP but the rest remains the same.

(29) the great primar, whiche before daies I gave to my wif, *remayn* styll to her. (OED, 1513 *Will of Robert Fabyan* in R. Fabyan *New Chron. Eng.* (1811) Pref. p. vii)

(30) a. TP

```
  | [u-Th]   [u-Th]
```

In terms of theta-roles, it is possible that intransitives are unstable after the derivational morphology disappears at the end of Old English. There are two ways to reanalyze this situation: increase the transitivity, as we’ve seen in the previous chapter, or change the verb to a Pred, as in (30b). The change of an intransitive to a copula is exemplified by verbs such as *remain* (and *stay*) that retain some of their original characteristics in that they are aspectual copulas.
In Old English, the verb *become* is an intransitive change of location verb, as (31) shows. There are more abstract uses in Old English, as in (32), concerning time and, as in (33), meaning ‘befall’ with an additional dative.

(31) *Hannibal to þam lande becom.*
Hannibal to that land came
‘Hannibal came to that land.’ (OED, Orosius, Bately 100.17)

(32) *Syþðan niht becom.*
‘When night came.’ (OED, Beowulf 115)

(33) *þæt þæm godum becmð anfeald yfel.*
that those good happens unmixed evil
‘that to good people evil happens.’ (OED, Boethius, Sedgefield 131.25)

The first sense of a copula ‘come to be’ in the OED is from 1175. Examples in (34) to (38) are taken from the *Cursor Mundi*. The glossary of Morris’ edition mentions 20 instances and they are mostly copulas in the modern sense although a few are still intransitive. *Cursor Mundi* is a poem of 30,000 lines that narrates the history of the world. It is a text of which several manuscripts exist. Morris’ (1874-1893) edition has two Northern (Cotton Vespasian and Göttingen) and two Midlands versions (Fairfax and Trinity). As can be seen from the information in parentheses, the dialectal origin doesn’t play a role because the same copula appears in different versions.

(34) *[Of] tristrem and hys leif ysote, How he for here be-com a sote*
‘About Tristram and his love Isolde, how he become a fool for her.’
(Cotton, 17-18; also in Fairfax)

(35) *A-gayn him suld becum sua grim?*
‘against him (he) should turn so fierce.’
(Cotton, 456; also in Göttingen; be in Fairfax)

(36) *þat he wald bicom our broþer*
‘that he wants to become our brother.’
(Cotton 854; same copula in all versions)

(37) \[Quen \ palette \ ṡu bicums ald\]
‘When he becomes old.’
(Cotton, 3562; same copula in all versions)

(38) \[bis zachari \ palette i of [redel], Becummen was o leui [sede]\]
‘This Zechariah of whom I am telling, became of Levi’s seed.’
(Cotton 10935-6; same copula in all versions)

By the beginning of the 16\textsuperscript{th} century, \textit{become} is no longer used intransitively (Visser 1946: 51). Its reanalysis as change of state copula must have been due to an ambiguity between adjective and adverb, as in (33), for instance, similar to that in the case of \textit{appear} and \textit{remain}.

As before, I provide the changes in terms of features and a tree in (39) and (40), this time without a TP.

(39) \[V \ (\text{intransitive}) \ > \ \text{Pred} \]
\[become \ \quad become \]
\[\text{[change of location]} \quad \text{[telic]} \]
\[\text{[u-Th]} \quad \text{[u-Th]} \]

(40) \[\text{VP} \ > \ \text{PredP} \]
\[\text{PP} \quad \text{V'} \quad \text{DP} \quad \text{Pred'} \]
\[\text{\symbol{99}æm godum} \quad \text{V} \quad \text{DP} \quad \text{Pred} \quad \text{AP} \]
\[\text{becymþ} \quad \text{anfeald yfel} \quad \text{become} \quad \text{evil} \]

See also Petré (2014, chapter 6) who, in a careful study of the semantics of \textit{become}, provides a lot of detail on the complement possibilities.
The three copulas discussed in this section show that they stay true to their original aspectual features and all continue to have Themes as arguments. The unaccusative appear keeps its stative use (losing its telic one), the unaccusative remain translates its semantic features of `continuation’ into durative aspect, and the unaccusative become keeps its telic aspect. The next source of copulas to consider is transitives.

5 Transitive and labile to copula verb

As we saw in section 3.3, transitives and labile verbs (i.e. alternating between unaccusative and causative) are also reanalyzed as copula verbs. Unergatives are not. I have repeated the ones mentioned before with more detail in (41).

(41) also transitive:
feel, sound, smell, look, taste, show (perception)
hold, keep, wear (durative)
strike, flash, bang (shut) (semelfactive)
prove, get

also labile:
ring, continue, grow, turn, commence, wax, fly (open), burn, blow (open)

In this section, I provide examples of a selection of these, namely feel, look, hold, keep, wear, strike, flash, bang, and continue.

The change in transitives is based on a structural reanalysis from transitive middle to copula, as we’ll see in the case of the perception verbs feel and look. The four other perception verbs will not be dealt with at length: sound starts out an unaccusative in 1300 and is extended to copula in 1375, very much like the other unaccusatives; smell is of unclear origin but transitive as well as copula around 1175; taste starts out as a transitive; and show is an uncommon copula.

The durative transitives are all looked at and so are the semelfactives. As mentioned in chapter 2, the class of semelfactive is seen by many as its own type of inner aspect namely
dynamic but not durative or telic and I will therefore consider all three. The verbs *prove* and *get* can be transitive or ditransitive and I will leave them outside the discussion because they are relatively minor copula verbs. An example of a labile verb that reanalyzes is *continue*. This verb appears in ambiguous contexts, just like *remain* and *appear*, and that’s most likely the source for the reanalysis. That is also true for the other labile ones which I leave without examples.

Turning now to the two verbs of perception I discuss in more detail, *gefelan* is a transitive built on the intransitive *felan*\(^2\). It is a transitive verb in Old English, as (42) shows, and stative because none of the examples have a *with(out)-*adverbial. There is a later durative verb meaning ‘explore by touch’, shown in (43) which usually has a *with(out)-*adverbial.

(42) a.  *And þonne seo modor gefele þæt þæt bearn si cwic,* ...

and then the mother feel that the child be alive

‘And when the mother feels that the child is alive, …’

(DOE, Dobbie, *The Anglo-Saxon Minor Poems* 123-4)

b.  *þysþernes ... swa gedrefedlic þæt hit man gefelan mihte*

darkness so troublesome that it man feel might

‘Darkness so troublesome that one might feel it.’ (OED, *Orosius* Bately 26.4)

(43)  *Wee han gropid as blinde men the wall, as withoute eȝen wee han felid.*

‘We have groped as blind men (do) the wall, as if we felt without eyes.’

(OED, 1382 Bible, Wycliffite, E.V., Isa. lix. 10)

The stative, sense perception meaning remains throughout the history of English as the Middle English (44a) and the Modern English (44b) testify to. We’ll come back to this in chapter 7 as well.

(44) a.  *so þat adaies he felt nöping, ne tasted*

‘so that during the day he felt nothing, not tasted anything.’ (OED, Trevisa

Higden Polychron, VII. 147)

\(^2\) We have seen the ge-less verb *felan* as intransitive in chapter 3 because *felan* has a genitive object.
b. May felt the darkness. (COCA fiction 2009)

The first copula-like instance the OED gives is early Modern English (45a), with the verb to be. Other examples are given in (45b-d).

(45)  
a. The hande ... feeling to bee rough.  
‘The hand feels rough.’  
(OED, 1581, Pettie tr. S. Guazzo Ciule Conuersat. ii. 92)  
b. The substance of it feels ... exactly like a very fine piece ... of Chamois leather.  
(OED, 1665, Hooke Micrographia 139)  
c. If it feels heavy ... then we give him more Rope.  
(OED, 1694 Acct. Several Late Voy. (1711) ii. 165)  
d. The weather was extremely cold, and felt particularly so to us.  
(OED, 1768, Byron Narr. Patagonia 263)

Poutsma (1926: 57) notes with early Modern English examples that feel, smell, and taste may also be complemented by an adverb, e.g. by how in (46a) and unpleasantly in (46b), or a noun used adverbially, as in (46c).

(46)  
a. How it feels to be in England.  
b. The rags smell unpleasantly.  
c. It sounded to me the sweetest music.

These are late Modern English examples but may tell us how the reinterpretation of transitive as copula took place, namely through a middle like structure, in which the Theme is the subject, i.e. it, the rags, and it, respectively, and the Experiencer is not mentioned.

The changes can be phrased in terms of features in (47) and a tree in (48), for the change from the transitive with an unexpressed Experiencer in (46a), represented as (48a), to that of the copula of (46), represented in (48b).
Intransitives are reanalyzed readily as copulas because not much changes in the argument structure. Transitives lose an argument in the change and this is possible when a middle, passive-like structure, as e.g. (48) to (50) are, is seen as structure with one argument. The aspect remains unchanged. Thus, stative transitive verbs reanalyze as stative, modal copulas.

Let’s see if this is true with another perception verb, look, as well. This verb is first a durative verb, as in (49), with an Agent and optionally a Theme that is expressed by means of a preposition.

(49)  a.  **He on heofon locode**  
he on heaven looked
`He looked towards the heavens.’
(OED, West Saxon Gospels: Mark Corpus, vi. 41)

b.  **eagan hi habbað & hig ne lociað.**
eyes they have and they not look

‘They have eyes but do not look.’ (OED, Lambeth Psalter cxxxiv. 16)

The verb look has a Middle English intransitive use with the meaning ‘have a certain appearance’, as in (50), although this could be an early copula.

(50)  

\[\text{Wurðliche hie deð lokin ņe manne ņe hes luuieð.}\]

decently it makes look the man that it loves

‘It makes the man look decent who loves it.’

(MED, 1225, Vices & Virtues 133-4)

The copula has its origin in the loss of the adverbial –e and later -liche/ly endings, which the two variants of the same texts show in (51): (51a) with hungr as adjective and (51b) with hungriliche as adverb.

(51) a.  

\[\text{So hungri and so holewe · sire herui him loked.}\]

‘So hungry and hollow Sir Harvey looked to him.’

(MED, Piers Plowman, A-text, V, 108)

b.  

\[\text{So hungriliche and holwe sire Heruy hym loked.}\]

‘So hungrily and hollow Sir Harvey looked to him.’

(MED, Piers Plowman, B-text V, 189)

By the time of Chaucer, i.e. late Middle English, the copula use is frequent, as in (52).

(52) The statue of Mars ... loked grym as he were wood.

(MED, c1385 Chaucer CT.Kn. A.2042)

Unlike in the case of feel, where a stative with Experiencer and Theme is reanalyzed as stative with Theme, look in (49) is hard to connect to (50) and (51). The changes would be loss of
durative aspect, loss of the Agent, and a change of the [visual] semantic features to a similar meaning in the copula, as shown in (53).

(53) V (transitive) > Pred

    locian      look
    [durative]  [stative]
    [u-A] [u-Th] [u-Th] (u-Exp)

This is an unexpected change and it may be the case that we are missing evidence of an intermediate stage.

The next set to look at are the durative hold, keep, and wear. The meaning of the verb hold is diverse, from `behold’, `watch over’, to `hold back’, and intransitive `hold on’ and `continue’. The intransitive use is easily converted into a copula, as in the cases we saw in the previous section. Checking Bosworth & Toller, the copula use is already there in OE, as shown in (54).

(54) he ... het ... þæt werod healdan fæste wið feondum.
    he ordered that band hold fast against foes
    `he ordered the band to stand fast against the foes.’ (B&T, Maldon 100-102)

The origin of the verb keep is unclear, according to the OED. Its meanings in the history of English again include `keep watch’ and `remain’, as in (55). From (55), it is easy to reanalyze the PP as part of the predicate and the unaccusative verb as copula.

(55) ðís emperor ... hase many men kepand at his courte.
    `This emperor has many men staying at his court.’ (OED, c1400 Mandeville's Travels)
The verb *wear* has meanings such as the transitives ‘wear (on the body)’, ‘carry’, ‘fly (a flag)’, ‘destroy’, and the intransitive ‘decay’, from which use the copula derives most likely. The first copula in the OED is (56) in a description of ill-thriving sheep.

(56)  *Teeth blacke, wearinge wide.*

‘teeth black, wearing wide.’

(OED, a1642 Best Farming & Memorandum Bks. (1984) 9)

Turning to the semelfactives, the copula use of *strike* is first mentioned by Visser (1963: 218), as in (57a). It is an infrequent copula and more often a complex transitive verb, as in (57b). Most likely, (57a) derives from (57b) through a leaving out of the Experiencer.

(57)  a.  [the cell] **struck** cold and damp (Dickens, 1859)

b.  It **struck** me (as) cold and damp.

The other two semelfactives, *flash* and *bang*, are also infrequent and late, as (58) shows.

(58)  a.  The lad **flashed** crimson with anger (Visser 1963: 216, Stevenson 1888)

b.  The car door opened and **banged** shut (Visser 1963: 215, Sinclair Lewis 1922)

*Flash*, in the sense of emitting light, is first seen in (59) in an intransitive sense. When an optional modifier appears, this modifier can then easily be reanalyzed as a complement.

(59)  **All flasshet in a ffire the firmament over.**

‘All flashed in a fire all over the firmament’ (OED, a1400 Destr. Troy 12498)

The origin of the (infrequent) copula *bang* could be as a transitive verb, as in (60a), or as unaccusative, as in (60b).
A last verb to be considered is *continue*. It is borrowed from French and first appears as causative in 1340 and then as unaccusative in 1400. (61ab) gives examples of these two verb types from the same text.

(61)  

a. *Þis medicyn þou schalt contynuen til it be hool.*  
this medicine you shall continue till it is cured  
‘You shall continue this medicine till there is a cure.’  
(OED, c1400 Lanfranc’s Cirurg. A. 91)

b. *& þe accidentis contynewen.*  
and the accidents continue  
‘and the incidents continue.’  
(OED, c1400 Lanfranc’s Cirurg. 120)

The OED doesn’t mention a copula use but a search of the Middle and Early Modern sections of the Helsinki Corpus provides (62a), from a letter from 1630 and COHA provides (62b) from 1812. There is a possible earlier example in (62c), from the beginning of the 17th century, which shows an ambiguity between unaccusative and copula, similar to that seen in section 4.

(62)  

a. It pleases God that I *continue* ill with my coold.  
(HC, 1630)

b. O may my fortunes, Still as they are, *continue* poor and mean.  
(COHA 1812)

c. I shall *continue* thankefull.  
(Shakespeare, All’s Well, 5.1.17)

The copula use of *continue* is attested about 200 years after the appearance of this verb into English as a unaccusative and causative. The copula use derives from the unaccusative in a
scenario where the adverb following the unaccusative had become ambiguous between adverb and adjective. The features provided in (63) are very similar to those of remain in (28) and the tree in (64) is similar to those of the other unaccusatives.

(63) V (unaccusative) > Pred
    continue         continue
    [continuation]    [durative]
    [u-Th]           [u-Th]

(64) a. VP
     accidents     V
     DP              V’

b. PredP
     They
     DP              Pred’

V (AP)         Pred         AP
continue        continue

thankful

The next section looks at a scenario in which all theta-roles are lost.

6 Copula to auxiliary

In this section, I just point out the obvious, namely that copulas are the source of auxiliaries and, perhaps the less obvious, that we know very little about their structural reanalysis. The change from copula to auxiliary is one in which the verb loses its single theta role and only becomes relevant to the aspectual or modal meaning of the sentence. In terms of structure, the copula is reanalyzed as situated outside of the theta-domain, i.e. outside of the PredP, and keeps its original aspect.

Heine (1993: 28) lists the typical sources that tense, mood, and aspect auxiliaries derive from, namely, ‘where one is or moves, what one does or wants, how a body is situated or what it is related to’. That includes verbs with one and two arguments. All of the current and past
English auxiliaries, *wesan*, *weordan*, *have*, *be*, *get*, and the modals, originate as main verbs, some transitive, some intransitive, and some copula.

From Old English on, *be* is used as auxiliary of the perfect, as in (65a), and possibly of the progressive, as in (65b), both from the OED.

(65)  

a. *Min broðer is faren of þisse liue.*
   my brother has gone from this life
   (*Peterborough Chronicle*, year 656)

b. *Adam þa wæs wuniende on þisum life mid geswince.*
   Adam then was living in this life with labor
   ‘Adam lived his life then, working.’
   (*Ælfric, Clemoes’ Catholic Homilies I*, 184.166)

Because in Old English the verb ‘to be’ has both copula and intransitive uses, there is no direct evidence that it was the copula *be*, as in (66), rather than the intransitive, as in (67), that gave rise to the auxiliary. The copula, however, is much more frequent.

(66) *Crist is soð god 7 soð man. 7 ante crist bið³ soðlice deafol 7 man. Se sylfa deafol þe on helle is se wyrð on þa earmsceapenan men ante criste 7 bið soðlice ægðer gedeofol ge man.*
   ‘Christ is a true God and true man and the anti-Christ is truly a devil and man. The same devil who is in hell he becomes the anti-Christ to wretched men and is truly either devil or man.’ (*Wulfstan, Homilies 42*)

(67) *Da lytlan cild bædon him hlafes, ac þær næs nan mann,*
   those little children asked him/them bread but there NEG.was no man
   *ðe þone hlaf him betwynan tobræce*
   then that bread him between broke

³ It would have been expected that the inflected *bið* in (55) became reanalyzed as a future marker because it was often used in that context, but it didn’t.
`The small children asked him for bread but there was no one who could break it for them.’ (OED, Ælfric Catholic Homilies: 2nd Ser. xxv. 233)

So, we have no evidence within the history of English how the be-auxiliaries in (65) arose. I’ll provide a possible scenario as to how the Theme was lost in (68), where the Pred represents the copula and the VP the unaccusative.

(68)  
\[
\begin{align*}
&\text{a. PredP/VP} > \text{b. ASPP} > \text{c. ASPP} \\
&\begin{array}{cccc}
he & \text{Pred’/V’} & \text{ASP} & \text{PredP/VP} \\
be & \text{be} & \text{be} \\
\text{(AP) telic/dur} & \text{he} & \text{Pred’/V’} & \text{telic/dur}
\end{array}
\end{align*}
\]

[continuation] 
\[
\begin{array}{c}
\text{be} \\
\text{AP}
\end{array}
\]
\[
\text{faren/wuniende} \\
\text{[pass]} \ [\text{durative}]
\]

In (68a), `be’ is still copula or existence of state verb, which is very much in the middle of the continuum between unergative and unaccusative in Table 2.7. It can therefore be reanalyzed as a durative verb without a clear Agent or telic with a Theme. Depending on whether it is used with a passive or progressive in (68bc), it can have either aspect.

A lot has been written about the demise of the copula and passive auxiliary wearðan `be, become’. As in the case of be, there is no direct evidence in Old English of the change from copula to auxiliary because both are present in Old English. A verb that has grammaticalized to auxiliary during the history of English is get, as chronicled in Gronemeyer (1999). Here, the copula use precedes the passive one, as evidenced by the first examples in the OED: (69) as copula and (70) as passive.
(69) How to get cleere of all the debts I owe. (OED, 1600, Shakespeare, Merchant of Venice i. i. 134)

(70) A certain Spanish pretending Alchymist ... got acquainted with foure rich Spanish Merchants. (OED, 1652, Gaule Πυς‐μαντια 361)

What’s important is that the telic aspect remains in this case.

To finish this section, when a copula loses its only theta-role, it becomes an auxiliary. The intransitive verb be is interesting in being placed relatively in the middle of the unaccusative/unergative continuum and ends up as either telic or durative auxiliary.

7 Acquisition

In this section, I argue that children’s initial use of copulas shows that they are conscious of the aspectual differences in predicates. There has been work on the acquisition of copulas since de Villiers & de Villiers (1972) and Brown (1973), who are interested in the order of acquisition of the various morphemes. Becker (2000) finds that the use versus non-use depends on finite versus non-finite environment. I will review the latter’s findings and then add some of my own comments.

Becker (2000) shows that young children omit the copula when the predicate expresses a temporary property (with an aspectual representation) but not when it expresses a permanent property (without aspectual representation). Her explanation is that, although children use finite and non-finite clauses, the copula is inflected and therefore finite and only appears in the aspectually simpler clause. The temporally marked clause has aspect but is not finite.

The data of 4 out of 5 children⁴ is reproduced in Table 5.5 and representative examples are given in (71) and (72).

<table>
<thead>
<tr>
<th></th>
<th>permanent</th>
<th>temporary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nina</td>
<td>74.1%</td>
<td>14 %</td>
</tr>
<tr>
<td>Peter</td>
<td>81.2%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Naomi</td>
<td>89.7%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>

⁴ The 5th child, Eve, is excluded by Becker (2000: 91) because she shows a number of other developmental differences.
Table 5.5: Overt copulas with permanent vs temporary predicated, from Becker (2000: 89)

(71)  
  a.  de sun is lightning (Adam 3;2.21) permanent  
  b.  he’s a dog (Nina 2;1.15)  

(72)  
  a.  he way up dere (Adam 3;0) temporary  
  b.  I in the kitchen (Nina 2;1.15, all from Becker 2000: 93).

These data show that the child learning English is very much aware of the aspectual difference underlying the same copula, namely that between duration and permanence/stativity.

As far as I know (and Becker p.c.), not much has been done to see if children are aware of the telic character of copulas and of other aspectual flavors. Because Becker uses data from Nina (Suppes 1974), Peter (Bloom 1970), Naomi (Sachs 1983), and Adam (Brown 1973), I will too. Nina’s data go until 3;3 years of age and become does not appear, nor do seem or appear. Stay is ambiguous between a lexical verb, as in (73), and possibly a copula, as in (74).

(73)  stay all day long  
(74)  a.  it gonna stay on?  
    b.  that why they’re gonna stay in this bed. (Nina, 3;03.08)

Peter was recorded from the age of 1;9 to the age of 3;2, so we perhaps don’t expect many varieties of copulas and indeed the data are like Nina’s. There are no instances of seem, appear, and remain at all, the instances of turn are all lexical verbs but there are ambiguous instances of stay, as in (75).

(75)  
  a.  *CHI: stay here (Peter, 2;07)  
  b.  *CHI: stay back (Peter, 2;02.14)
Naomi’s data go from 1;1 year of age to 5;1 years of age, but her use of copulas other than *be is very similar to that of Nina and Peter. The verb *turn is frequent though not as copula, the copulas *appear, *seem, and *remain are absent, but there is a copular use of *stay, as in (76).

(76)  *CHI:  gonna *stay asleep (Naomi, 2;11.8)

Adam’s corpus, which goes until he is almost 5 years of age, contains four instances of *become, as in (77), but all from the same exchange. The verb *turn is frequent but not as a copula and *appear, *seem, and *remain do not occur at all, let alone as copulas. *Stay is frequent but is a lexical verb, as (78) shows, and never occurs followed by an adjective as would be expected from a copula.

(77) a.  *CHI:  an(d) *become a spider
   b.  *CHI:  *become a spider
   c.  *CHI:  *become a spider web
   d.  *CHI:  can [?] somebody *become a spider just like a magician?
        (Adam, 3;04.18)
(78)  *CHI:  don’t *stay dere (Adam, 2;11.13)

In conclusion, children very early seem to understand the permanent and non-permanent uses of the simple copula, i.e. the stative and durative meanings, but take their time using telic copulas such *turn or *become. That is an unexpected result which I don’t have an explanation for.

8 Conclusion
The main function of a copula is to help assign a theta-role and to add aspeetual and modal meaning (at least in English). The three kinds of aspect that we saw in other chapters play a role here as well: change of state, duration, and the absence of aspect appear in the copulas as
become, remain, and appear show, respectively. The origin of these copulas lies in unaccusatives.

There is a transitive origin to copulas as well; here the aspect either remains the same (stative) but the experiencer theta-role disappears in the copula feel or it retains the Theme and loses the durative aspect in the copula look. Other transitives probably turn copulas via an intransitive stage. The causative/unaccusative continue also reanalyzes in much the same way as the other unaccusatives. As for auxiliaries, these lose the Theme theta-role as they reanalyze from copulas and retain aspectual (or modal) meanings.

Children distinguish between non-permanent and permanent early on. This distinction can be seen in terms of duration and state as well. Why children are late acquirers of telic copulas may show telicity is more complex than state and duration.