As we have seen in the previous chapter, definiteness and specificity can be expressed in a number of ways, through position, structural Case, verbal aspect, and of course through a determiner. In this chapter, I examine changes in determiner systems. Demonstratives are involved in cyclical changes by becoming articles and later class or Case markers (cf. Greenberg 1978 and Lyons 1999). This involves the grammaticalization of deictic features. For instance, the Old English masculine demonstrative pronoun *se* develops into the definite article *the*. When the demonstrative is renewed, it is often done so through a locative adverb, as in English with the adverb *there/here* (cf. Brugè 1996).

The changes from demonstrative to article can easily be expressed using a Determiner Phrase (DP), where the demonstrative is in the specifier position (possibly having moved there) and the article is the head. I will focus on cyclical changes involving the DP rather than definiteness, the more so since there are languages and language families, e.g. Salish (Matthewson 1998), where definiteness and specificity are argued not to be part of the determiner system. The structural changes involved in the cycle are from specifier to head to affix of the DP, not surprising given changes described in earlier chapters. Again, I will put these changes in terms of Feature Economy: semantic features are reanalyzed as interpretable and then uninterpretable features. The cycle involves changes both in syntactic position, feature content, and semantic function; I focus on the former two.

In section 1, I first briefly review some views on definiteness and specificity, the structure of the DP, and the (definite) DP-cycle. I assume a DP even if a language doesn't have articles. In sections 2 through 8, I look at different language families starting with Indo-European in sections 2 and 3 since so much is known about this family. Each language corresponds to a different stage of the cycle, but by looking at the languages in a family, cyclical change can be seen in some. Some languages are just grouped for convenience, not because of typological or genetic classifications. Uralic is represented in
section 4 by Finnish and Hungarian and section 5 examines some families of North America. Section 6 discusses the DP cycle in Austronesian, section 7 in Afro-Asiatic, Niger Congo, and section 8 looks at creoles. As in previous chapters, I argue that certain grammatical features are lost in this cycle and then replaced by new semantic ones.

1.  Definiteness, the DP, and the DP cycle

I will first examine definiteness and specificity in nominals very briefly, and then turn to a structural representation of the nominal in the form of a DP as well as a discussion of the DP cycle.

1.1  Definiteness and Specificity

Lots has been written about the difference between definiteness and indefiniteness, and between specificity and non-specificity. Definite the in English is used in familiar contexts where both the speaker and hearer know the referent. Uniqueness is an aspect of definiteness as well, as argued by Russell (1905). Specificity can be defined through identifiability or, as in Frawley (1991: 69), as "the uniqueness of the entity", e.g. a particular man in (1), not just any man.

(1) I'm looking for a man who speaks French (Frawley 1991: 69)

Specificity is relevant for a number of grammatical phenomena, e.g. whether to use indicative or subjunctive in Spanish in (2). The indicative is used for a specific man in (2a) and the subjunctive for a non-specific man in (2b).

(2) a. Busco a un hombre que habla francésSpanish
    look-I for a man who speak-3S.IND French
    'I am looking for a man who speaks French.'
    b. Busco a un hombre que hable francésSpanish
Many languages mark specificity through morphological or syntactic means, namely definiteness marks specificity and indefiniteness non-specificity. However, (1) shows that there is not a one-to-one relationship between the two since (1) is indefinite and yet specific. A very common way to mark definiteness is through a demonstrative or an article. The demonstrative and the article both have an identifying function, but demonstratives have an additional locational or temporal feature.

1.2 The DP

Since the mid 1980s, a basic structure for nominals is a DP, as in (3).

(3) DP  
    \[ \text{my favorite dog} \quad \text{D}' \quad \text{NP} \quad \text{'}s \quad \text{N} \quad \text{... toy} \]

The specifier of the DP contains demonstrative pronouns or possessive nominals (the latter moved from a lower position), and the D head contains articles and possibly the genitive marker 's in English. There are restrictions on the co-occurrence of definite markers. Thus, in English, either the specifier or head can be present but not both, as (4a) shows, and that, but not the, appears independently, as (4bc) shows.

(4) a. *That the dog loves their the toys.
    b. I saw that.
    c. *I saw the.
Cross-linguistically, if both a demonstrative and article appear, the order is [DEM ART N] or [ART N DEM], according to Rijkhof's (2002: 179-180) list of languages. This fits (3) well in that [DEM ART N], attested in e.g. Abkhaz, Guarini, and Hungarian, is the base order, and [ART N DEM], attested in e.g. Berbice Dutch Creole and Galela, has a specifier-last structure. The structure in (3) can be expanded with agreement and Case features, e.g. through a Num(ber) Phrase or a Kase Phrase, and I will do so where necessary.

Adjectives are placed in between the determiner layer and the noun. They have been analyzed in many different ways. Early on, the AP was an adjunct inside the NP, as in (5a); later, the AP was given its own projection, e.g. as in (5b).

\[(5)\]

\[\begin{array}{ll}
\text{a. NP} & \text{b. DP} \\
\begin{array}{c}
\text{Det} \\
\text{the}
\end{array} & \begin{array}{c}
\text{D} \\
\text{the}
\end{array} \\
\begin{array}{c}
\text{AP} \\
\text{energetic}
\end{array} & \begin{array}{c}
\text{A'} \\
\text{energetic}
\end{array} \\
\begin{array}{c}
\text{N'} \\
\text{puppy}
\end{array} & \begin{array}{c}
\text{A} \\
\text{N}
\end{array} \\
\begin{array}{c}
\text{N}
\end{array} & \begin{array}{c}
\text{NP}
\end{array}
\end{array}\]

Many researchers, e.g. Valois (1991), Laenzlinger (2000), and Cinque (to appear), have split up the AP even further. For instance, quality adjectives such as beautiful linearly precede size adjectives such as round, i.e. are merged later. Some also distinguish between inherent (Individual Level) and non-inherent (Stage Level) adjectives. Chierchia & McConnell Ginet (2000) use a division of intersective, subsective, and non-predicating. To map the syntactic position of an adjective to a semantic meaning is a challenge and I will not attempt this here.

For Old Norse and Old English, I will use a DP structure based on Cinque (to appear), Spamer (1979), Fischer (2000; 2006), and van Gelderen & Lohndal (2008),
where there is a crucial difference between the nominal adjective (mainly pre-nominal in position and inflected as weak) and the verbal adjective (in both positions, inflected as strong). I argue that strong verbal adjectives originate as reduced relative clauses in postnominal position, and that prenominal weak adjectives are nominal. Cinque describes adjetival positions in Romance and Germanic and notes that they display some mirror effects. His suggestions for Germanic work well for Old English.

In English (Germanic) the prenominal position is systematically ambiguous between the two values of each property [stage-level and individual-level, etc], while the postnominal one (when available) has only one value: stage-level, restrictive, implicit relative clause, and intersective readings [...] In Italian (Romance), instead, it is the postnominal position that is systematically ambiguous between the two values of each property, while the prenominal one only has the individual-level, nonrestrictive, modal, nonintersective, absolute, absolute with superlatives, specific, evaluative, and NP dependent, readings (Cinque in press: chapter 2).

As to feature checking inside the DP, articles are clear probes located in D, as in (6a), with uninterpretable features checking the phi-features of the noun. Since *the* has [u-phi], it cannot occur on its own, as shown in (4c). The demonstrative can occur on its own, as in (4b), and I therefore assume it has [i-ps] or [i-ps] and [i-loc], as shown in (6bc). Number in (6bc) has to be checked, as I have indicated1, but the exact probe on the demonstrative still has to be determined. That probe might be [u-#] with no probe in the NumP when a demonstrative appears.

(6) a. DP b. DP c. DP
   \[\begin{array}{c}
   DP \\
   \hline
   D \quad \text{NumP} \quad D \quad \text{NumP} \quad \text{that} \quad D'
   \end{array}\]

---

1 Diessel (1999: 25) shows percentages of inflection on demonstratives in 68 languages that have inflection and shows that number marking is the most frequent, followed by gender and Case.
The English D in (6a) and (6b) would also have [u-T] or [u-ASP], valued by the T and v respectively; the DP in (6c) would not and would be expected in a non-structural Case position. Not all languages might have all three possibilities.

I have not indicated gender in (6), but in languages with gender such as Dutch, German, Romance, or Hindi/Urdu, the D head would also probe for gender. I assume the same holds for adjectives: they have uninterpretable gender and number and look down the tree to value those features.

In the next section, I suggest that the change from demonstrative to article is determined by (a) the shift from specifier to head, and (b) the (complete) loss of interpretable features (iF). That would mean a reanalysis of (6c) as (6b) as (6a). The exact mechanism of probing/feature checking presented in (6) remains to be made more precise.

1.3 The Cycle and Economy

Greenberg (1978) describes a cycle where demonstratives become articles (stage I) that in turn become non-generic markers (stage II) and finally noun class markers (stage III). Greenberg's examples come from languages in the Niger-Congo family, and from Semitic and Indo-European. He emphasizes that the cycle "constantly generates concordial phenomena" (Greenberg 1978: 75). Diessel (1999) and Lyons (1999) expand on these stages and see the initial loss of the deictic character as crucial. As we have seen in the previous chapter, articles are also reanalyzed as Case markers and demonstratives can be reanalyzed as finite complementizers, as we'll see in the next chapter.

The definiteness cycle can be represented as in (7). Using a DP structure, (7a) translates into (7b). The specifier becomes a head which subsequently disappears and is replaced by a new specifier. In (7c), the changes involving the features are listed.
Figure 7.1 shows these changes in tree form (although (6b) is not shown). In stage (a), the demonstrative has interpretable features, which are reanalyzed as uninterpretable in stage (b). Stage (c) shows the renewal of the features by means of an adverb.

Figure 6.1: The DP Cycle (‘dem’ stands for demonstrative and ‘art’ for article)

Renewal of the demonstrative, as in stage (c), is frequent with locative adverbs, which (8) and (9) show, or with additional demonstratives, as in (10) and (11).

(8) die man *hier/daar* Dutch
    that man here/there
(9) *den hör/där* mannen Swedish
    the here/there man-DEF
(10) el *hombre este* Spanish
    the man this
As is known from the grammaticalization literature, when an element grammaticalizes, both the source and the new element may survive. We see this in (10) and (11) and will see it in a number of languages below.

The numeral is frequently reanalyzed as indefinite article, as in (12) from Kurdish, a Western Iranian language. In other Iranian languages, there are also indefinite affixes, e.g. in Balochi (Royen 1929: 485).

(12) a. *jek* mal
    one house

    b. *mal-ək*
    'a house.' (both from Lyons 1999: 95)

The Old English numeral *ane* corresponds to the Modern English *a(n)* and Sorbian has also grammaticalized the numeral 'one' into indefinite marker. In Upper Sorbian, *jedyn* 'one' is usually *jen* when used as article. This change can be represented as in (13a) (see Lehmann 2002: 46-7). The syntactic change, as in (13b) depends on one's theoretical assumptions on what numerals are and where indefinite articles are in the DP. It could be expressed easily as a cycle and through a loss of interpretable features as in (13c) (where F is number) though this chapter will only consider definiteness and specificity marking:

(13) a. numeral > indefinite pronoun > indefinite article

    b. Q/A > D > zero

    c. iF > uF > zero

In this first section, I have given background on definiteness, the DP, and the DP cycle. I now turn to examples of the DP cycle.
2. Indo-European: Germanic

As mentioned in the previous chapter, in Proto-Indo-European and Proto-Germanic, there are no definite and indefinite articles, although there is evidence that the Case markers have reanalyzed from earlier definiteness markers. Germanic seems to have had many cycles, however. For instance, Ringe (2006: 170) sees in the weak adjectival -n ending an original definite article (though Curme 1910: 441 and Lockwood 1968: 40 consider it a nominalizer). Other articles arise later, e.g. in Old Norse, in early Middle English, and in High German (see e.g. Demske 2001 and Philippi 1997 for the latter), mainly originating from demonstrative pronouns or adverbs.

The history of Scandinavian shows that demonstratives go through several cycles of Figure 6.1 above. The complicating factor is the intricate nature of the DP with multiple definite layers. Demonstratives in the history of English are also complex but here I will simplify the structure as a DP. I end the section with some stages in other Germanic languages, for instance, Afrikaans which analyzed Dutch demonstratives as articles and renewed the demonstratives through an adverb.

2.1 Scandinavian

The runic inscriptions from the 5th century on show very few demonstratives and no obvious articles. In Antonsen's (1975) set of early runic inscriptions, there are three demonstratives, (14) from the fifth century, (15) from the sixth century, and (16) from the seventh century.

(14) wate hali hino
    wet stone this
    'Wet this stone.' (Strøm stone; Antonsen 1975: 54-55)
(15) worte ūat azina
    wrought this stone.
    (Buskerud stone; Antonsen 1975: 80-81)

2 Section 2 is based on material from van Gelderen (2007) and on van Gelderen & Lohndal (2008) though the analysis is a little different.
In the non-runic Old Norse texts, e.g. the Poetic Edda from the 12th or 13th century, there are very still few markers of in/definiteness, as the bare noun in (17) shows. The demonstrative pronouns *hinn* and *sa* (and their morphological variants) are typically used independently, as in (18) and (19).

Sentences (18) and (19) are very similar in structure and the pronouns *hinn* and *sá* refer to similar abstract persons, and both start a stanza. There is also an *inn* which is less independent since it only occurs before weak adjectives and nouns, as in (20) and (21). The form of the adjective is always the weak one, and this will feature in my analysis.
There is also a suffixed form of *inn* but these are rare (e.g. in *Hávamál*, there are 10 instances, as in (20), of independent *ins* but none of a suffixed form).

The use of the demonstrative *sa* and its variants before a noun is less frequent in the *Poetic Edda* but does occur, e.g. (22).

(22) *sökkðisk síðan sá fiskr í mar* Old Norse
sank then that fish in sea

‘and the fish sank into the sea.’ (*Edda, Hymniskviða* 24).

In later texts, there are even more ways to express definiteness, as shown most recently by Faarlund (2004; 2007; 2009), Abraham & Leiss (2007), and Lohndal (2007). An independent definite article (*h)inn* continues to be used before a weak adjective as in (23), and the noun can be marked for definiteness, as in (24), when no adjective precedes the noun. There can also be just a demonstrative pronoun, as in (25).

(23) *ok hinn siðasta vetr er hann var í Nóregi* Old Norse
and the last winter that he was in Norway

(*Bjarni's Voyage* 41.8, Gordon 1956)

(24) *konung-ar-nir* Old Norse

king-P-DEF

‘the kings.’

(25) *ok var þann vetr ...* Old Norse
and was that winter

‘and he was during that winter ....’ (*Fóstbræðra Saga* 78.11, Faarlund 2004: 82)

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3 Though Faarlund provides two instances of doubling that I don't discuss because they are rare:

(i) *ins versta hlutarins* Old Norse
the worst-W part-DEF

‘of the worst part.’ (*Bandamanna Saga* 46.21, Faarlund, 2004: 58)

(ii) *hinir beztu menninn-ir* Old Norse
the.MP.NOM best-W men-DEF

The article and demonstratives (both proximal and distal) in Old Norse are inflected for Case, gender, and number. Thus, *hinn* in (23) is a nominative singular masculine, *nir* in (24) is a plural masculine nominative, and *þann* in (25) is an accusative masculine singular.

Having the demonstrative and article occur together is also possible, as in (26) to (28), and this could indicate that *it* is in the D head and the demonstrative *þat* in the specifier position of a DP, as I will argue below. Notice again that the adjectival endings are weak:

(26) *þat it helga sæti* 
    that the holy-W seat
    'The holy seat.' (Gordon 1956: 312)

(27) *þau in storu skip* 
    those the big-W ships
    'Those big ships.' (*Heimskringla* I, 437.13, Faarland 2004: 82)

(28) *þat it mikla men Brisinga* 
    that the mighty-W necklace (of Freyja)
    'The mighty Brisinga necklace.' (*Thrym's Lay*, 13)

A possessive pronoun can also precede the article, as in (29), though of course a possessive precedes a noun regularly on its own, as in *þinn hamar* 'your hammer.'

(29) *þitt hitt milda andlit* 
    your the mild-W face

Faarlund (2004; 2007) suggests a double DP for the sentences in (26) to (31) (one DP and one RP, for Reference Phrase). His main argument for the double structure is that a noun may appear before the demonstrative, as in (30) and (31). I will argue that in these sentences the demonstrative (*þat* in (30) and *sa* in (31)) is a D head and that the preposed
nominal is in the specifier of DP. The article *inn* is in a low position. Thus, demonstratives in Old Norse are ambiguous between specifier and head.

(30)  
\[ \text{fé pat allt} \]  
\text{money that all}  
\text{`all that money.' (Egil's Saga 232.9, Faarlund 2007; 2009)}

(31)  
\[ \text{kvistr sa inn fagri} \]  
\text{twig that the fair}  
\text{`that beautiful twig.' (Barð 3.8, Faarlund 2007; 2009)}

Building on recent work by Julien (2005), Lohndal (2007), and Roehrs (2009), I will suggest that the basic DP in Old Norse is as in (32), with the article *hitt* in a low position and the weak (nominalized) adjective more like a compound, indicated by the Adj head. The demonstratives *sa*, *pat*, and *þau* are in the specifier or in the head.

(32)  
\[ \text{DP} \]  
\[ \{ \text{Poss NP} \} \]  
\[ \text{D'} \]  
\[ \text{D} \]  
\[ \text{nP}^4 \]  
\[ \text{þitt} \]  
\text{your n NP}  
\[ \text{hitt} \]  
\text{the Adj N}  
\[ \text{milda andlit} \]  
\text{mild face}

I have not found sentences with a possessive and a demonstrative (e.g. *þitt pat andlit* [your that face] or *pat þitt andlit* [that your face]). I will take this absence to

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4 The nP is used in parallel to the vP, i.e. in order to accommodate the argument structure of verbal nouns.
indicate that the possessive can also check deictic features (see Wood 2003; 2007b) and that its typical position is (still) in the specifier position.

The DP in (32) has a specifier that can be occupied either by a possessive, as in (29), or a nominal, as in (30) and (31). I assume that the demonstrative is analyzable as specifier, e.g. in (26), or as head D, e.g. in (30), since there is evidence for both to the language learner. The head position has the grammaticalized demonstrative. The n head is what renders the noun root referential and this head can be joined by the head noun, as in (30) above. When the (weak) adjective precedes the noun, *inn* plays a role in nominalizing the adjective. Nygaard (1906: 48) formulates the individual-level character of the weak adjective as "[a]djektivet betegner da en bekjendt egenskab ... eller en egenskap, der tillhører gjenstanden efter dens natur og væsen" [the adjective denotes a known characteristic … or a characteristic that belongs to the thing according to its nature]. Prokosch (1939: 260) and others similarly suggest that these weak adjectives "denote permanent quality", much like the noun.

A (mainly post-nominal) strong adjective is predicative and individualizes, and could be represented as a reduced relative clause (see also Cinque to appear). A tree for strong adjectives is given in (33), with the words of (35) below filled in. It is similar to the structure in van Gelderen & Lohndal (2008), with the structure of the relative clause undetermined.

(33)  
```
  DP
     
    D       D'
    
  ein

  one   nP   RC
  
    ... N ... AP
    berg harðla hátt ok bratt
    mountain very high and steep
```
In the case of pre-nominal strong adjectives, the AP moves into a higher position (with the A in D picking up the strong inflection). The strong ending is often called the pronominal one.

The difference between the weak and strong adjectives explains why pre-nominal adjectives do not stack and are typically heads not phrases. Post-nominal adjectives can be phrasal of course, as in (34) and (35).

(34) \textit{ok sá par mikinn her} \\
and saw there big-S army \\
‘and saw a big army there.’ (Hkr II.229.7; Faarlund 2004: 68)

(35) \textit{eitt berg harðla hátt ok bratt} \\
one mountain very high and steep \\
‘one very high and steep mountain.’ (Barl 47.36, Faarlund 2004: 95)

I'll now turn to features. When a demonstrative occurs on its own (and is in the specifier position), as in \textit{Hinn er sæll} in (18) above, it has interpretable features that do not need to probe for a noun. It was claimed above that a D head has uninterpretable phi-features and that the phrase in the specifier position has (mainly) interpretable features. The Old Norse uninterpretable phi-features on D include number and gender and they are valued by the noun's interpretable features. If a demonstrative with interpretable locative/deictic features is used, the D can be empty. As to the features of the n probe, they probe for phi-features (in fact before the D does so) to ensure that the root is a noun (in Chomsky 1995, these would be categorial features).

In terms of the cycle, the historical development described above is what we would expect in terms of demonstratives being reanalyzed as articles. How about the nominalizer in n? At some point, let's say Proto-Old Norse, a locative adverb \textit{hinn/hitt} 'here' is incorporated as part of the nP, as in \textit{hali hino} 'stone this’ above. Then, it is reanalyzed as a head and as a clitic nominal marker in Old Norse sentences such as (24). The latter is the origin of the Modern Norwegian and Swedish -\textit{en/-et}, which Faarlund (2007) argues is an affix. Old Norse then renews its locative marker through a demonstrative, such as \textit{sa, pat, or pann}, possibly appositive initially. Since these are
deictic elements, a DP is triggered and they are incorporated as specifiers of the DP. Aspectual prefixes are also lost and this may have contributed to this reanalysis as well (see chapter 5). These demonstratives correspond to *det* and *den* in Modern Norwegian and Swedish (*det* for neuter nouns and *den* for the others). Examples of this later stage are modern Swedish (36) and (37).

(36) *den nya bok-en*  
the new book-the

(37) *bok-en*  
book-the, ‘the book.’

Renewal of deixis in Scandinavian has two sources, one locative adverb that is incorporated into the DP in a low position and an appositive demonstrative pronoun that is incorporated quite high in the DP. Similarly, Dahl (2004: 178) argues that there are two grammaticalizations going on independently in Scandinavian but that external factors make the situation opaque. He says the suffix strategy in addition to a demonstrative, as in (36) from Swedish, is basically the option Scandinavian languages of the northeastern areas use and the prenominal demonstrative without nominal affix, as in (38), is the pattern the southwestern languages use (i.e. most Danish dialects). The pattern in (36) is commonly referred as double definiteness. When no adjective occurs, as in (37) and (39), both varieties have an affix.

(38) *det store hus*  
the big house

(39) *hus-et*  
house-the  
‘the house.’

From the point of view of the DP cycle, the northeastern situation represents the older stage where the head has not yet gone to zero and the southwestern situation gives evidence for the stage where the head has been replaced.
The analysis of the double definite constructions, as in (36), has remained controversial. Taraldsen (1990), Delsing (1993), and Julien (2005) provide different analyses. Julien accounts for the phenomenon of double definiteness in terms of an nP structure, where –en/-et are in n with the noun in N moving to n. If no modifier is present to block the movement of the nP to the specifier of DP, the nP moves to the specifier of the DP, as shown in (40).

(40) DP
    \[\text{D' \rightarrow D \rightarrow nP \rightarrow n' \rightarrow n \rightarrow NP \rightarrow -en \rightarrow N \rightarrow bok}\]

In this way, it is possible to see the -en as making a nominal out of the root bok. If an adjective is present, the AP that contains the adjective would be closer to the D and, not containing a definiteness feature, the AP would not be able to move to Spec DP. Hence, an expletive den would appear with adjectives.

How does this work in the older stages, e.g. in (23) above? I suggest that the weak adjective is inside the NP and that the hinn/hitt element precedes that weak adjective, as

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5 There are other alternatives. Roehrs (2009) has an Art(icle)P(hrase) above the nP and his demonstrative moves from the specifier of the ArtP to that of the DP. Roehrs uses this to account for Old Norse, where both Noun-Demonstrative and Demonstrative-Noun orders occur. The modern languages would have lost the N-fronting option.
in (41)⁶. In the spirit of Spamer and Fischer, this adjective is really a nominal, and I have therefore added another n to (32) resulting in (41).

(41)  

![Diagram of (41)]  

`the’ nP  N

vetr

n  A

siðasta

We have seen renewal of the definite marker (h)it by more deictic elements, e.g. *pat* in (26). With a possible erosion of the deictic element in (37) and (38), a renewal of demonstratives is indeed going on in the modern Scandinavian languages. Josefsson (2000: 738) mentions (42) and Bondi Johannessen (2006) argues Norwegian encodes psychological deixis, e.g. uncertainty about the hearer's knowing the person, in (43).

(42)  

*Känner du han den gamle vaktmästeren*     Swedish

know   you he the old janitor-DEF

‘Do you know the old janitor?’

(43)  

*Men hun søster-en min er sånn ...*     Oslo Norwegian

but  she sister-DEF my is like

‘But my sister is the kind ...’

There is of course also the adverb reinforcement with *där*, as in (44), and the use of a more specific *denna* in (45).

(44)  

*den där bok-en*     Swedish

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⁶ The glosses of ‘that’ and ‘the’ in (32) and of ‘the’ in (41) are for convenience; they may not be accurate.
We will see this type of renewal in other languages as well. In fast speech, the two demonstratives in (44) become one, according to Gisle Andersen for her Bergen variety of Norwegian presented in (46).

(46) *den der bilen* > *denner bilen* Norwegian variety

the there car-DEF > that/this car-DEF
‘that/this car.’

Summarizing, Scandinavian has seen a number of changes in its DP. They can be accounted for through the Head Preference Principle and Late Merge of the adjectives or, alternatively, through Feature Economy. The latter also provides insight into the renewal: if a particular feature is uninterpretable, it will automatically find a renewal.

2.2 English

There are many thoughts on how the demonstrative pronoun in English was reanalyzed as an article (some reviewed in McColl Millar 2000). In what follows, I’ll extend the analysis for the demonstrative, article, and adjective given for Old Norse to Old English.

In Old English, there are no articles but there are demonstratives, such as *ða* before *æþelingas* in (47). This demonstrative refers back to an earlier *þeod cyninga* ‘kings.’ We have seen in section 2 of the previous chapter that demonstratives are a lot less frequent in Old English than articles are in Modern English.

(47) *hu ða æþelingas ellen fremedon*
how those-NOM.P nobles-NOM.P courage did

---

7 As reported in 1995 on Linguist List 6-799.
'how those nobles performed heroic acts.' (*Beowulf* 3)

As in Old Norse, adjectives can be weak (definite) or strong (indefinite) with the weak ones in pre- or post-nominal position or on their own, as in (48), and the strong ones in either pre- or post-nominal position, as in (49), with (originally) indefinite or definite meaning. The situation is quite complex in Old English, as e.g. Mitchell (1985 I: 51-80) shows.

(48) *Ic þæm godan sceal for his modþræce madmas beodan.*

I (to) the good-W (one) shall for his daring precious-things give

`I'll give treasures to the good one for his daring acts.' (*Beowulf* 384-5)

(49) *þæt wæs god cyning*

`that was a good-S king.’ (*Beowulf* 11)

In (48), *þæm* is in the specifier of the DP with interpretable features, and in (49), the adjective (or noun) moves to D, and checks the features.

Demonstratives occur together with possessives, as in (50). This shows the demonstrative is not yet article like.

(50) *Se heora cyning ongan ða singan 7 giddian*  

the their king began then to sing

`Their king began to sing.’ (*Orosius* Bately 35.14-5)

Tables 6.1 and 6.2 show the different forms. The masculine nominative *se* is the form that is reanalyzed as *the* and the neuter *þæt* is reanalyzed as the singular distal demonstrative *that*. Both of these changes occur first in the north (according to the *OED*). In addition, the plural *þæt* ends up as *those*. Rupp (2008) and others have argued that *þæt* is the precursor of the reduced article *t*. This could be the case and, towards the end of the section, I argue that the present-day demonstrative *that* is grammaticalizing again.
It is hard to determine when the article first appears in English. In the northern *Lindisfarne Gospels*, there is a nominative masculine *ðe/þe*, as in (51) and (52), but this may be a variant of *se*, since they are nominative forms.

(51) **Herodes** *ðe* *cynig*

Herod the-NOM king

‘King Herod.’ (*Lindisfarne Gosp.* Matthew ii. 3)

(52) **Cueð** to **him** *ðe* *hælend*

said to him the-NOM savior

‘The savior said to him.’ (*Lindisfarne Gosp.* Matthew ix. 15)

Mitchell (1985: 102) mentions the accusative *pe* in (53), which could be the first article.

(53) **Da** *geseah ic* *pe* *gedriht*

then saw I the host/company

‘Then I saw that nation.’ (*Daniel* 22, Junius, Krapp edition)

Wood (2003: 69-71) suggests two additional Old English ones (one from Bede’s *Ecclesiastical History* and one from *Appolonius of Tyre*). Generally, however, it is thought that the demonstratives are weakening phonologically by late Old English. The
OED gives examples from the *Peterborough Chronicle* and the *Ormulum* as the first. In the late Old English (54), there is a *þe* instead of *þæs* and in the early Middle English (55), *þe* is very frequent.

(54) *Ic Wulfere gife to dæi Sancte Petre 7 þone abbode Saxulf 7 þa munecas of þe mynstre þas landes 7 þas wateres*

I Wulfhere give to ... St Peter and the abbot Saxulf and the monks of the abbey the lands and the waters... (*Peterborough Chronicle* anno 656:40, Thorpe edition).

(55) & *gaddresst swa þe clene corn All fra þe chaff togeddre*

and gather-2S so the clean wheat all from the chaff together

`and so you gather the clear wheat from the chaff.’ (*Ormulum* 1485, Holt edition)

In (54), the demonstrative forms do not show the forms expected either, e.g. the accusative *þone* should be the dative *þæm* according to Table 6.1.

More evidence for the changing status of the demonstrative can be found in data provided by Traugott (1992), Wood (2003; 2007ab) and others, namely that the possessive often precedes the demonstrative, as in (56a), even if in the original Latin, there is no demonstrative. Wood (2007ab) argues that the demonstrative is in the head position by late Old English. One of her arguments is that, towards the end of the Old English period, the possessive is in complementary distribution with the demonstrative, as is shown by the (100 to 150 years) later scribe's rendering of these sentences as (56b).

(56) a. *his þone onfangenan lichaman*

his that received body

b. *his underfanzenan lichaman*

*(Gregory's Dialogues, 155.9, from Wood 2007a: 181)*

(57) a. *min þæt ungesælige mod*

my that unhappy spirit

b. *min ungesælige mod*

*(Gregory's Dialogues, 4.9, from Wood 2007b: 355)*
As Wood shows, of the 16 Possessive-Demonstrative constructions that occur in both the earlier C-text and the later H-text, 15 are replaced by just the demonstrative in the later text. The reason is, according to Wood, a reanalysis of the possessive between Old and Middle English from indefinite to definite features. In Old English, the possessive can be adjectival or originate from below the D to move to the specifier of DP if the demonstrative is (already) a head. The disappearance of the combination of possessive and demonstrative pronouns shows the possessive being reanalyzed as a D head. The complementarity means that both possessive and demonstrative are in the head D.

As was mentioned in chapter 2, Traugott (1992: 173) and Kiparsky (2002) argue that se in (58) is a demonstrative that is used as third person `he’ with more topic shifting possibilities than the (regular) pronoun he.

(58)  
\textit{Hi habbad mid him awyriedne engel, mancynnes feond, and se hæfd andweald...}  
They have with them corrupt angel, mankind’s enemy, and he [the angel] has power over...  (Ælfric, Homilies ii.488.14, from Traugott 1992: 171)

I agree with this scenario and, in chapter 2, phrased it in terms of deictic features. The pronoun, lacking clearly deictic features, can be used as a reflexive and is syntactically a clitic (according to Pintzuk 1996).

When, as argued in this section, se reanalyzes as an article, schematized in (59a), it loses interpretable features. However, there are other shifts in the pronominal system. These other changes are presented in (59b). The Old English third person pronouns show an initial \textit{h-}, but are very variable (\textit{hi} can be singular and plural, etc.) and change in the late Old English period. Thus, a new third person feminine singular pronoun \textit{she} and third person plural \textit{they} appear first in the same texts as the articles first appear in. The \textit{OED} has the first instance of \textit{she} in the text that has the first clear articles, namely in (54), and \textit{they} first appears in the same text as (55) does.

(59) \begin{tabular}{llll}
Old English & Middle English \\
a. se & > & the \\
[i-loc]/[i-phi] & [u-T]/[u-phi] \\
\end{tabular}
b.  

\[
\begin{array}{ll}
he/hi & \text{is replaced by} \quad he \\
heo/ha & \text{is replaced by} \quad she \\
hi/hie & \text{is replaced by} \quad they \\
[i-\phi] & [i-\phi]/[i-loc]
\end{array}
\]

The change represented in (59b) would go against feature economy. It is, however, often argued that both the shift towards a special feminine pronoun and a plural one were caused externally, through Scandinavian influence. The shift in (59b) is therefore not one where one lexical item gains features but one where a lexical item is replaced by another and causes a reorganization. These changes then enable the third person pronouns to shift topic and be more deictic.

The independent use of \textit{se} in (58) stops, as Wood (2003: 69) also shows, and the third person pronoun loses its reflexive character. So when one of the demonstratives (the masculine singular) is reanalyzed as article, another (the neuter singular) is reanalyzed as the regular demonstrative. Replacing the independent demonstrative is the personal pronoun. Once \textit{the} appears, it cannot be used independently and this is important in showing that it is in the head position: D on its own doesn't license an empty noun, or to put it in terms of features, uninterpretable features (in the head D) need interpretable features on the N.

Three other stages of the cycle can be found in the history of English, namely further reduction of \textit{the} to \textit{t(h)'} (and of \textit{that} to \textit{t'} in certain dialects), the renewal of the demonstrative by a locative, and the frequent use of \textit{that} instead of \textit{the} in spoken English.

I'll start with the first.

In early Modern English, there is a stage with a definite clitic, as in (60ab).

(60)  

\begin{itemize}
  \item \textbf{a.} Morret's brother came out of Scoteland for \textit{th'}acceptacion of the peax  
    \textit{(The Diary of Edward VI, Nichols 1963 edition: 265)}
  \item \textbf{b.} There's a Letter for you Sir:  
    It comes from \textit{th'} Ambassadours that was bound for England.  
    \textit{(The Diary of Edward VI, Nichols 1963 ed: 265)}
\end{itemize}

\footnote{There are many other forms but I just give the most frequent ones.}
These do not just occur before nouns that start in vowels, as (61) and (62) show, from Shakespeare’s First Folio. The examples in (61) are before the consonant /b/ and the ones in (62) before /f/, but there are many more.

(61) a. When he was brought agen to th' Bar, to heare …
   (Henry 8 II, I, 31)
b. Turne all to th' best: these Proclamations (Winter’s Tale III, I 15)
c. on certaine Speeches vtter'd By th' Bishop of … (Henry 8 II, iv, 171)
(62) a. To th' fairenesse of my power. (Coriolanus I, 9, 72)
b. Expos'd this Paragon to th' fearefull vsage (Winter’s Tale V, I, 153)
c. She workes by Charmes, by Spels, by th' Figure (Merry Wives IV, 2, 185)
d. To th' fire ith' blood: be more abstenious,… (Tempest IV, 1, 53)
e. They'l sit by th' fire, and presume to know. (Coriolanus I, I, 195)

One would expect the Early Modern English stage to experience renewal, and we see quite a number of pronouns such as them being used as demonstratives, as in (63) and (64). According to the OED, this occurs from the 16th century on. From the 18th century on, we find (65) and (66).

(63) To Samaria and them partes. (1596 H. Clapham, Bible Hist. 92, from the OED s.v. them)
(64) The warres and weapons are now altered from them dayes. (1598, Barret Theor. Warres I. i. 4, from the OED s.v. them)
(65) On leaving yours and Mr. B.’s hospitable House, because of that there Affair. (1742 Richardson, Pamela III. 404, from the OED, s.v. there)
(66) As for staying with them there French rascals, it was never the near. (1811 Ora & Juliet IV. 93)
Standard English never develops into a stage where the article is weakened and needs a new reinforcement, but many contemporary dialects continue the pattern of (63) and (64) with just *t'* or *th'*, e.g. the fictional (67) and (68).

(67) " *T'* maister nobbut just buried, and Sabbath no o'ered, und *t'* sound o' *t'* gospel still i' yer lugs, and ye darr be laiking! Shame on ye! Sit ye down, ill childer; there's good books eneugh if ye'll read 'em. Sit ye down, and think o' yer sowls!" (Emily Bronte, *Wuthering Heights*).

(68) "Ah'm gettin' *th'* coops ready for *th'* young bods,"' he said, in broad vernacular. (D.H. Lawrence, *Lady Chatterley's Lover*, chapter 8)

Barry (1972) and Jones (2002) have made studies of this definite article reduction phenomenon. Rupp & Verhoeoff (2005) claim that older speakers at the North Yorkshire-Lancashire border used *t'* when referring to something identifiable, as in (69), but use demonstratives for other uses.

(69) They had a baby and when *t'*baby arrived he got jealous.

As mentioned, Rupp (2008) and others show that this use arises from the demonstrative *that*. That is quite possible and would mean an additional application of a phrase being reanalyzed as a head.

Many varieties (both in Britain and the US) also continue the trend of (65) above and renew demonstratives, as in (70) to (73), where the first may be a slip of the tongue. This use is nowadays typical for non-standard urban dialects (see e.g. Cheshire et al. 1993).

(70) It was just I I was just looking at **there them** down there (BNC FME 662).

(71) The things showing round **there them** (BNC KBD 7334).

(72) Oh they used to be ever so funny houses you know and in **them** days and The er you never used to see in the oh a lot of houses and you never used to see big windows like these. They used to have big windows, but they used to a all be
them there little tiny ones like that.... Used to have to be very rather experienced
in them days to do this here net mending. (BNC - FYD 72; 112)

(73) then the Headmistress, cos we had a Headmistress there cos it was a mixed
school, and she recommended me for this here errand boy's job, his name was.
(BNC - H5G 117)

We can put the list of changes in English in terms of changes to the structure, as
in (74), namely a reanalysis of the demonstrative *that* as a head *the* and an incorporation
of the postmodifying locative as a higher element:

(74) \[
\begin{align*}
&\text{DP} \\
&D' \\
&\text{D} \text{ the} \\
&\text{N} \text{ N'} \text{ there} \\
&\text{[loc]} \text{ renanalysis} \\
&\text{[uF]} \text{ reanalysis as head}
\end{align*}
\]

The similarities between Old Norse and Old English are that (a) both incorporated
locatives, (h)inn/(h)itt in Old Norse and *there* in English and (b) the demonstrative was
reanalyzed as a D head that is in its turn being renewed.

Apart from the reduction of the article *the* and the reinforcement of the
demonstrative that by a locative, there is a third change in progress that can be seen by
comparing written and spoken texts. In spoken texts, the demonstrative *that* is more
frequent compared to the definite article; in written, more formal texts, the article *the* is
more frequent. This is of course directly relevant to the DP cycle: *the* is being replaced by
*that*.

Early Modern English shows this tendency because, as mainly a written set of
texts, it favors definite articles over demonstrative pronouns. Just looking at the Helsinki
Corpus EMOD1-3 texts, minimal use of *that/those* is made compared to *the*. Some
numbers are given in Table 6.3 for nouns immediately following these but there is no difference when an adjective intervenes.

<table>
<thead>
<tr>
<th></th>
<th>woman</th>
<th>man</th>
<th>child</th>
<th>king</th>
<th>building</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>the</td>
<td>45</td>
<td>61</td>
<td>119</td>
<td>192</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>that</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6.3: *That* and *the* followed by frequent nouns in the EMODE HC

The percentage of definite articles in the Helsinki Corpus EMOD1-3 texts - *the* comprises 4.98% of the total number of words - is very close to that of modern written texts. Academic texts are even higher, e.g. the current book has *the* at 5.25%. The percentage of the definite article *the* (as measured against all words in a text) varies enormously in English texts (and in French as we’ll see) but mainly between spoken and written genres. For instance, in a spoken formal corpus of Modern American English (CSE), *the* is used only once in a hundred words (1.1% to be precise).

Comparing *the* and *that* in the same texts results in very interesting differences. In the BNC 10 million word spoken part, the definite article appears 409,906 times (4.1%) and the demonstrative 147,335 times (1.5%). In the BNC 15.3 million word academic part, the definite article is much more frequent than the demonstrative. The article appears times (7.4%) and the demonstrative 32284 times (.2%). The different numbers also appear in Table 6.4, with two more genres added.

<table>
<thead>
<tr>
<th></th>
<th>spoken</th>
<th>fiction</th>
<th>newspaper</th>
<th>academic</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>the</em></td>
<td>409960 (4.1%)</td>
<td>836836 (5.3%)</td>
<td>644043 (6%)</td>
<td>1,129,235 (7.4%)</td>
</tr>
<tr>
<td><em>that</em></td>
<td>147335 (1.5%)</td>
<td>78129 (.5%)</td>
<td>19501 (.2%)</td>
<td>32284 (.2%)</td>
</tr>
<tr>
<td>total</td>
<td>10,000,000</td>
<td>15,900,000</td>
<td>10,500,000</td>
<td>15,300,000</td>
</tr>
</tbody>
</table>

Table 6.4: The article *the* and demonstrative *that* in the BNC

Table 6.4 shows that in spoken English, *that* is more frequent and could be a sign of renewal of the [u-phi] in D, a change in progress.
It might be that the numbers of *that* are higher for spoken English because of the frequent independent use (i.e. without a noun). This is not the case, however: sequences of *that* and a noun or an adjective and noun are still much higher in the spoken. I have provided these numbers in Table 6.5, and have added the numbers of reinforcements with *there*. The latter, as expected, are much more frequent in spoken English.

<table>
<thead>
<tr>
<th></th>
<th>spoken</th>
<th>fiction</th>
<th>newspaper</th>
<th>academic</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>that</em> (A) N</td>
<td>26470 (.27)</td>
<td>23718 (.14)</td>
<td>7148 (.07)</td>
<td>16330 (.1)</td>
</tr>
<tr>
<td><em>that</em> (A) N <em>there</em></td>
<td>281</td>
<td>34</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>% with <em>there</em></td>
<td>1%</td>
<td>.14%</td>
<td>.03%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 6.5: *That* and *there* in the BNC

In this subsection, I have reviewed some changes in the history of English concerning demonstratives pronouns. In the Old English period, there are no articles; they are the result of the grammaticalization of demonstratives in late Old English. I have also looked at reinforcements by adverbs and changes in the pronominal system. In Old English, demonstratives were used more like personal pronouns.

2.3 *Afrikaans, Dutch, and varieties of German: renewal*

In Afrikaans, arguably a creole based on Dutch with some lexical and syntactic borrowings from English, Malay, Bantu languages, Khoisan languages, Portuguese, and other European languages, *die* is the definite article where, in Dutch, *die* `that' is a demonstrative. *Dié, hierdie* and *daardie* (or *daai*) are the demonstratives, as in e.g. (75) and (76).

(75) **Hierdie** plaatjie laat jou 'n gedetaaldeer boom van **hierdie** taal familie sien.
This picture lets you a detailed tree of this language family see
`This picture lets you see a detailed family tree of this language family.'

(76) **Daardie** teenstrydighede was egter nie soseer in die man Bram Fisher nie
'Those contradictions were however not so much in the man Bram Fisher not (but in ...)' (Mandela speech, 1997, http://www.anc.org.za/ancdocs/history/mandela/1997/sp971128.html)

There has been prescriptive pressure against *hierdie en daardie* in the past (see Donaldson 1993: 142-3) but this is no longer evident in the media. To a Dutch speaker reading newspapers, however, it seems that *hierdie en daardie* are still not as frequent as demonstratives in Dutch.

In short, one of the Dutch demonstratives, namely *die*, was analyzed in Afrikaans as the article. The reason for this may be that the Dutch article shows a gender distinction and the demonstrative does not. The Dutch demonstratives show a proximal (*dit/deze* ‘this/these’) and distal (*dat/die* ‘that/those’) distinction and this distinction appears in Afrikaans in *hierdie* and *daardie* ⁹. In terms of the cycle, the specifier *die* is analyzed as head and new specifiers appear reanalyzed from the Dutch locative adverbs *hier* ‘here’ and *daar* ‘there.’

In Dutch, there are two definite articles depending on the gender of the noun, *de* and *het*. These originate from demonstratives as also happened in the other Germanic languages. I won’t go into that history but would just like to point out a renewal in the independent use in certain Dutch dialects: the original article *den* is reinforced with the (inflected) demonstrative *die* or *dieje*.

(77)  *Ik wil den dieie/deze*  Brabant Dutch

I want the that/this
‘I want that/this one.’

(78)  *Dat is maar serie werk bij den die!*  Brabant Dutch

That is only mass production with the that

(From *Woordenboek van de Brabantse Dialecten* 1996: 2597 Assen)

---

⁹ Dutch *dit* ‘this’ corresponds to the same form in Afrikaans but with the meaning ‘it’, Dutch *dat* is restricted in Afrikaans to the complementizer, and Dutch *deze* ‘this’ is not present in Afrikaans.
Van der Horst (2008: 597) shows that this use goes back to at least Erasmus, i.e. the 16th century, next to the use of a locative *g(h)ene*.

Pennsylvania Dutch has a construction with an agreeing demonstrative (*sell* 'that') and a locative (*datt* 'there') as well, as in (79), from Old Order Amish speakers. Putnam (2006) shows that the younger generation of Pennsylvania Dutch speakers is introducing a new form with the specifier and the head merged, as in (80).

(79)  *mit*  *sellam datt grosse mann*  Pennsylvania Dutch

with  that-DAT  there  tall  man

'with that tall man.' (Putnam 2006)

(80)  *mit*  *sell=datt grosse mann*  Pennsylvania Dutch

with  that-there  tall  man

'with that tall man.' (Putnam 2006)

The emerging 'street languages' in European countries show similar uses of the Head Preference Principle. These languages are multi-ethnic youth-languages and they have emerged, for instance, in The Netherlands, Germany, Sweden, and Denmark. For instance, *so* 'such' has become an article in (81), though it is an adverb in the standard languages. Himmelmann (1997: 20) reports the same for Swiss German, as in (82), where *säb* derives from *selbst* 'same.'

(81)  *Ich*  *such' nicht so Ausbildungsplatz*  Kanak Deutsch

I  search  not  that  education-place

'I am not looking for that kind of position.' (from Wiese 2006).

(82)  *i säbem huus*  Swiss German

'in that house.' (Himmelmann 1997: 20)

In conclusion, we can describe the DP-cycle as going from deictic to definite since deictic features are lost, as in (83), slightly adapting (6) and (7) above. This follows from Feature Economy but also from the Head Preference and Late Merge Principles.
From the renewal of the demonstrative by means of locative adverbs, it is clear that the article loses those features. As I have mentioned below (7), I have not said much on the loss of the phi-features of the demonstrative. This remains for further work.

3. Indo-European: Romance, Slavic, and Indo-Iranian

In Romance, the most well-known case of the DP cycle is Latin demonstrative *ille* `that' appearing, for instance, in French as the article *le* (and the weak accusative pronoun), and in Romanian as an enclitic. As this grammaticalization took place, another set of demonstratives came into being, e.g. *ce(tte)* in French. This development fits the cycle very well: the Latin demonstrative was in the Spec of DP (as also argued by Boucher 2003) and its French and Romanian descendants in the head. In what follows, I give some of the well-known facts about Romance, add a few comments on Slavic, and provide some information on Persian, Balochi, and Urdu. In the latter, definiteness is not marked by demonstratives but through an Object Marker (*-ra* and *ko*), as we saw in the previous chapter.

3.1 The DP Cycle in Romance, French in particular

In this section, I show some stages of the DP Cycle in the different Romance languages, the variation among them, and review the (extensive) literature on where these forms come from. The results show that the DP cycle from Latin to Old French is as predicted; French, from the 17th century on, shows two kinds of renewal.
Three different stages of the cycle are given in (84) to (86). In (84), Latin *ille* is a demonstrative indicating location away from the speaker and addressee, which has become the definite marker *le, la* or *l'* in French (85), and a definite marking suffix in Romanian (86):

(84) \[ \text{*ille} \quad \text{liber} \quad \text{Latin} \]

\[
\begin{array}{l}
\text{that} \\
\text{book,} \\
\text{`}\text{that book.'} \\
\end{array}
\]

(85) \[ \text{l'}hiver} \quad \text{French} \]

\[
\begin{array}{l}
\text{the-winter} \\
\end{array}
\]

(86) \[ \text{om-ul} \quad \text{bun} \quad \text{ Romanian} \]

\[
\begin{array}{l}
\text{man-DEF} \\
\text{good, 'the good man',} \\
\end{array}
\]

This represents a change from specifier to head to affix.

In many of the Romance languages, the article is a clitic. Interestingly, the French article (*le/la*) was reanalyzed by African and North American learners as part of the noun, e.g. French (87) but (88) in Haitian Creole.

(87) \[ \text{la} \quad \text{rivière} \quad \text{French} \]

\[
\begin{array}{l}
\text{the} \\
\text{river'} \\
\end{array}
\]

(88) \[ \text{larivyè a} \quad \text{ Haitian Creole} \]

\[
\begin{array}{l}
\text{river} \\
\text{DEF} \\
\text{`}\text{the river'} \\
\end{array}
\]

The article in Modern French is phonologically quite weak. It cannot occur on its own, as (89) shows, and is repeated between different instances of nominals, as in (90).

(89) \[ \text{*Je pratique le} \quad \text{French} \]

\[
\begin{array}{l}
\text{`I play the'} \\
\end{array}
\]

(90) \[ \text{Je pratique le tennis, le badminton, le squash, la natation.} \quad \text{French} \]

\[
\begin{array}{l}
\text{`I play tennis, badminton, squash, and swimming.'} \\
\end{array}
\]
There is a lot of variation in Romance. More details on the descendants of Latin *ille* `that' are provided in Table 6.6. Some languages have D-elements showing different Cases; some have two and some three genders.

<table>
<thead>
<tr>
<th></th>
<th>Masc S/P</th>
<th>Feminine S/P</th>
<th>Neuter S/P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin:</td>
<td><em>ille/illi</em></td>
<td><em>illa/illae</em></td>
<td><em>illud/illa</em></td>
</tr>
<tr>
<td></td>
<td><em>illum/illos</em></td>
<td><em>illam/illas</em></td>
<td><em>illud/illa</em></td>
</tr>
<tr>
<td>Romanian:</td>
<td>-(*u)l + -le/-ii</td>
<td>-a/-le</td>
<td>-ul + -le/-le</td>
</tr>
<tr>
<td></td>
<td>-(*u)lui/-lor</td>
<td>-i/-lor</td>
<td>-(u)lui/-lo</td>
</tr>
<tr>
<td>Roma:</td>
<td><em>o/le</em></td>
<td><em>e/le</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>le/le</em></td>
<td><em>la/le</em></td>
<td></td>
</tr>
<tr>
<td>French:</td>
<td><em>l(e)/les</em></td>
<td><em>la/les</em></td>
<td></td>
</tr>
<tr>
<td>Spanish:</td>
<td><em>el/los</em></td>
<td><em>la/las</em></td>
<td></td>
</tr>
<tr>
<td>Catalan:</td>
<td><em>(e)l/els</em></td>
<td><em>(l)a/les</em></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.6: Different Ds in Romance

Vincent (1997) has shown that the Latin demonstratives *ille* `that' and *ipse* `self' were both candidates for articlehood. The former is traditionally a marker of distal deixis and the latter one of emphasis. Leiss (2000), on the basis of data in Selig (1992), suggests that *ille* is first used with (definite) focus and *ipse* for anaphoric use, i.e. topic. *Ille* was reanalyzed as the French article *le* (among other things). Descendants of *ipse* functioned or function as articles in Catalonia, Gascony, parts of the Provence, Sicily, Sardinia, and parts of Southern Italy (Vincent 1997: 154). Since the demonstratives lose some locative/deictic function in the daughter languages, they are reinforced in Vulgar Latin as *ecce iste* `see this' and *ecce ille* `see that' (see Greenberg 1978: 76; Giusti 2001a: 169), which in turn grammaticalize to *cest/cist* and *cel/cil* in Old French and become *ce(tte)* in Modern French.

Harris (1977: 256) claims the latter forms are articles since they do not mark distance, and that "only forms with ... -ct and -là can be regarded as demonstratives"
(260). Harris (1977: 256; 1978: 76) has the following figure for the developments between Latin and French that show his claims.

<table>
<thead>
<tr>
<th></th>
<th>prefixed #/gender</th>
<th>definite article</th>
<th>proximity marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical Latin</td>
<td>-</td>
<td>-</td>
<td>hic, iste, ille</td>
</tr>
<tr>
<td>Vulgar Latin</td>
<td>-</td>
<td>ille</td>
<td>ecce iste, ecce ille</td>
</tr>
<tr>
<td>Old French</td>
<td>-</td>
<td>le</td>
<td>cest, cel</td>
</tr>
<tr>
<td>Modern French</td>
<td>le</td>
<td>ce</td>
<td>ce ... ci, ce ... là</td>
</tr>
</tbody>
</table>

Figure 6.2: The Development of Romance determiners from Harris (1977; 1978)

According to Giusti (2001a), *ecce* was introduced in a specifier position after *iste* and *illum* had become heads. As Epstein (1993: 113) argues, and shown in Figure 6.2, *le* and *li* in Old French DPs, such as *li empereres* 'the emperor', are articles since the emperor is Charlemagne, easily identifiable. Boucher (2003: 57) confirms that the articles were already in the D head position by Old French since contractions such as *au, a(u)s, del, du, dou*, etc. occur from the very beginning. Thus, one set of cyclical changes takes place between Latin *ille* and Old French *le/li*.

Between Old French and Present-day French, there are two kinds of renewal. There are 'new' demonstratives, namely *ce(t), cette, and ces* and *celui, celle(s), and ceux*, and adverb-like elements that reinforce the demonstrative, namely -là, as in (91), or -ci:

(91)  *mais ma femme elle vivait à ce moment-là encore*  
      French  
      >but my wife she lived at that moment-DEM still  
      >‘but my wife was still alive at that moment.’ (Kate Beeching's corpus)

Comparing the use of the old and new variants in the last 400 years, one can conclude that *le* and its forms mark definiteness, *ce* and its forms refer back to something in the context, as in (92), and that to mark real deixis -là or -ci are used, as in (91).

(92)  *On essaie justement dans ces moments de ... méditation, de ... d’éch...*  
      >‘One tries exactly in those moments of meditation to … to esc[ape].’
The use of the *ce* forms has not increased considerably in the last 400 years, but that of -là and -ci has. The use seems stylistically determined.

Table 6.7 shows a very rough approximation of the situation in Jules Verne’s late 19th century fiction *De la Terre à la Lune* and (Kate Beeching's) 20th century spoken French *Corpus d’entretiens spontanés*. This may provide some insight as to how frequently *ce(t)*, *cette*, and *ces* are used (12 % and 6% respectively) in comparison with the regular articles. The numbers of *ce* only include a D in combination with a noun, as in (92), and not independent *ce ‘it’*.

<table>
<thead>
<tr>
<th></th>
<th>Jules Verne</th>
<th>Cd’ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS</td>
<td>le 1225 ce 196</td>
<td>le 2556 ce 231</td>
</tr>
<tr>
<td>FS</td>
<td>la 1534 cette 228</td>
<td>la 2804 cette 195</td>
</tr>
<tr>
<td>MFS</td>
<td>l’ 1120 cet 54</td>
<td>l’ 1234 cet 31</td>
</tr>
<tr>
<td>P</td>
<td>les 1090 ces 193</td>
<td>les 2790 ces 139</td>
</tr>
<tr>
<td>Total</td>
<td>4969 (88%) 671 (12%)</td>
<td>9384 (94%) 596 (6%)</td>
</tr>
</tbody>
</table>

Table 6.7: Articles and demonstratives in Modern French

These numbers just give a rough sense for the relations between the article and *ce*-forms because the percentages of demonstratives relative to the total number of demonstratives and articles may be lower. The reason is that the contracted articles *au*, *aux*, *du*, and *des* are not included. Some of the instances of *le* and *l’* are object clitics, however. What is important to notice is that the instances of *ce(t)*, *cette*, and *ces* are not very high and, as we’ll see next, have not been increasing.

Using the same method for Descartes *Discours de la Methode*, a philosophical text from the year 1637, renders a percentage of 8% demonstratives out of a total of demonstratives and articles combined, and for Molière's *L'Avare*, a comedy from 1668, the percentage is 11%. (Again contracted forms are not among these and the object clitics have not been eliminated). This would mean that the demonstrative forms have stayed
stable e.g. between Molière and Verne, but that the text type (academic, spoken, fiction, etc) plays a major role, something we saw in English too.

<table>
<thead>
<tr>
<th></th>
<th>Descartes</th>
<th>Molière</th>
<th>Verne</th>
<th>modern spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS</td>
<td>le 272</td>
<td>ce 31</td>
<td>le 330</td>
<td>ce 46</td>
</tr>
<tr>
<td>FS</td>
<td>la 407</td>
<td>cette 31</td>
<td>la 316</td>
<td>cette 48</td>
</tr>
<tr>
<td>MFS</td>
<td>l' 234</td>
<td>cet 8</td>
<td>l' 274</td>
<td>cet 12</td>
</tr>
<tr>
<td>P</td>
<td>les 597</td>
<td>ces 57</td>
<td>les 215</td>
<td>ces 28</td>
</tr>
<tr>
<td>Total</td>
<td>1510 (92%)</td>
<td>127 (8%)</td>
<td>1135 (89%)</td>
<td>134 (11%)</td>
</tr>
</tbody>
</table>

Table 6.8: Articles and demonstratives in Descartes’ *Discours de la Methode* and Molière’s *L’Avare*

However, unlike English, the special demonstratives are low in spoken French, and the article is still frequent.

If the difference between the *le*-forms and *ce*-forms is stylistically motivated and probably hasn’t changed much, has anything? For instance, has the number of *ce* forms enhanced by –*là* increased? Of all the instances of *ce(t)*, *cette*, and *ces*, 2 nominals have -*là* following it in Descartes, 10 have -*là* in Molière, 20 in Verne, and 96 in the spoken French corpus. The respective percentages are 1.6%, 7%, 3%, and 16%. This may indicate that *ce(t)*, *cette*, and *ces* were not reanalyzed as demonstratives but that -*là* and -*ci* are, especially in modern spoken French. This requires more research into different text types, however. Note that Molière’s comedy with spoken dialogues is much higher than the prose of both Descartes and Verne. Danton (2010) notes that the use of –*là* is mainly anaphoric to something already mentioned in the text and that French doesn’t seem to make much use of spatially deictic demonstratives.

<table>
<thead>
<tr>
<th></th>
<th>Descartes</th>
<th>Molière</th>
<th>Verne</th>
<th>modern spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>-<em>là</em></td>
<td>2 (1.6%)</td>
<td>10 (7%)</td>
<td>20 (3%)</td>
<td>96 (16%)</td>
</tr>
</tbody>
</table>

Table 6.9: Numbers of -*là* and percentages relative to all *ce*-forms.
Turning to Romanian, in which language Latin *ille* develops into a suffix *-ul*, i.e. makes a full cycle, there is an additional demonstrative *cel* that can be added, as in (93). The renewal is similar to the form in French and of course expected. This *cel* is more deictic and there is a proximal one as well, as in (94).

(93)  *om-ul*  *cel*  *bun*  Romanian
man-DEF  that  good
‘that good man.’ (Greenberg 1978: 76)

(94)  *băiat-ul*  *acesta*  *frumos*  Romanian
boy-the  this  nice
‘This nice boy.’ (Giusti 2001a: 161)

Could these new specifiers *cel* and *acesta* have become heads in (95)?

(95)  *acest*  *băiat*  *frumos*  Romanian
this  boy  nice
‘This nice boy.’

If yes, the development of Romanian demonstratives shows another stage in the cycle from specifiers to heads.

Summarizing, in Romance, there is quite a bit of evidence for a DP cycle where a demonstrative such as *ille* (in the specifier of the DP) is reanalyzed as an article *le* (in the D head). The demonstrative then gets renewed two ways, via *ecce* (which ends up in the demonstrative *ce(t(te))*) and via *-là* and *–ci*. The changes in features would be very similar to those in English.

3.2 Slavic

There is a lot of variation in Slavic, with Russian showing no evidence of an article, and Bulgarian and Macedonian having suffixed ones. I'll just mention some stages here that are in between, but an entire chapter could be devoted to the variation in Slavic. As
mentioned in the previous chapter, Slavic languages also use aspect to mark definiteness (accusative is definite whereas genitive is indefinite).

Serbian, Polish, Sorbian, Czech, and Slovenian have grammaticalized demonstrative adjectives as definiteness markers, though these languages do no yet have full-fledged articles (Heine & Kuteva 2006, chap 3). This development has not taken place in their standard varieties but it certainly has in their colloquial varieties. An example from Czech of an optional demonstrative is given in (96).

(96)  
\[ \text{Chci vodu ale ta voda musí byt čistá} \]  
\[ \text{Czech want water but DEM water must be clean} \]  
\[ ‘I want water but the water must be clean.’ (Heine & Kuteva 2006: 115) \]

In Sorbian, the changes are perhaps most obvious. In Upper Sorbian, there is evidence that the use of a demonstrative goes back to the 16th century. Heine & Kuteva (2006: 113), based on Lötzsch 1996), suggest that with the grammaticalization of the demonstratives \textit{ton, ta, te, te}, the demonstrative use was strengthened by means of \textit{tu-} ‘here.’ There is a lot of extra-linguistic pressure against this grammaticalization. For some speakers, the use of articles is seen as a German influence.

Bosnian/Serbian/Croatian has a reinforced demonstrative, as in (97), that functions as a phrase, according to Brugè (1996).

(97)  
\[ \text{ona tamo nova kniga} \]  
\[ \text{Bosnian/Serbian/Croatian that there new book} \]  
\[ ‘that new book there.’ (Brugè 1996: 23) \]

The renewal of the deictic features of \textit{ona} ‘that’ and \textit{ova} ‘this’ is of course by overt locative elements. According to Brown & Alt’s (2004: 80-81) description of Bosnian/Serbian/Croatian, \textit{ona} and \textit{ova} have complex roles as textual markers and that may be responsible for their reanalysis and subsequent renewal.

Slavic languages show a lot of variation in their DPs, with only demonstratives in Russian, reinforced demonstratives in Bosnian/Serbian/Croatian (97), grammaticalization
of demonstratives in e.g. Czech (96), and clitic articles in Macedonian. Language contact is a major influence: the development of articles is typical of the European Sprachbund (Standard Average European) and the clitic article is typical of the Balkan Sprachbund. As Heine & Kuteva (2006) argue grammaticalization and hence also cyclical change is accelerated in these contexts.

3.3 Indo-Iranian: Persian, Balochi, and Urdu/Hindi

In Persian, all the (demonstrative) ingredients are present for a definiteness/DP cycle but, as I show, there is very little change going on. This is even more so in Balochi and in Urdu/Hindi. This means there are other ways to mark definiteness. One possibility is through the DOM object markers –ra and –ko, another is through the well-developed aspect system, and a third possibility is that the compound verb system is used to indicate indefinite objects.¹⁰

Persian has a suffix article -i that would in principle be a candidate for renewal. The suffix marks both the indefinite and definite and is therefore marked as a D in (98) and (99). However, it is rare in a definite context.

(98)  \[ \text{ketaab-}i \quad ke \quad \text{didam} \quad \text{Persian} \]
\[ \text{book-D} \quad \text{that} \quad \text{saw-1S} \]
\[ 'The \ book \ that \ I \ saw.' \]

(99)  \[ \text{(yek) ketaab-}i \quad \text{Persian} \]
\[ a \ \text{book-D} \]

The suffix derives from an older aiva ‘one’ or ‘this’ respectively. Infrequently, the definite -i occurs with a relative clause, as in (98); the indefinite may be doubled by yek ‘one’, either as reinforcement, as in (99), or as sole marker. Lazard (1957: 66) notes that ketaabi on its own is more formal than yek kitaab(i) showing the yek is probably a renewal of the indefinite article.

¹⁰ Leiss (2000: 216), in a footnote, mentions the unpublished work of Shahram Ahadi in this context; see also the work on Noun Incorporation in Native American languages.
There is no renewal, however, for the definite suffix –i in the form of a new demonstrative. There are demonstrative pronouns in Persian, an and in, but these are also used as personal pronouns and emphatically, as in (100), not for specificity.

(100) chun hævaye an ruz kæmi sær d bud, ... Persian
because weather that day little cold was
‘because the weather was a little cold that day...’ (Dresden et al. 1958: 66)

These demonstratives are specifiers since they can occur on their own. Specific nouns such as the bolded ones in (101) lack special markings by definite markers but they have locative prepositions.

(101) be molla xæba r dadaend ke be meydan beræva ed Persian
to mullah news gave-3P that to square go-SBJ
‘They told the mullah that he should go to the square.’ (Dresden et al. 1958: 68)

As mentioned in the previous chapter, the regular definite is only marked when it is an object, as in (102), i.e. a DOM.

(102) ketaab-ra didam Persian
book-OM saw-1S
‘I saw the book.’

Another Indo-Iranian language that has no definite or indefinite articles is Balochi; it is "the context of the sentence" (Gilbertson 1923: 12) that determines definiteness. For indefinites, there is a numeral yak ‘one' that can be used, and for definites, the demonstrative pronouns e ‘this' and án ‘that' can be used and can be made emphatic with ham, as in (103).

(103) haw-án zál Balochi
EMPH-that woman
Looking through some Balochi texts in Gilbertson, I find that the use of demonstratives is rare. As in Persian, there is an object marker -(r)a (Gilbertson 1923: 20; Barker & Mengal 1969: 141) used for definite objects, as in (104a), whereas indefinite objects have no ending, as in (104b).

(104) a.  mən  koh-a  gyndin  Balochi
    I  mountain-DOM  see  
    ‘I see the mountain.’

b.  mən  kohe  gyndin  Balochi
    I  mountain  see  
    ‘I see a mountain.’ (Barker & Mengal 1969: 141)

Urdu is quite close to Persian regarding demonstratives, as well as in other respects, e.g. the DOM and the compound verb system. Hindi is grammatically almost identical to Urdu but the examples below are Urdu in vocabulary choice and therefore marked as such. In Urdu, there is no -i suffix as in Persian but the distal demonstrative woo ‘that’, as in (105), is very infrequent and hard to find in texts, except in more set phrases, as in (106). Another function is as third person pronoun, as in (107), which I have argued in chapter 2 is phrasal.

(105)  Elly  kii  woo  doo  laal  kitaabêe  Urdu
    Elly of DEM two red book-P
    ‘Elly's two red books.’

(106)  woo  vakt  merii  xaan  bahot  duur  nehii  hê  Urdu
    that time  my love  very far  not  is
    ‘That time isn't very far, my love’ (Iqbal, axrii xat)

(107)  woo  kitaab  parhtaa  hê  Urdu
    he book reading-MS  is
    ‘He is reading a book.’
As in Persian, a specific/definite noun is often not marked, especially when inanimate. For instance, in (108), the football was the cause of trouble and quite specific; yet it is not marked. Again, as in Persian, to make an object definite, a differential object marker (DOM) is used, namely -ko in (109).

(108) \textit{fuutbol} kal suuba tak mere pas rah-ega Urdu
football tomorrow morning till me with stay-FUT
'The football will stay with me till tomorrow morning.' (Barker 1975: 248)

(109) mē nee kitaab ko parhaa Urdu
I ERG book DEF read
'I read the book.'

I suggest that the structure of a simple Urdu DP with a demonstrative \textit{woo} is as in (110). \textit{Woo} is in a specifier position with interpretable features, because \textit{woo} can appear on its own and be emphasized through \textit{hii}. (As mentioned above in connection with (6), the number features on Num may be uninterpretable as well).

(110) DP

\hspace{1cm} woo

D’

[i-loc] D

[i-ps] NumP

Num NP

[i-#] N

kitaab

[i-phi]
Though infrequent, the structure with a *woo* marked nominal is quite complex, with a possessive phrase that precedes the demonstrative, as in (105), or follows it, as in (111).

(111) *woo phalvaalee kii duukaan* Urdu
    fruitseller of shop
    ‘that fruitseller's shop.’ (Barker 1975: 107)

Barker (1975: 107) says the unmarked construction is (111) but that three other possibilities occur, as in (112) to (114).

(112) *phalvaalee kii woo duukaan* Urdu
    fruitseller of that shop
    ‘that shop of the fruitseller.’ (there may be more than one owned by the same person).

(113) *us phalvaalee kii duukaan* Urdu
    that-OBL fruitseller of shop
    ‘that fruitseller's shop.’

(114) *us phalvaalee kii woo duukaan* Urdu
    that-OBL fruitseller of that shop
    ‘that shop of that fruitseller.’ (Barker 1975: 107).

In these sentences, *woo* and its oblique variant *us* are used for deictic reference. The possessor *phalvaalee kii* can move higher to a position preceding *woo* and then its function is deictic, and replaces *woo*, as in (112). In (113), the demonstrative is modifying *phalvaalee* and, in (114), there are two demonstratives. The analysis of (112) to (114) will involve a higher Topic position to which the possessor moves. The analysis of the genitive *kii* is debated; it shows suffixaufnahme (Plank 1995; Payne 1995) in that it indicates the genitive as well as the Case and agreement of the entire DP. It also goes with entire phrases, like English ‘s.
Concluding the discussion on Persian, Balochi, and Urdu/Hindi, there is very little evidence of a DP-cycle going on. I think this is because there are other means of indicating definiteness on objects (and subjects).

4. Uralic

Uralic includes Finnish, Sami, Samoyed languages, Hungarian, and a few others. In this section, I examine Finnish and Hungarian. Though Finnish conveys definiteness through Case, it is developing an article; Hungarian has a well-developed D-system.

Finnish, as is well-known from the work of Belletti (1988) and de Hoop (1992), expresses definiteness on objects through accusative Case (see the previous chapter). Finnish also has demonstratives *tämä* 'this', *tuo* 'that', and *se* 'it, that, the', with three separate plurals, *nämä*, *nuo*, and *ne* and they are of course marked for Case. The exact relationship between the three demonstratives is debated, especially for spoken Finnish. Laury (1997: 58-9) tends toward a dynamic approach in which these demonstratives are "used by speakers ... to express their orientation and stance toward referents". The morphologically appropriate form of *tämä* 'this', namely *tällä* in (115), places a referent within the speaker's current sphere and is used when objects are focused on and manipulated. *Tuo* 'that' places the object outside that sphere, and its accusative form in (116) does this. *Se* 'the', with a partitive given in (117), defines the addressee's sphere.

(115) Mä  leikin  tällä 
I play  tämä-ADE
'I'll play with this one.' (Laury 1997: 63)

(116) Nääthän  sää  on  lipun 
see-2S  2S  tuo.ACC  flag
'You can see that flag, right.' (Laury 1997: 75)

(117) te  rakensitte sitä  taloo sitte vai Spoken Finnish
2P build-PST  se.PRTV house-PRTV then  PRT
'You were building the house then, right.' (Laury 1997: 118)
Laury's book is a study on the emergence of the definite article in spoken Finnish. Her texts from the 1890s indicate that se-marked referents are more often discourse-prominent, i.e. topics, and that se is (becoming) an article. In (118), the food has been mentioned and is very important since 'the girl' (Cinderella-like) is supposed to cook it.

(118) kun tyttö näytti sen muanan
when girl showed se.ACC food-ACC
'when the girl showed him the food.' (Laury 1997: 184)

Laury also shows that these nominals more often have an O(bject) role than an S(ubject) or A(gent) role (1997: 177). Laury's explanation is as follows, "se-marking can be seen as an accessory device ... an addressee is likely to read a lexical noun phrase in the O or Oblique role as a new mention" (p. 179) and this needs to be marked.

The data from the 1930s and 40s show more se-marking, also when these indicate new information. Laury's data from the 1970s, 80s, and 90s show that se-marking has increased for noun phrase in all roles especially those identifiable to the addressee, and that tämä is now used for prominent referents. This use to identify would suggest that se is an article and Laury agrees while mentioning dissenting voices that say it is not yet obligatory.

In Hungarian, the situation is very different. A noun is (mostly) preceded by an article, the definite one being a(z) 'the', as in (119). This form shows allomorphy depending on the first sound (consonant or vowel) of the word following, and is therefore more clitic or affix-like. The article is not inflected for Case or number.

(119) a ház
'the house'

A phrase can have two definiteness markers, as in (120) and (121), with the demonstrative preceding the article and (heavily) inflected for case and number.
The uninflected definiteness marker looks like a reduced form of the demonstrative, and would be in the head of the DP while the demonstrative is in the specifier position. There are also reinforced forms such as *amaz* ‘that there.’

In this section, I briefly reviewed two Uralic languages with different definiteness strategies. Finnish is developing a definite article from a demonstrative and, according to many, this is happening on the basis of contact with Swedish. In Hungarian, there is evidence of previous cyclical change from the synchronic forms.

5. North American Languages

North American languages provide examples of how demonstrative pronouns are reanalyzed as heads and how new demonstratives develop, all evidence of cyclical change. I am grouping these languages by geographic area for the sake of convenience more than for typological reasons. Yuman languages, e.g. Mohave, Tiipay (or Diegueño), Havasupai, and Yavapai, all have some incipient form of the article, as do several Uto-Aztecan, Salish, and Algonquian languages. Of these, I'll discuss Pima Bajo, Tohono O'odham, Cupeño, and Cora (all Uto-Aztecan), Maricopa and Tiipay (Yuman), St'át'imcets, Lushoodseed, Bella Coola (all Salish), and Cree (Algonquian). However, there are many others, e.g. Siouan (Riggs 1893: 18; Pustet 1995), Wakashan (Anderson 2005: 101), and Athabascan (see e.g. Lovick 2009).

5.1 Uto-Aztecan and Yuman
Shaul (1986; 1995) provides a description of an earlier stage of the Tepiman branch of Uto-Aztecan, namely Nevome, on the basis of texts and grammars starting from the 17th century. He shows that there are no articles in this stage and but that there are Case marked demonstratives, hugai `that', huca `that-OBL', hugama `those-NOM', and hucama `those-OBL', whose system is breaking down (1986: 51). Direct descendants of Nevome are Pima Bajo and Tohono O'odham.

In Pima Bajo, the more conservative of the two in this respect, Estrada Fernández (1996: 8) calls íg and ík in (122) articles but notes that they are homophonous with the demonstrative.

(122) íg kil ík gogosi givim

the man the dog strike-IMPF

`The man is striking the dog.' (Estrada Fernández 1996: 8)

This indicates that the article stage has not quite been reached. According to Estrada Fernández (1996: 19), Case is also marked on the article in (122), íg for the nominative and ík for the oblique. This is of course not surprising given what Shaul has illustrated regarding the earlier stage.

Pima Bajo's close relative Tohono O'odham (Zepeda 1983) has heg(ai) `that' and heg(am) `those' as demonstratives. They also serve as third person pronouns. There is an article g (see also Langacker 1977: 100-101), as in (123), that looks like a contraction or shortening of the demonstrative.

(123) 'Ab 'o hihim g cewagi O'odham

there AUX walk-P the clouds

`Here come the clouds.' (Zepeda D'ac 'O'odham 1982)

In O'odham, g does not occur sentence-initially, probably due to its reduced phonology (at least compared to Pima Bajo) but otherwise seems to be frequent. Payne (1987: 787)
sensitive to its distribution "is strictly syntactic, identifying the beginning of" the NP. Nevome, Pima Bajo, and O'odham are thus in different stages of the DP cycle.

Langacker (1977: 100-101) provides many other examples of Uto-Aztecan languages with emerging and established articles, e.g. Nahuatl, Southern Paiute, Cupeño (124), and Cora (125).

(124) ət pə' pulini-š  
DEM ART child-ABS  
'that child.' (Langacker 1977, taken from Hill & Nolasquez 1973: 127)

(125) áihna í tyata'a  
that ART man  
'That man right here.' (Casad 1984: 246)

In their syntax, these constructions fit the DP cycle since there is in (124) and (125) what looks like a specifier followed by a head. Semantically, they are quite complex. Cora has three articles, agreeing with the demonstratives with respect to the position of the object to the speaker. The demonstratives can be inflected for case and, in the case of objective demonstratives, agreement with the subject. The demonstrative can be dislocated too.

The Yuman languages have complex systems of demonstratives, some of which are developing into articles. For instance, Gordon (1986: 53ff.) discusses the system in Maricopa, where demonstrative suffixes (-ny, -s, -v), prefixes (ny-, s-, v-), and roots (aany, aas, va, da) all work together. The suffix –ny, as used in (126), comes closest to being a definite marker but it is not obligatory.

(126) 'iipaa-ny-sh hmii-k  
man-DEM-SM tall-REAL  
'The man is tall.' (Gordon 1986: 53)

This suffix is the one most closely connected (in phonological shape) to the root aany which is also used as the regular third person pronoun.
Epstein (1993) argues that Jamul Tiipay (Diegueño) possesses an article *pu*, as in (127), that derives from a distal demonstrative *puu* `that' (128). Note that the article in (127) is clitic-like since *wa* `house’ precedes it. Relevant examples can be found in Miller (2001), who refers to *pu* in (127) as a `demonstrative clitic’ not an article.

(127)  
wa-\textit{pu} \quad nyaa-ch \quad shin \quad chaw \quad Jamul Tiipay
\begin{tabular}{l}
\text{house-DEF} \\
\text{I-NOM} \\
\text{along} \\
\text{made}
\end{tabular}

\text{`I built that house myself.'} \quad (Miller 2001: 153)

(128)  
\textit{puu}-ch \quad xiipuk-ch \quad w-aa \quad Jamul Tiipay
\begin{tabular}{l}
\text{that-NOM} \\
\text{be.first-SS} \\
\text{3-go}
\end{tabular}

\text{`That one went first.'} \quad (Miller 2001: 151).

The article is used in discourse-prominent positions, according to Epstein, e.g. compare (129) and (130) where, in the latter, a preposed specific object is marked.

(129)  
\textit{nyaach} \quad \textit{vuur} \quad wi\textit{iw} \quad Jamul Tiipay
\begin{tabular}{l}
\text{I} \\
\text{burrow} \\
\text{see}
\end{tabular}

\text{`I saw a/the burrow.'} \quad (from Epstein 1993: 121)

(130)  
\textit{vuur-\textit{pu}} \quad \textit{nyaach} \quad wi\textit{iw} \quad Jamul Tiipay
\begin{tabular}{l}
\text{burrow-DEF} \\
\text{I} \\
\text{saw}
\end{tabular}

\text{`I did see that burrow.'} \quad (from Epstein 1993: 121)

Miller (2001) analyzes a few stories and notes that the first time a nominal is introduced, it does not have -\textit{pu} but that subsequently it typically does. Other references that are specific are also marked by -\textit{pu}.

(131)  
\textit{\textit{ii}-\textit{pu}} \quad \textit{achkatt} \quad Jamul Tiipay
\begin{tabular}{l}
\text{wood-DEF} \\
\text{cut into pieces}
\end{tabular}

\text{`She cut the wood into little pieces.'} \quad (Miller 2001: 346)
This seems quite clear evidence for the start of an article-phase. The structural position is in accordance with the DP cycle: an independent demonstrative in (129) and a head in (128).

The Uto-Aztecan languages are in various stages of losing dependent marking on DPs through the demonstratives and are developing articles. Structurally, this process follows the stages in the DP Cycle. The Yuman languages show various stages in their synchronic shapes.

5.2 Salish

I will show that Salish languages are in different stages of the DP cycle. Even though the semantics of demonstratives are controversial, the actual structural positions are not. It is harder in this family to show a diachronic development.

Lots is written on the determiner system in the Salish family, partly because there is a debate as to whether or not there are articles (see Himmelmann 1997: 204). Kroeber (1999), in his comparison of the Salish languages, uses the term `article' and notes that they code gender in most languages but that their degree of definiteness may just be `known to the speaker' (1999: 66) and that referential may be a better term. Matthewson (1998) argues (convincingly to my mind) that D-elements do not convey definiteness or specificity but assertion of existence. The various Salish languages express different features on the D from among visibility, proximity, gender, number, and Case and they differ widely in complexity. Bella Coola has 18 different distinctions but Sechelt only 5 (Matthewson 1998: 28-31). I will first discuss the semantic properties of the D but my main interest is where the different elements are situated in the DP and what that tells us about the DP cycle.

Matthewson (1998) defines definiteness as the novel-familiar distinction. She shows in detail for seven Salish languages that this distinction known from English is not relevant. Some examples from Sechelt are given in (132). The determiner lhe presents the first mention of the snake woman and (133) a later one, but the determiner is the same.

(132) $t'i$  súxwt-as  lhe  ?úlhka? s lhánay  Sechelt
Matthewson (1998: 58) then shows that specificity is not relevant either but that assertion of existence is. In (132), *lhe* indicates that the snake woman exists, whereas in (134) *she* indicates that the cloud isn't there yet.

Though the semantic features of the determiner system are different, the syntactic representation of the DP can still be used and I turn to the representation of determiners and provide different stages of the DP cycle in Salish. St’át’imcets (or Lillooet) has a specifier and a head as well as an suffix in (135), but the demonstrative is clearly proximal, as (136) shows.

The structure for (135) might look like (137). The proximal demonstrative *cʔa* is in the specifier position, the article *ti* in the head position, and the suffix in the light n.
Matthewson (2005: 19-20) provides full paradigms for the determiner, e.g. ti ... a and the demonstrative. Her table makes clear that the -a suffix indicates that there is an assertion and the choice of the ti/ta, ni/na, ku prefixes indicate present, absent, or remote in the singular. The demonstrative shows a three-way distinction: number, proximity, and visibility. The deictic markers, 'here' and 'there' in St'át'ímcets show interesting similarities to the specifier in (135). For instance, l-čʔa means visible, proximal 'here'. This similarity to the specifier cʔa is not surprising considering the typical renewal sources.

Demonstratives co-occur with possessives, as in (138). This fits with the structure in (137) above since the possessive would be closer to the noun, possibly in the specifier of the nP.

(138) niʔ na n-stáʔa St'át'ímcets
       DEM DET 1S.POSS-aunt-DEF
       'my aunt.' (Matthewson 2005: 51)

In Lushoodseed, another Salish language, there are differing analyses and sets of demonstratives depending on the researcher. Hess & Hilbert (1977: 5) list the group in (139).
Hess (1995: 77) adds a fifth to this list, namely the non-contrastive to and provides a list of these five sets of adnominal demonstratives with their neutral and marked (feminine) forms too. Himmelmann (1997: 206) notes that the ti is not very frequent in Lushoodseed texts and that the longer forms ti ḥi this' and ti ḥil 'that' are much more frequent. This suggests an absence of the article, and that Lushoodseed is in an earlier stage of the DP-cycle than St’át’imcets.

In the related Bella Coola (Davis & Saunders 1997: 86; 89), two sets of deictic prefixes are listed, with masculine, feminine, and plural forms) as well as six sets of deictic suffixes. For instance, in (140), ti- indicates proximal masculine and -tx the same but also that it is not gestured; ta- is distal and -t’ay distal and pointed.

(140) mus-is ti-ʔamllk̓i-tx  ta-q’lsxw-t’ay Bella Coola
   feel-3S DEF-boy-DEF DEF-rope-DEF
   'The boy felt that rope.' (Davis & Saunders 1997: 89)

The system Davis & Saunders describe is extremely complex and I will not go into this more except to note that the preverbal Bella Coola ti is similar to the Lushoodseed and St’át’imcets ti and that the Bella Coola suffixes seem to be deictic renewals. Why they appear as suffixes is not clear; the St’át’imcets pattern of demonstrative is more expected cross-linguistically.

In Skwxwú7mesh (or Squamish), there are again a number of determiners and demonstratives. Gillon's (2009) table of determiners is given here. She distinguishes between determiners and demonstratives on syntactic grounds: the determiner cannot occur by itself (is comparable to the in English) whereas the demonstrative can (is comparable to this and that in English). They cannot occur together.
<table>
<thead>
<tr>
<th></th>
<th>Deictic/locatable</th>
<th>Non-deictic/Non-locatable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender neutral</td>
<td>ta</td>
<td>kwi</td>
</tr>
<tr>
<td>Feminine</td>
<td>lha</td>
<td>kwelha</td>
</tr>
</tbody>
</table>

Table 6.10: The determiner system of Skwxwú7mesh (from Gillon 2009: 188)

Gillon argues that determiners are used for domain restriction within a context, following Westerståhl (1984) and others. There are numerous other semantic analyses, e.g. Matthewson's (1998) mentioned above. Sentence (141) shows that the same form *ta* is used for novel and familiar nominals.

(141) Chen nam ch’áatl’am kwi chel’áklh. Skwxwú7mesh  
I go hunt/track DET yesterday

\[ S-en \text{ men } kw’ách-nexw \text{ ta } míxalh. \]

NOM-1S.sbj just look-TR DET bear

\[ S-en \text{ men } kw’élash-t \text{ ta } míxalh. \]

NOM-1S.sbj just shoot-TR DET bear

‘I went hunting. I saw a bear. I shot the bear.’ (from Gillon 2009: 193 (43))

The non-deictic determiner *kwi* refers back to a previously mentioned referent, here *ta schí7i*, but can also restrict this referent, as it does in (142).

(142) Chen wa lhém-n ta schí7i. Skwxwú7mesh  
I IMPF pick-TR det strawberry

\[ Chen \text{ húy-s } kwi \text{ schí7i}. \]

I finish-CAUS DET strawberry

‘I picked strawberries. I ate one strawberry.’ (from Gillon 2009: 197)
The difference between deictic and non-deictic in Skwxwú7mesh, according to Gillon, is that the deictic determiners have wide scope whereas the non-deictic determiners, such as the one introducing stá7uxwlh in (143), have narrow scope.

(143) Na múkst-s-t-as i7xw slhen-lhánay’ kwi stá7uxwlh Skwxwú7mesh
REAL kiss-CAUS-TR-3ERG all woman DET child
‘Every woman kissed a (different) child.’ (from Gillon 2009)

The non-deictic determiners are analyzed by Gillon as part of the predicate, somewhat like bare nouns. Though Gillon doesn't draw this conclusion, I'd like to suggest this means they are in a different position: the deictic DP being able to escape into a position of wide-scope and the non-deictic NP not.

Demonstratives in Skwxwú7mesh are more morphologically complex than determiners and, as mentioned, they can appear on their own. I think this means that they are in specifier positions with interpretable features, whereas determiners are in the head position with uninterpretable features, hence they need a noun. Salish languages present a variety of options: either the specifier is filled or the head or both.

5.3 Algonquian

Cree languages, a group of closely related Algonquian languages, have a very complex set of demonstratives, as e.g. Cyr (1993: 199) shows. I will just provide a short description showing that the current system is quite old and that it provides some evidence for earlier cyclic development.

Cyr argues, on the basis of textual evidence from Montagnais Cree that "the so-called demonstratives should be classified as definite articles" (Cyr 1993: 198). They are most often used after the nominal they go with has already been introduced in the text by nothing or by a demonstrative. The sentence in (144) follows a discussion on how to build a house and the house is known to all participants, i.e. very topical.

(144) eukun ne mitshuap Montagnais
The marker *ne* can occur together with proper nouns, locative and possessive constructions, and is used by monolingual older speakers. This prompts Cyr not to see it as French influence, which I think is correct since even the reconstructed Proto-Algonquian (see Proulx 1988) was already shifting toward article use.

In conclusion, three families in North America show evidence of a DP-cycle. In Uto-Aztecan, the historical data show an absence of an article in older varieties but various articles that derive from demonstratives in the modern versions. In Salish, it is harder to see a diachronic development. The languages in this family vary tremendously, either the specifier is filled or the head or both; the locative adverb is related to the demonstrative and could have served as its source. In Cree, there is perhaps the beginning of an article-stage.

6. Austronesian

In Austronesian, there are demonstrative pronouns, article-like elements, as well as frequent linkers/ligatures and adverbial renewals. These four elements represent the stages in the DP Cycle since linkers derive from demonstratives, according to Himmelmann (1997), and would be the last stage in the cycle (with demonstratives being specifiers and articles heads and adverbials the renewals). I'll start with Maori.

Maori has definite (the singular *te* and plural *ngaa*) and indefinite (*he*) articles, as well as proximal (*tenei*) and distal (*tenaa* and *teraa*) demonstratives (Bauer 1993: 355-361; 381-387). The definite article is shown in (145) and the demonstratives can be 'divided', as (146ab) shows, where (146b) is the most common strategy.

(145)  
```
  te  tangata                  Maori
    DEF  man,                  
  `the man.'                  
```
Waite (1994) analyses these phrases using a DP with *te* as head D and Dooley-Collberg (1997) argues that the demonstrative involves a (post-nominal) proximal particle incorporated in the D head. More information is needed on the difference between (145), (146a), and (146b) in terms of emphasis or formality. For now, I’ll describe the cyclical mechanisms most likely occurring. The interesting point for the cycle is that the D head is reinforced by an adverb-like element.

(145) has a very basic structure with *te* in the D head. To derive (146a), *nei* moves to a position between the D and the N in Dooley-Collberg’s analysis; more specifically, it incorporates into D. The sentence in (146b) requires no movement.

The position that *nei* moves to is right-adjoined to D, which is a bit unusual (using Kayne’s 1994 antisymmetry). In addition, *nei* may be phrasal which Dooley-Collberg’s analysis of possessives requires for possessives anyway. I therefore extend Dooley-Collberg’s analysis of possessives to *nei* in (146) as well. This provides an analysis of renewal very similar to e.g. that in English above.
Possessive nominals, as in (148a), can be preposed as well in (148b). In the singular, the genitive marker\(^{11}\) attaches to the article *te* to form *too*.

(148) a. \[ te \quad whare \quad o \quad Hone \quad \text{Maori} \]

\[ \begin{array}{l}
\text{DEF.S} \\
\text{house} \\
\text{GEN} \\
\text{John} \\
\end{array} \]

'John’s house.’

b. \[ too \quad Hone \quad whare \]

\[ \begin{array}{l}
\text{DEF.S-GEN} \\
\text{John} \\
\text{house} \\
\end{array} \]

'John’s house.' (Dooley-Collberg 1997: 6)

The analysis Dooley-Collberg suggests for (148b) is one where the *o Hone* moves to the specifier of the DP. The head of this DP, i.e. *te*, will in its turn move to the head of the phrase *o Hone*, resulting in *too Hone*, as in (149).

\[ \begin{array}{c}
\text{(149)} \\
\text{DP} \\
\text{PP} \\
\text{D’} \\
\text{P} \\
\text{NP} \\
\text{D} \\
\text{NP} \\
\hline
\text{o o Hone te whare} \\
\end{array} \]

The advantage of (149) is that *te* left-adjoins to *oo* and that we could extend this analysis to the demonstrative in (146a); the disadvantage is that the movement is to a position that doesn’t obviously c-command the D. What speaks for movement of *nei* in (146a) is that movement is limited to occurring only once: either *te* moves to join a demonstrative in (150) or a possessive in (151) but not both.

(150) \[ teenaa \quad huu \quad ooku \quad \text{Maori} \]

\[ \begin{array}{l}
\text{DEF.S-DIST} \\
\text{shoe} \\
\text{GEN-1S} \\
\end{array} \]

'that shoe of mine.'

\[^{11}\text{There are two kinds of genitive markers in Maori, } o \text{ and } a, \text{ which I will not go into.}\]
(151) \textit{tooku} \quad \textit{whare} \\
\text{DEF.S-GEN-1S} \quad \text{house} \\
`my house.' (Dooley-Collberg 1997: 9; 12)

That means that the specifier of the DP in (149) can only be filled by one phrase at the time. I’ll leave the precise analysis of the DP for future work.

In Austronesian languages with a Topic-Focus system such as Tagalog, the topic marker \textit{ang} is a definiteness marker as well. Technically, only \textit{a} is the definiteness marker since \textit{-ng} is a ligature linking the article to the noun. In (152), the verbal prefix \textit{b-} identifies the theta-role of the topic DP that is marked by \textit{ang} as Agent. The other dependent markers are used when the DP is a non-topic: \textit{ng} is used when the Actor, Patient, and Instrument are non-topics; \textit{sa} is used to mark the Goal, Source, Location, and Benefactive of the non-topics.

(152) \textit{b-um-ili ng kotse ang lalake} \quad \text{Tagalog} \\
\text{AF-PF-buy P car TOP man} \\
`The man bought a car.' (Frawley 1976: 106)

If the ligature \textit{-ng} derives from a demonstrative that reanalyzed as a D, \textit{a-} must be the renewal. In Ilokano, that reanalysis of the ligature as D head is clearer.

In Ilokano (Frawley 1976: 29), another Austronesian language spoken in the Philippines, the article \textit{ta} in (153) can be `lengthened' to a demonstrative \textit{dayta} in (154). This may have happened, as in Maori, through the incorporation of a more deictic element either in the specifier or the head of the DP.

(153) \textit{ta aso} \quad \text{Ilokano} \\
the dog

(154) \textit{dayta aso} \\
that dog
What is interesting is ta’s and dayta’s interaction with the ligature. In the case of the simple article, there can be no ligature, as (155) shows, but in the case of the demonstrative, shown in (156), the ligature is optional.

(155) *ta nga aso
      the LIG dog, ‘the dog.’

(156) dayta (nga) aso
      that LIG dog, ‘that dog.’  (Frawley 1976: 31)

(155) suggests an analysis where ta and nga are in complementary distribution in the head D and where dayta is analyzable as either head (in (154)) or specifier when nga is present (in (156)). Thus, nga is an original demonstrative (e.g. Himmelmann 1997: 172), but after having become a D head, it may now be replaced by another D, namely ta.

In this section, I have provided a few instances from the literature on Austronesian languages showing that here too there is a head that marks nouns, though not a definiteness marker, that derives from a more specific, more independent element. As the head becomes less specific, it may be reinforced by adverbial material, e.g. in Maori. In Tagalog, a- might have reinforced the head ng in D. In Ilokano, a reinforcement of the article ta- by the demonstrative element day is reminiscent of the Maori. The demonstrative in Ilokano shows an ambiguity as to whether it is a head (as in or a specifier. This will no doubt lead to a reanalysis. The data in this section fit stages of the DP cycle very well. I have not phrased this in terms of features since less is known what the features involve.

7. The Afro-Asiatic and Niger-Congo families

As mentioned, each language represents a different stage in the cycle. Evidence from Egyptian, Arabic, and Amharic, all Afro-Asiatic, shows that their cliticized articles derive

---

12 The linker is often na and nga and this is the same form as demonstratives, e.g. nana ‘that' in Kambera.
from more elaborate pronominal forms. The Niger-Congo languages Gourmanchéma and Fongbe also show evidence of various stages. I’ll start with Egyptian where evidence exists for a complete cycle.

The DP cycle has been noticed in the history of Egyptian where, for instance, the feminine ending -t in Middle Egyptian śn-t ‘sister’ is reinforced by a demonstrative t3, as in (157). The demonstrative in turn becomes a t- prefix in Coptic, as do the masculine p3 and plural n3 demonstratives.

(157) t-3 śn-(t) Middle Egyptian
    F-DIST sister-F
    ‘that sister.’ (Schenkel 1990: 18)

In chapter 4, I showed that the masculine distal demonstrative pronoun pw in Old Egyptian is reanalyzed as a copula through a loss of phi-features. There are four levels of closeness represented in Old Egyptian demonstratives, the w-series being only one (Loprieno 1995: 68). The z-series, used in (157), is reanalyzed as an article. Whereas the copula pw, originally one of the demonstrative –w series, loses its phi-features, this doesn’t happen with the articles p3, t3 and n3; masculine, feminine, and plural continue to be marked. The reanalysis can therefore be formulated as in (158), with a loss of deictic features rather than a loss of phi-features as in the case of the copula. (158a) represents the feminine demonstrative reanalyzed as article, (158b) represents the masculine, and (158c) the plural.

(158) Middle Egyptian Coptic
    a. t-3 > t-
    b. p-3 > p-
    c. n-3 > n-
       [i-phi]   [u-phi]
       [i-loc]
Amharic, a Semitic language of Ethiopia, has an enclitic inflected for gender and number in e.g. (159). As in Romanian, the adjective (or numeral) when it precedes is thus marked, as (160) shows.

(159)  \textit{färäs-u} \hspace{1cm} \textit{Amharic}  \\
\text{horse-DEF.MS} \\
\text{`the horse.'}  \\
(160)  \textit{tələq-u} \hspace{1cm} \textit{bet} \hspace{1cm} \textit{Amharic}  \\
\text{big-DEF} \hspace{1cm} \text{house}  \\
\text{`the big house.'}

This means \textit{u-} is a head in D that the closest head (either N or A) moves to.

Both Hebrew and Arabic DPs have received a lot of attention. As is well-known, especially for Arabic, the article is quite clitic-like in that it assimilates to the consonant of the noun or adjective it attaches to; the Hebrew article \textit{ha-} seems less phonologically attached. Benmamoun (2000) and Shlonsky (2004) provide some data where new deictic material is added to the DP and this is relevant for the cycle in that different varieties are in different stages.

The demonstrative in Standard Arabic agrees in person, number, and gender with the noun and is free to appear both pre-nominally and post-nominally, as in (161).

(161) a. \textit{haaðihi} \hspace{1cm} \textit{l} \hspace{1cm} \textit{jaami`at-u} \hspace{1cm} \textit{Standard Arabic}  \\
\text{this-3FS} \hspace{1cm} \text{the} \hspace{1cm} \text{university}  \\

b. \textit{l} \hspace{1cm} \textit{jaami`at-u} \hspace{1cm} \textit{haaðihi}  \\
\text{the} \hspace{1cm} \text{university} \hspace{1cm} \text{this-3FS}  \\
\text{`this university.'} \hspace{1cm} \text{(Shlonsky 2004: 1494)}

Levantine Arabic similarly has agreeing demonstratives precede and follow the noun, as in (161), but in addition has an invariable \textit{hal} in pre-nominal position, as in (162).

(162) \textit{hal} \hspace{1cm} \textit{bint} \hspace{1cm} \textit{Levantine Arabic}
Shlonsky (2004) argues that *hal* is bimorphemic and includes the article *l*. Evidence for this is the assimilation that is typical for the article. (163) shows the article *l* and demonstrative *hal* assimilating to the consonant of the next word.

(163)  

a. \( z \ zalame \)  
   Levantine Arabic  
   `the man.'  

b. \( haz \ zalame \)  
   this man.' (Shlonsky 2004: 1500)

The cyclical stages represented are Standard Arabic with the (proximal) demonstrative in the specifier of the DP and the article showing some evidence of phonological reduction. Levantine Arabic shows how the demonstrative is no longer in the specifier but together with the article occupies the head position.

Frajzyngier (1997) shows that Chadic languages, also Afro-Asiatic, have plural markers that may derive from demonstratives. Put in terms of features, this would mean a reanalysis from interpretable phi-features and deictic features to possibly just number features. Plurals, however, are often restricted to definite nouns in Chadic and it is therefore possible that some deixis remains. In the most widely spoken Chadic language, Hausa (Lyons 1999: 52-3 and Jaggar 2001), there are several definite/specific markers. Schuh (2002) provides data from three related Chadic languages, Western Bade, Gashua Bade, and Ngizim. "The \(-n\) of WB [Western Bade] nunation is clearly cognate with the GB [Gashua Bade] masculine distal demonstrative".

The Niger Congo language Gourmanchéma, or Gurma, spoken mainly in Burkina Fasso, has two definite forms for `the men', namely those in (164). The semantic difference between the two is not clear but, in terms of the DP cycle, it is interesting to see the renewal of *ba* in (164b).

(164)  

a. \( nita-ba \)  
   Gourmanchéma  
   men-DEF, `the men.'
Languages closely related to Gourmanchéma show a variety of differences. Some have a suffix or a prefix or the renewed 'prefix' has lost the definite meaning, e.g. Gangam. According to Greenberg (1978: 55), this group shows all the stages in the cycle.

In Fongbe, a Niger-Congo language spoken mainly in Benin, there is a doubling as well, as (165) shows. I assume that ơ is a reduced form of élơ reinforcing the deixis.

(165) àsǹ nyɛ tɛn élơ ơ le' Fongbe
    crab me GEN DEM DEF P
    'these/those crabs of mine.' (Lefebvre 2004: 89)

According to Lefebvre (2004), Haitian Creole has used French lexical items ça, cela, and celui-là but the syntax of Fongbe, as (166) shows.

(166) krab mwen sa/sila a yo Haitian Creole
    crab me DEM DEF P
    'these/those crabs of mine.' (Lefebvre 2004: 89)

There are apparently some speakers that use sa as proximate and sila as distal, but this is not common. Other speakers use sila as distal but sa as general definite. A third set of speakers makes no distinction at all, and a fourth group has only sa. The latter group may be gaining in influence, according to Lefebvre 2004: 257). Lefebvre argues that the differences can be traced back to substratum differences, in that Fongbe, Ewe and other languages show the same variation.

In this section, I have reviewed data from Egyptian, Arabic, and Amharic, all Afro-Asiatic, and from Gourmanchéma and Fongbe, Niger-Congo languages. These all show evidence of various stages of the DP Cycle.
8. Creoles

Recent work on the structure of the creole nominal includes Bruyn (1995); Déprez (2003; 2007); and especially Baptista & Guéron (2006). As is well-known, Bickerton (1981) suggests that a typical creole language distinguishes between specific and non-specific but there is enormous variation and no two creoles have the same nominal system. Number marking seems crucial in many to mark referentiality. In this section, I provide a few examples and show how they may fit in the stages of the cycle.

Bruyn (1995: 98) examines the history of Sranan Tongo, a creole of Surinam. In Modern Sranan, the definite articles are singular \(n)\text{a}\) and plural \text{den}\, but in earlier forms these are \text{da}\ and \text{den}\ respectively. Bruyn provides examples of definite markers from the 18th century, as in (167), where \text{da boote} 'the boat' has been mentioned previously.

\[(167) \text{Cezar j}oe \text{\ bin \ tey \ da \ boote \ bon …} \quad \text{Early Sranan} \]

\[
\text{Caesar you PST tie the boat well} \\
\text{‘Caesar, did you tie the boat well.’ (Bruyn 1995: 99, van Dyk 110)}
\]

She notes (see also 2006: 359) that the articles are sometimes still seen as having deictic value because they do not occur together with the more deictic \text{dati}. The latter is used as third person independent pronoun as well. This situation changes by the end of the 18th century, as (168) shows, where \text{dati} is used as an additional marker of deixis, i.e. a renewal.

\[(168) \text{den \ dey \ dati} \quad \text{Sranan} \]

\[
\text{the-P day that} \\
\text{‘those days.’ (Bruyn 1995: 107, Leys 735)}
\]

Bruyn also examines the relative frequency of the articles \text{da/(n)\text{a}}, as in (167), and \text{den}, as in (168), over three centuries and notes that their frequency goes up, expected if they are
grammaticalizing (2006: 360). The relative frequency of reinforcing demonstratives also goes up.

Depréz (2007) develops a very comprehensive account of grammaticalization of the elements in DP, also in terms of changes in the features, in a way very similar to what I have suggested above. She argues, as I have, that specifiers have interpretable features and heads uninterpretable ones. Some heads trigger movement to their specifier and thus appear post-nominally, as in Mauritian Creole (169) with a structure as in (170); other heads do not.

(169) sa bann zom la Mauritain Creole

DEM P men DEF

'de men.' (from Depréz 2007)

(170)

If a determiner is in the specifier position, it will always be initial to its phrase; if it is a head, it will trigger movement of a lower phrase to its specifier. The changes are from specifier to head, and from interpretable to uninterpretable, though this might involve triggering movement into the specifier position, itself not economical.

Jamaican Creole has a definite and indefinite article, *di* and *wan* respectively. The demonstratives are interesting in that they can be split, as in (171) and (172).

(171) a. dat-de bwai Jamaican Creole

'that boy.'
b. \textit{da bwai-de}  
\textit{that boy.}  

(172) a. \textit{dem-de bwai}  
\begin{tabular}{l}
\textit{those boys.} \\
\textit{Jamaican Creole}
\end{tabular}  

b. \textit{dem bwai-de}  
\textit{those boys.}  
\textit{all from Bailey 1966 : 29}

This is very reminiscent of the data in English, where the locative \textit{there} is used to reinforce a demonstrative.

Summarizing, creoles can be characterized as using a DP-system where cyclical renewal takes place.

9. Conclusion

Demonstratives are very frequent across the world's languages and express definiteness and location relative to the speech event. Articles convey just definiteness and appear, for instance, in Indo European, Hungarian and Finnish, Uto-Aztecan, Yuman, Salish, Algonquian, Austronesian, Afro-Asiatic, Niger-Congo, and in Creoles. Apart from those discussed in this chapter, articles appear in the Indo-European Armenian, Bengali, and Kashmiri; in Dravidian (e.g. Sinhalese); in Basque (Trask 1997: 199); in Oto-Manguean, Mixe-Zoque, Mayan, and in Wakashan. Huang (1999) argues they can even be found in Chinese. Anderson (2005), Himmelmann (1997: 195-8), Royen (1929), Lyons (1999), Diessel (1999) provide further references and examples.

I have suggested that some of the stages and changes that demonstratives undergo can be seen in terms of a DP-cycle where demonstratives in specifier positions are reanalyzed as heads. The deictic meaning that was earlier connected with the demonstrative is lost when it bleaches to an article but this deictic function can then be renewed through other means, e.g. a deictic adverb or a demonstrative. This change can be formulated in terms of features being reanalyzed from semantic to formal, as in (83) above.