In this chapter, I show that the reanalysis of a demonstrative or pronoun as an agreement marker, discussed in Chapters 2 and 3, is also obvious when a subject pronoun is reanalyzed as an auxiliary or copula verb, initially with its person and number features in tact. This change involves a third person pronoun or demonstrative. This is very different from the subject cycle, where first and second person are consistently the first to change. I argue the reason is due to the deictic features of the demonstrative which translate into locational features on the copula, thus lending support to the feature analysis of third person pronouns in chapter 2.

Katz (1996) is one of the first to note the systematic nature of this change and to discuss it as a cycle. Copula cycles occur in many typologically and genetically different languages: Turkish, Uto-Aztecan, Chinese, Hebrew, Palestinian Arabic, Maltese, Kenya Luo, Lango, Logbara, Nuer, Wappo, West Greenlandic, and Creoles. I will argue that the cyclical changes follow from the Head Preference Principle and Feature Economy.

There are other sources for copulas, mainly prepositions and verbs (see Hengeveld 1992; Nicholas 1996; Stassen 1997; and Pustet 2003), and they can be accounted for within the framework developed in this book (see Lohndal 2009). In this chapter, I will mainly be looking at demonstratives and pronouns.

In section 1, I provide some background on copulas. Sections 2 through 6 provide examples of stages of the pronominal copular cycle. Section 7 considers how pronouns have been seen to derive from copulas and section 8 is a conclusion.

1. Background

First, I provide some examples of copulas from English as well as a structure for representing copulas. Then, I review the literature on grammaticalization of copulas.
1.1 What is a copula?

I use the term *copula* for a verb with no independent meaning, also referred to as linking or equating verb. English has a wealth of copulas, as the incomplete list in (1) shows.

(1) be, become, seem, appear, look, remain, keep, stay, fall, turn, go

Some consider only *be* a copula since other linking verbs add an aspectual (*remain, keep, and stay*) or evidential (*seem and appear*) touch. Most copulas in English also can be used as intransitives, as (2) shows.

(2) a. He **looked** nice (in that outfit) = copula  
    b. He **looked** (for it) everywhere. = main verb

Many linguists distinguish (at least) two types of copulas cross-linguistically. Hengeveld (1992: 188) calls these predicativizing and discriminating. The predicativizing ones are typically verbs, as in (2a), or verbalizing affixes. The discriminating copulas are markers of non-verbal predication, such as pronouns, as we’ll see in Greenlandic, Hebrew, and other languages, and invariant particles, as in (3), which I will not examine further.

(3) **Te'i** ma'ino a gorø  Gude  
    PRT water LOC river  
    'There is water at the river.' (Hoskison 1983: 81, from Hengeveld 1992: 191)

This distinction is relevant in grammaticalization since the predicativizing ones derive from verbal sources and the discriminating ones from pronominal and other deictic elements.
Many possible structures for copulas have been suggested (Stowell 1978; Higgins 1979; Rothstein 1995; Adger & Ramchand 2003; and Mikkelsen 2005). In Stowell's analysis, the copula is a raising verb with a small clause complement, as in (4).

(4)  VP
     /   \
    V    SC
     /     \
    be     DP
         /   \
        DP/AP

This analysis has a number of advantages: it is simple and could be changed into a vP shell relatively easily. In what follows, I will present an account for the cycle that does not depend on the precise structural representation of the copula but rather on its features. Such an account is in accordance with Feature Economy.

1.2 The Copula Cycles

As mentioned in the introduction, there are at least three sources of copulas, hence the plural in ‘copula cycles’, pronouns, verbs, and adpositions/adverbs. Classic examples of these cycles are described by Li & Thompson (1977), Hengeveld (1992), Gildea (1993), Devitt (1994), Katz (1996), Stassen (1997: 78-95), Whitman (2000), Pustet (2003: 54), and Lohndal (2009). I will give examples of each of the sources for copulas but then focus on the pronominal source.

In many languages, pronouns end up as copulas: in (5) from West Greenlandic, tassa is a linker but can also (still) be used as a demonstrative pronoun.

(5)  Hansi tassa pisurtaq  West Greenlandic
     Hansi that leader
     ‘Hansi is the leader.’ (Fortescue 1984: 72, from Hengeveld 1992: 192)
Positional verbs (Hengeveld 1992: 238) are also a source of copulas: Dutch *zitten* ‘to sit’ can be used as a copula, as in (6).

(6) \textit{Jan zit in Frankrijk} \hspace{1cm} \text{Dutch}

\begin{center}
\begin{tabular}{lll}
Jan & be-3S in & France \\
\end{tabular}
\end{center}

‘Jan is in France.’ (Hengeveld 1992: 238)

The third source is the most diverse. Stassen (1997: 87-90) mentions the focus marking particle \(-k\) in the Uto-Aztecan Chemehuevi in (7), and I will come back to an example by Li & Thompson below; adpositional sources are also frequent.

(7) \textit{Nii-k nainc} \hspace{1cm} \text{Chemehuevi}

\begin{center}
\begin{tabular}{ll}
1S-FOC & girl \\
\end{tabular}
\end{center}

‘I am a girl.’ (Press 1975: 132)

As mentioned, I will only consider the pronominal source in this chapter. A cycle is easy to notice: a demonstrative is reanalyzed as a copula and a new demonstrative is introduced. The copula, in turn, might disappear. The way this cycle has been explained is through the reanalysis of a topic or focus construction, as in (8).

(8) \textit{The elephant that happy}

\begin{center}
\begin{tabular}{llll}
TOPIC & SU & VP & \\
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{ll}
SU & copula VP \\
\end{tabular}
\end{center}

The question would be why first (or second) person pronouns are never reanalyzed as copulas since they are frequent topics. I will therefore suggest an addition to (8) that depends on the features of the demonstrative.

It is possible to think about the changes in terms of the Head Preference Principle and Late Merge. The Head Preference Principle predicts that the demonstrative/pronoun could optionally be a head; once that happens, it could be reanalyzed as a (higher) copula.
I will be more precise and use features since they account for the renewal. Like Lohndal (2009: 218), I rely on a version of Feature Economy. However, rather than using [F], as in Lohndal, I will be more specific and use [loc] and [phi]-features ([u-T] in (9) represents Case).

(9)  
<table>
<thead>
<tr>
<th>Layer</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>[i-loc]</td>
</tr>
<tr>
<td>2</td>
<td>[i-loc]</td>
</tr>
<tr>
<td>3</td>
<td>[u-phi]</td>
</tr>
</tbody>
</table>

I haven’t seen an analysis of copulas in terms of features\(^1\). Since the sources of renewal are deictic and aspectual, I’d like to suggest the features in (10) for English copulas. The simplest copula is *be*; most of the others will have additional aspect or mood features.

(10)  
<table>
<thead>
<tr>
<th>Copula</th>
<th>[i-loc]</th>
<th>[i-loc]</th>
<th>[i-loc]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[i-ASP]</td>
<td>[i-M]</td>
<td></td>
</tr>
</tbody>
</table>

Demonstratives and third person pronouns start the copula cycle, as we will see below, and that makes sense given that those have deictic features (as argued in chapter 2). I have represented the stages in Figure 4.1. In stage (a), the phi-features of the T probe are valued by the pronoun or demonstrative in VP, the demonstrative or third person pronoun moves as full phrase to the Spec of TP, and the copula moves to T. Modern English represents that stage. In stage (b), the demonstrative is a head and its phi-features are very similar to those of the copula and of the T. A reanalysis may therefore take place of the demonstrative as copula. Chinese is representative of this stage. Stage (c) shows a new demonstrative to provide interpretable phi-features for the T probe; this occurs in Saramaccan.

\(^1\) Katz’ (1996: 62) suggestion that copulas and demonstratives share “existence in time and space” focuses on both time and place whereas I think copulas and demonstratives share the location only.
Stage (b) and especially stage (c) might start to delete the copula. I will not look at the triggers for that change. There is an enormous literature (see the review in Walker 2000) on copula contraction and deletion in African American English.

In what follows, I provide examples of the various stages languages go through, starting with an overt copula and regular subject.
2. Pronoun and copula stage: English

Stage (a) is what we are used to from English, so I will keep this section short. In (11), T is a probe and agrees with the pronoun; the copula *be* and the subject move to T and the Specifier of TP respectively.

(11) \[\text{TP} \]
\[\text{She} \quad \text{T'} \]
\[\text{[i-phi]} \quad \text{[i-loc]} \quad \text{T} \quad \text{[u-T]} \quad \text{VP} \]
\[\text{[u-phi]/} \quad \text{[NOM]} \quad \text{V} \quad \text{SC} \]
\[\text{be} \quad \text{[loc]} \quad \text{She} \quad \text{AP} \]
\[\text{[i-phi]} \quad \text{[i-loc]} \quad \text{happy} \]
\[\text{[u-T]} \]

As I have argued in chapter 2, third person pronouns and demonstratives usually have deictic features, and hence there is a similarity with the (finite) copula. I suggest this makes a reanalysis possible in some languages. In English, this would probably not happen since (third) person pronouns also have case ([u-T] in (11)). If it didn’t have this, the features, after valuation would be as in (12) and be very reanalyzable.

(12) \[\text{She} \quad \text{T} \]
\[\text{be} \quad \text{[i-loc]} \quad \text{[i-loc]} \quad \text{[u-phi]} > [3S] \]
In English, the copula *be* is used for permanent as well as non-permanent qualities, unlike e.g. Spanish, and [i-loc] for *be* in (10) and (11) is meant to represent individual as well as stage level. Languages where that distinction is relevant would have an ASP(ect) Phrase, as do verbs such as *remain* in English.

3. **Demonstrative pronouns as ambiguous copulas:**

   **Chinese, Polish, and Russian**

The stage from (a) to (b) is here represented by Chinese and by Polish and Russian.

3.1 **Chinese shi**

Many have examined the origin of the copula in Mandarin Chinese. For instance, Wang (1958) argues that Ancient Chinese has no copulas, Li & Thompson (1977) put the origin of the Chinese copula (from the demonstrative *shi*) in a broader typological perspective, and Whitman (2000) formulates the change from pronoun to copula as a change from specifier to head.

In an early period (before 200 BCE), there are no copulas, according to Wang (1958), and *shi* ‘this’ typically functions as a demonstrative in *shi ri* ‘this day.’ *Shi* still has this function in very formal contexts, as in (13). In old Chinese, *shi* also functions as a resumptive pronoun with an empty copula, as in (14).

\[(13)\quad jiang\;\textit{shi}\;xiang\;jing-feijibo\;\textit{ben\;suo}\;\text{Mandarin\;Chinese}\]
\[
\text{will\;D\;CL\;funding-transfer\;D\;organization}\]
\[
\text{‘He will transfer these funds to our organization.’}
\]
\[
\text{(Academia\;Sinica\;Balanced\;Corpus\;of\;Modern\;Chinese;\;Hui-Ling\;Yang\;p.c.)}
\]

\[(14)\quad fu\;yu\;gui\;\textit{shi}\;\textit{ren\;zhi\;suo\;yu\;ye}^2\;\text{Old\;Chinese}\]
\[
\text{Riches\;and\;honor\;this\;men\;GEN\;NOM\;desire\;PRT}\]

---

2 Peyraube & Wiebusch (1994: 338) argue that ye is a copula. I have not looked into this and it could mean that ye grammaticalized into an affirmative particle and as a result a new copula appeared.
‘Riches and honor, this is men’s desire.’ (Whitman 2000: 234)

In (14), it is difficult to determine whether *shi* is a copula or a demonstrative subject. However, examples such as (15) are unambiguous since doubling occurs; in Modern Chinese, this would be rendered as (16) with a demonstrative *zhe*.

(15) **Shi shi lie gui** Old Chinese  
this is violent ghost  
‘This is a violent ghost.’ (Whitman 2000: 234)

(16) **Zhe shi lie gui** Mandarin Chinese  
‘This is a violent ghost.’ (Mei Ching Ho p.c.)

The demonstrative function of *shi* is (mainly) lost in modern Mandarin Chinese, but the copula function, as in (16), remains. It indicates identity (location, possession, and existence are expressed in different ways). It is also often used as a cleft or in a presentational construction, as in (17) and (18).

(17) **Shi wo de zuo** Mandarin Chinese  
be 1S POSS fault  
‘It’s is me (who is) at fault.’ (Hui-Ling Yang, p.c.)

(18) **Shi wo** Mandarin Chinese  
be 1S  
‘It’s me.’ (Hui-Ling Yang, p.c.)

Summarizing the situation in Chinese, one can say that this language has seen a reanalysis of the demonstrative *shi* as copula: since the features of the demonstrative are similar to those of the copula and appear in similar functional heads, this reanalysis was possible. The demonstrative *shi* itself is still used, e.g. in (13), but the main sources of renewal come from demonstratives such as *zhe* in (16). The developments in Chinese follow the copula cycle presented in Figure 4.1 very well, namely from phrase to functional head. This basic account would still be correct if Chinese turns out not to
include a TP but an ASPP as well as a Top(ic)Phrase. Then, the copula would occupy the head position and the ‘subject’ the specifier position. I’ll also mention this possibility in connection to Russian.

3.2 Polish and Russian

Most Indo-European languages have a copula derived from a verbal source (e.g. English and Dutch). Slavic languages seem to be an exception, although the change taking place there is not complete.

In Polish, the copula być ‘be' is optionally preceded by to, as (19ab) shows. In the present tense, this particle is also optional, as in (20ab), but the copula verb jest can be deleted as well, as (20c) shows.

(19) a. *Adam być lingwistą*  
Adam was linguist  
b. *Adam to być lingwista*  
Adam PRT was linguist  
‘Adam was a linguist.’ (from Rutkowski 2006)

(20) a. *Jan jest mój najlepszy przyjaciel*  
Jan is my best friend  
b. *Jan to jest mój najlepszy przyjaciel*  
Jan PRT is my best friend  
c. *Jan to mój najlepszy przyjaciel*  
Jan PRT my best friend  
‘Jan is my best friend.’ (from Rutkowski 2006)

To is historically a demonstrative and Rutkowski (2006) argues that its presence in addition to the copula provides evidence of an unfinished change. Sentences such as (20c) are of course ambiguous where the status of to is concerned and provide the impetus for reanalysis of to as copula with fewer features, according to (9).
Rutkowski argues that *to* hasn’t completely reached the head stage. He suggests that *Adam* in (19b) is in Topic position, *to* in the Spec of TP, *byl* in T, and *lingwista* in the Spec of VP. In a sentence without *to*, such as (19a), *Adam* is in the Spec of TP. One piece of evidence for the different status of *Adam* in (19a) and (19b) is that control by *Adam* is possible in (21) but not in (22). This shows that, in sentences with *to*, the DP subject is in an adjunct position.

(21) *Adam byl lingwistą, mieszkając w New Haven*  
Adam was linguist living in New Haven  
‘Adam was a linguist when he lived in New Haven.’

(22) *Adam to byl lingwista, mieszkając w New Haven*  
Adam TO was linguist living in New Haven  
(Rutkowski 2006)

Russian has a very similar construction as Polish, as is shown in (23) for the present tense. In all cases, *eto* is optional.

(23) *Misha eto nash doctor*  
Misha this our doctor  
‘Misha is our doctor.’ (Markman 2008: 366)

Markman, following others, proposes that *eto* in (23) is in the head of the TopP and suggests a reduced pseudo-cleft structure. Unfortunately, she (2008: 374) leaves the nature of the pronominal element for further research. If *eto* is in the Top head, it is not technically a copula, however.

Chinese, Polish, and Russian provide evidence of an ambiguous stage in the development of the demonstrative, one where it can be seen as a specifier or a head. This is of course necessary before a reanalysis can take place. In Chinese, *shi* has reached the head stage but Polish and Russian represent cases where we have a demonstrative that could be reanalyzed as a copula, e.g. in the present tense, but hasn’t been.
4. Pronouns reanalyzed as copulas:  
Creoles, Afro-Asiatic, and Native American languages

In this section, I discuss languages where demonstratives have been reanalyzed as copulas. There are a number of complexities, as I show.

4.1 Creoles

Creoles provide evidence that a demonstrative was reanalyzed as a copula and an earlier topic pronoun now functions as subject. This represents stage (b) of Figure 4.1. I’ll discuss Saramaccan and Cape Verdean Creole in this section, the former provides a good example but the latter only a partial one.

McWhorter (1997) presents examples of demonstrative pronouns being reanalyzed as copula verbs in Saramaccan, as in (24), where *da* derives from the English demonstrative *that*.

(24)  

a. *Mi da i tatá*  
   Saramaccan
   I COP your father
   ‘I am your father.’ (McWhorter 1997: 87)

b. *Heň da di Gaamá*  
   Saramaccan
   he is the chief
   ‘He's the chief.’ (McWhorter 1997: 98)

McWhorter (1997: 97) argues that early Saramaccan had a zero copula and the demonstrative subject pronoun *da* ‘that’ was reanalyzed as an (identificational) equative copula. He also argues that earlier *mi* and *heň* in (24ab) were in topic position but that they now are now in subject position. This seems a clear case of a demonstrative pronoun reanalyzed as copula.
Apart from the copula *da* in (24), there is another copula in Saramaccan that is derived from the locative adverb *there*, namely *de* in (25). It is used for class equatives and locatives.

(25)  

a. *a de mi tatá*  
    ‘He is my father.’ (McWhorter 1997: 99)  

b. *Dí wómi de a wósu*  
    the woman there LOC house  
    ‘The woman is at home.’ (McWhorter 1997: 88)

McWhorter (1997: 106) calls this *de* `expressive’ since he argues its origin is that of a deictic adverb. Putting this in tree form (abstracting away from Case), I see this change as one from an empty copula with interpretable location features to one where the empty copula has uninterpretable location features since the lexical *de* can be seen as having interpretable location ones.

(26)  

```
TP  
  Dí wómi de T’  
    [i-phi] [loc]  
    T    VP  
      [u-phi]  
      V    SC  
        [i-loc]  
    Di wómi de PP  
      [i-phi] [loc]  
      a wósu
```

Baptista (2002) provides sentences from Cape Verdean Creole showing a similar origin of the copula. In (27), the copula form *e* (used with individual-level predicates) derives from the third person pronoun *el* ‘he' and has kept the [3S] interpretable features since this copula can only be used for third person singulars.
The copula e in (27) has none of the deictic features since it is purely equational. Because (27) is limited to third person singular, we could also argue that e still is the subject and that the optional el is a topic. This is what Baptista (2002: 102) suggests: “e occupies the syntactic position of a copula but behaves like a pronoun”. Later on, she argues that it is also used as a focalizer, as in (28).

This means that, as copula, it can also move to the left periphery, and that being a topic or cleft marker is a natural extension of the copula.

CVC also has a stage-level copula sta that can be used with any subject, as (29) shows; when used without a pronoun, it can be first, second, or third person.

However, the origin of sta is verbal (I assume estar ‘be’ in Portuguese, which derives from the Latin stare ‘to stand’). So, CVC shows that a third person pronoun can be used as an individual level copula. It doesn’t show evidence of a demonstrative being reanalyzed in a more locational way.

Many creoles have a copula verb and, in most, this copula derives from an earlier demonstrative or pronoun, as it does in Saramaccan. Haitian (DeGraff 1992; Déprez
2003), Jamaican (Bailey 1966: 65; Durrleman-Tame 2008: 70), Sranan (Arends 1986), and Tok Pisin (Mühlhäusler 1985: 362) provide further examples.

4.2 Afro-Asiatic

The history of Hebrew and Arabic shows that copulas in these languages are derived from demonstratives or third person independent pronouns. The relevant examples come from Reckendorf (1921), Berman & Grosu (1976), Doron (1986), Katz (1996), Zewi (1996), Stassen (1997), and Naudé (2002). I’ll start with an example from Egyptian and then continue with the Semitic branch of Afro-Asiatic. Cushitic and Chadic languages also display some evidence of this change, but I do not go into these.

Loprieno (1995: 68) explains that in Old Egyptian there were many series of demonstratives. There was a pronominal based one, with a person marker (p- for masculine singular, t- for feminine singular, and jp- and jpt- for the plural) followed by a deictic element (e.g. –n and –w for different degrees of closeness). This resulted in demonstratives such as pn ‘this’ and jpw ‘those’ in (30).

(30) a. \( rmt \ p-n \)  
   man  MS-PROX  ‘this man.’

b. \( ntr-w \ \ jpw \)  
   god-P  MP-DIST  ‘those gods.’ (Loprieno 1995: 68)

According to Loprieno, the masculine distal pw-pronouns became copulas in Middle Egyptian, as in (31), not agreeing in gender or number with the nominal predicate.

(31) a. \( rmt \ pw \)  
   man  be  ‘This is a man.’ (Loprieno 1995: 68)

b. \( \text{idmj} \ pw \ \ jmnt \)  
   city-F  be  west-F  ‘The West is a city.’ (Loprieno 2001: 1752)
This change could have happened because of a reanalysis of the demonstrative as an element without phi-features but keeping its deictic features, as in (32).

(32) | Old Egyptian | Middle Egyptian |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>p-w</td>
<td>pw</td>
</tr>
<tr>
<td>[i-phi]</td>
<td>[i-loc]</td>
</tr>
</tbody>
</table>

Note that (31a) would still be ambiguous, but not (31b).

In Modern Hebrew, the third person pronoun can optionally function as a present tense copula, as in (33), or a regular subject, as in (34). This means that the pronoun is either a pronoun or a copula and could in principle be reanalyzed in (33).

(33) dani (hu) ha-more

Dani he the-teacher

‘Dani is the teacher.’

(34) hu malax 'al jisra'el

‘He ruled over Israel.’ (Katz 1996: 86)

However, this situation is reminiscent of Polish and Russian in that the past tense still requires an overt verb with tense and deictic features. This means reanalysis will not take place.

Eid (1983), among many others, argued that pronouns also serve as present tense copulas in Arabic, as (35) shows. They can appear with non-third person subjects as well, as in (36a), but agree in gender and number, as (36b) shows.

(35) allahu huwa 'lhayyu

God he the-living

‘God is the living.’ (Benveniste 1966 [1971: 165])

(36) a. 'ana huwwa l-mas'u:l

Egyptian Arabic
I he the-responsible

‘I am the responsible.’ (Edwards 2006: 51)

b. il-mushkila hiyya T-Talaba

the-problem(FS) she the-students

‘The problem is the students.’ (Edwards 2006: 52)

There is a copula kaːn for non-present tenses, but it seems as if the reanalysis of the pronoun to copula is complete in the present tense, at least in Egyptian Arabic, since the erstwhile pronoun is negated the same way as a verb. Note (37) where hiyya behaves as a regular verb.

(37) faTma ma-hiyya:-sh il-mas’u:la Egyptian Arabic
    Fatima NEG-be.3SF-NEG the-responsible

    ‘Fatima is not the one responsible.’ (Edwards 2006: 53)

The status of the pronominal copula is still controversial, however. Building on Simpson & Wu (2002), Edwards argues for a pronominal analysis of the copula, noting that the negative surrounds many other non-verbal elements and that (37) is a focusing construction. The most likely development is one where the pronoun (with interpretable phi- and deictic features) in a specifier position of the VP was reanalyzed as a head with uninterpretable features, e.g. as V in (26) (though v in a vP shell would also work). The uninterpretable features would probe a new goal. The status of subjects such as faTma in (37) can be either argument or not. If they are non-arguments, there would be a pro providing new phi-features for T, possible since Arabic is a pro-drop language.

A possible piece of counterevidence to the pronoun being a head is that in neither Arabic nor Hebrew can we ‘double’ the pronoun, as shown in (38) for Hebrew.

(38) *hu hu more Hebrew
    he he teacher

    ‘He’s the teacher.’ (Doron 1986: 326)
This could be a phonetic constraint, as argued in xxxx (see Nunes 2004).

Naudé (2002) examines an earlier stage of Hebrew, namely Qumran Hebrew, used about 1800 years ago. In Qumran Hebrew, the post-copular element can only be a definite nominal, as in (39), not an indefinite or an adjective, as in Modern Hebrew.

(39) ‘thhw’ yhwh Qumran Hebrew
    You he lord
    ‘You are the Lord.’ (Naudé 2002: 162)

This suggests a demonstrative origin, as in Egyptian, which may not yet have been grammaticalized in the case of (39).

Another Semitic language that developed a copula from a demonstrative is Amharic. Stassen (1997: 78) suggests that the “copula na/ne in this language may have had a demonstrative origin.” It now appears in final position, as in (40), which is typical of verbs.

(40) Antä tòlləq nà-h Amharic
    2S big be-2S
    ‘You are big.’ (Stassen 1997: 78)

In conclusion, Afro-Asiatic languages frequently reanalyze demonstratives as copulas. Different languages show different stages: Middle Egyptian clearly has such a copula but the evidence in Hebrew and Arabic is still contested.

4.3 Native American Languages

Native American languages provide many examples of copulas derived from a demonstrative/pronoun. Pustet (2003: 58) shows that the Lakota copula hécha goes back to the demonstrative hé. I will just mention Zoque.
Faarlund (2004) provides an example from Zoque, a Mixe-Zoque language of southern Mexico. In (41), the demonstrative te’ is shown as well as its more grammaticalized use as a predicate marker te having assimilated to -de.

(41) Te’ une che’-bü-de
    The child small-REL-PRED
    ‘The child is small.’

In this section, instances have been provided where demonstratives and third pronouns are reanalyzed as copulas.

5. Turkish and Hebrew: Possible Counterexamples

Katz (1995) provides many examples of pronouns being reanalyzed as copulas, including the ones mentioned above in Chinese and Hebrew. However, she also provides some reconstructed evidence from earlier stages of Turkish and Hebrew of the opposite development namely that copulas change into pronouns.

Based on a dictionary of Turkish from before the 13th century, Katz (1995, chapter 6) argues that the present-day Turkish pronoun o(n) ‘s/he’ derives from the verb ol-mak ‘be-INF’. In the early texts, ol already appears as demonstrative and pronoun, but Katz argues that the copula use was earlier. Her main reason is that early texts “make sparing use of independent pronouns” (1995: 122). To me, this is not a convincing argument for claiming that the copula was earlier than the pronoun. Arabic, for instance, also avoids subject pronouns such as huwwa ‘he’, as in (42).

(42) (huwa) jaa’-a
    he came-3MS ‘he came’.
The case of a possible reverse development in Hebrew is more complex. Katz (1995, chapter 7) argues that the origin of *hu* in Hebrew (33) is the verb *xaja/xawa* ‘to live’. Her grammaticalization path for Hebrew is as in (43).

(43) xaja/xawa haja/hawa howo hu hu
   a   b   c
   ‘to live’ ‘to be’ ‘his being’ ‘he’ ‘be’

(Katz 1995: 189)

She provides (44) from Biblical Hebrew with most of the stages of (43) represented. According to Katz, the etymology of ‘Eve’ is connected to ‘life’ from being ‘the mother of all life’.

(44) wajriqa ha’adam sem išto xawa Biblical Hebrew
called the-man name wife Eve
ki hi hajta ‘em kol-xaj
because she was mother all-alive

‘And Adam called the name of his wife Eve because she was the mother of all living things’. (Genesis 3:20, from Katz 1995: 166)

The change from (43a) to (43c), i.e. a change to the use of *hu* from copula verb to pronoun, would constitute a counterexample to what I have presented in this chapter since a pronoun has more features than a copula. The argument that this happened seems to rest on the assumption that the pronoun is a cognate of a lexical verb. However, there is no stage with just the lexical verb and not the pronoun. This means that the pronoun was always around and therefore, the counterexamples to a unidirectional cycle are not convincing.

Another possible counterexample is provided in Kwon (2009) who argues that the auxiliary *be* in Old North Russian developed into a pronoun. Old Russian was pro-drop and there was a *be* ‘available’ after the resultative *l*-participle. This verb became used on its own as a general past tense. Kwon argues that pronouns and auxiliaries were similar
enough in their feature specifications to have this happen. I think one of the problems is that, if the new pronoun is indeed a full pronoun, the change would mean that an earlier head is now projecting as a phrase. I don’t see evidence of that in Kwon’s data.

6. Specialized demonstratives

In section 4, we saw that both da and de are used as copulas in Saramaccan. They have specialized functions, e.g. as identificational and locative copulas. Some copulas develop special aspectual uses, as is most obvious in the copulas that have a verbal source. In this section, I provide a brief overview of the data from Panare presented in Gildea (1993).

Panare is a Cariban language where the past and present tense marking auxiliaries are argued by Gildea (1993) to derive from distal and proximal demonstratives via a copula stage. The proximal kēj can be used to draw attention to something being in the present, whereas the distal nēj is more typically a default or the past, as in (45).

(45) maestro nēj chu Panare
teacher DIST 1S

`I was a teacher.’ (Gildea 1993: 61)

A demonstrative indicates the spatial deixis of a nominal; as copula, “the deixis is now of the predications” (1993: 59).

In addition to the development of (45), nominalized verbs are used with copulas, as in (46). The copulas are syntactically the same as other auxiliaries, though their use is extremely complex (and beyond this chapter).

(46) ē’pumanēpēj kēj Toman Panare
detrans-hit-IMPF PROX Thomas

`Thomas is falling.’ (Gildea 1993: 65)
Thus, Panara shows that, if both distal and proximal demonstratives are reanalyzed, they may be specialized for tense.

7. Conclusion

In this chapter, I have examined the pronominal and demonstrative source of copulas since this is relevant to the development of head marking. The changes can easily be accounted for either in a Feature Economy framework or with the Head Preference Principle. If demonstratives and third person pronouns have deictic features, they can be `confused’ with copulas, i.e. are ambiguous, and can be reanalyzed. The `confusion’ is in accordance with the Feature Economy cline of (9). If ambiguous, a lexical item will be reanalyzed with fewer features.

Other sources for copulas, such as adpositions and locational verbs, also fit the Feature Economy framework, but see Lohndal (2009) for more on that.