

## **Chapter 4**                      **From *Linguistic Cycles*, Elly van Gelderen, in progress.**

### **The Pronominal Copula Cycle**

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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 intact. 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-Aztec, 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'inə a gərə* 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.



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) *Jan zit in Frankrijk* Dutch  
 Jan be-3S in France  
 ‘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) *Ni-k nainc* Chemehuevi  
 1S-FOC girl  
 ‘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) The elephant that happy  
 TOPIC SU VP  
 ↓  
 SU copula VP

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)	demonstrative/pronoun	> copula	> grammatical marker
	specifier	> head	> affix
	[i-loc]	> [i-loc]	> --
	[i-phi]	> [u-phi]	
	[u-T]		

I haven't seen an analysis of copulas in terms of features<sup>1</sup>. 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)	<i>be</i>	<i>remain</i>	<i>seem</i>
	[i-loc]	[i-loc]	[i-loc]
		[i-ASP]	[i-M]

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.

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<sup>1</sup> 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.

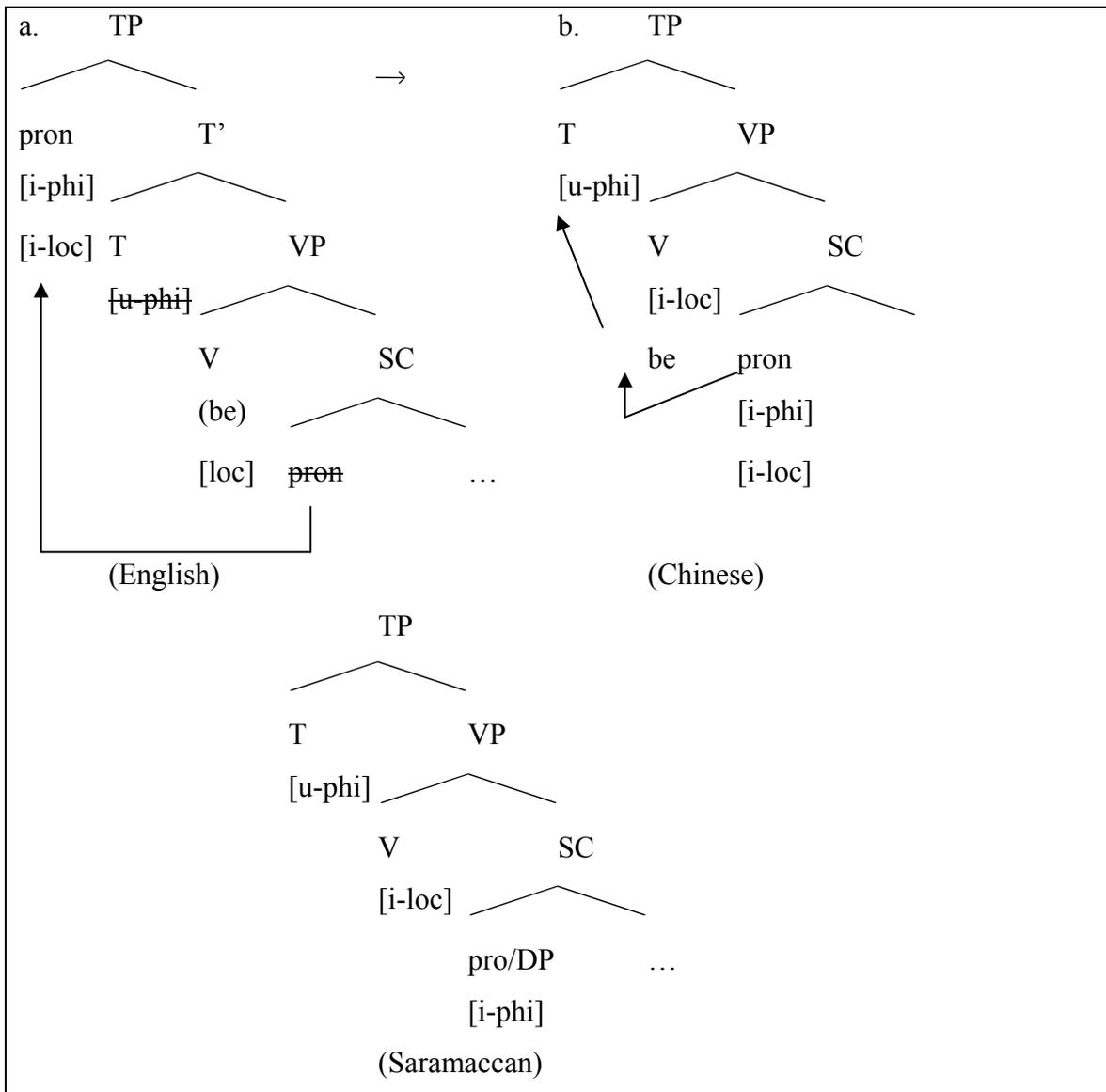


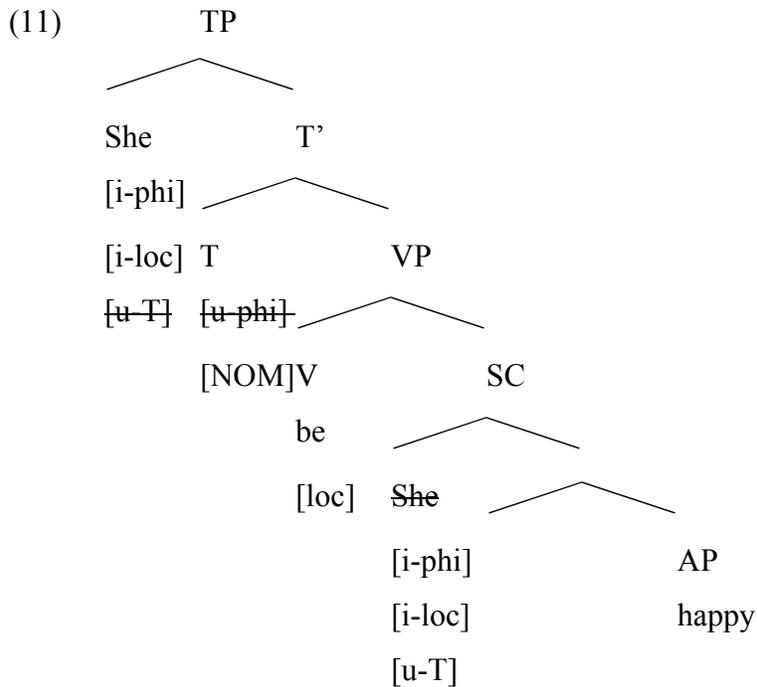
Figure 4.1: The Pronominal Copula Cycle

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.

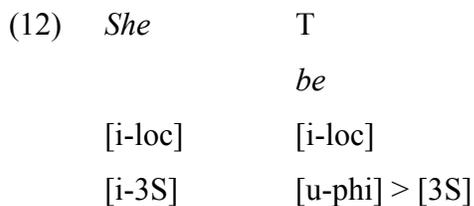
In what follows, I provide examples of the various stages languages go through, starting with an overt copula and regular subject.

## 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.



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.



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) *jiang shi xiang jing-feijibo ben suo* Mandarin Chinese  
will D CL funding-transfer D organization  
‘He will transfer these funds to our organization.’

(Academia Sinica Balanced Corpus of Modern Chinese; Hui-Ling Yang p.c.)

(14) *fu yu gui shi ren zhi suo yu ye<sup>2</sup>* Old Chinese  
Riches and honor this men GEN NOM desire PRT

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<sup>2</sup> 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 był lingwistą* Polish  
Adam was linguist
- b. *Adam to był lingwista*  
Adam PRT was linguist  
'Adam was a linguist.' (from Rutkowski 2006)
- (20) a. *Jan jest mój najlepszy przyjaciel* Polish  
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).



#### 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*.

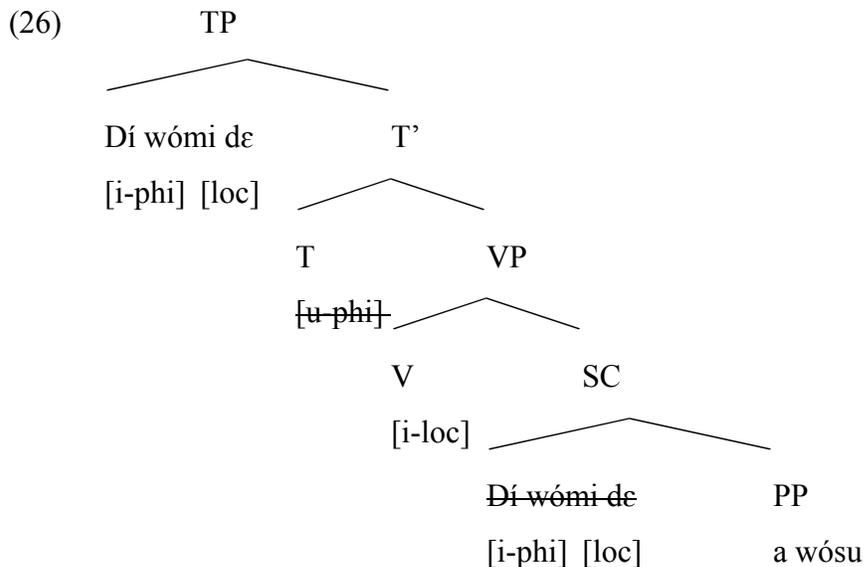
- (24) a. *Mi da i tatá* Saramaccan  
I COP your father  
'I am your father.' (McWhorter 1997: 87)
- b. *Hɛn d̩́ dí Gaamá* Saramaccan  
he is the chief  
'He's the chief.' (McWhorter 1997: 98)

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 *hɛn* 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 *dε* in (25). It is used for class equatives and locatives.

- (25) a. *a dε mi tatá* Saramaccan  
 ‘He is my father.’ (McWhorter 1997: 99)
- b. *Dí wómi dε a wósu*  
 the woman there LOC house  
 ‘The woman is at home.’ (McWhorter 1997: 88)

McWhorter (1997: 106) calls this *dε* ‘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 *dε* can be seen as having interpretable location ones.



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.



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* Old Egyptian  
 man MS-PROX 'this man.'
- b. *ntr-w jp-w*  
 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* Middle Egyptian  
 man be  
 'This is a man.' (Loprieno 1995: 68)
- b. *tmjt 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 |
|      | <i>p-w</i>   | > | <i>pw</i>       |
|      | [i-phi]      |   | [i-loc]         |
|      | [i-loc]      |   |                 |

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) | <i>dani</i>            | <b>(hu)</b>  | <i>ha-more</i>      | Hebrew          |
|      | Dani                   | he           | the-teacher         |                 |
|      | ‘Dani is the teacher.’ |              |                     |                 |
| (34) | <b>hu</b>              | <i>malax</i> | <i>'al jisra'el</i> | Hebrew          |
|      | ‘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) | <i>allahu</i>                                      | <b>huwa</b> | <i>'lhayyu</i> | Arabic           |                 |
|      | God  | he          | the-living     |                  |                 |
|      | ‘God is the living.’ (Benveniste 1966 [1971: 165]) |             |                |                  |                 |
| (36) | a.   | <i>`ana</i> | <b>huwwa</b>   | <i>l-mas'u:l</i> | Egyptian Arabic |



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) *'th hw' 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 tälləq nä-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* Zoque  
 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 13<sup>th</sup> 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* Arabic  
 he                    came-3MS    'he came'.





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.