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While the comparative method is concerned with regularities in phonological change, grammaticalization theory deals with regularities of grammatical change. In an A–Z format, this book summarizes the most salient generalizations that have been made on the unidirectional change of grammatical forms and constructions. The product of ten years of research, *World Lexicon of Grammaticalization* provides the reader with the tools to discover how different grammatical meanings can be related to one another in a principled way, how such issues as polysemy and heterosemy are dealt with, and why certain linguistic forms have simultaneous lexical and grammatical functions. It covers several hundred grammaticalization processes, in each case offering definitions of lexical concepts, suitable examples from a variety of languages, and references to the relevant research literature; appendixes organized by source and target concepts allow for flexible use. The findings delineated in the book are relevant to students of language across theoretical boundaries.

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World Lexicon of Grammaticalization

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Contents

Acknowledgments
vii

Abbreviations and Symbols
ix

1
Introduction
1

2
Grammatical Concepts Used in This Work
15

3
Source–Target Lexicon
27

Appendix 1: Source–Target List
317

Appendix 2: Target–Source List
327

Appendix 3: List of Languages
337

References
351
Acknowledgments

World Lexicon of Grammaticalization is based on research carried out between 1991 and 2000 at the University of Cologne and the Center for Advanced Study in the Behavioral Sciences, Stanford, California. A number of people have contributed to this work in various ways, in particular the following: Sasha Aikhenvald, Johan van der Auwera, Walter Bisang, Jürgen Broschart, Joan Bybee, Jean-Pierre Caprile, Hilary ChapPELL, Ulrike Claudi, Gerrit Dimmendaal, Bob Dixon, Spike Gildea, Tom Givón, Colette Grinevald, Tom Güldemann, John Haiman, Martin Haspelmath, Ingo Heine, Paul Hopper, Raimund Kastenholz, Roland Kießling, Christa Kilian-Hatz, Alan King, Christa König, Sylvia Kutscher, Beth Levin, Thomas Müller-Bardey, John Newman, Helma Pasch, Alain Peyraube, Mechthild Reh, Susanne Romaine, Mathias Schladt, Chao Fen Sun, Bernardus Suwute, Kossi Tossou, Elizabeth Traugott, Holger Tröbs, Erhard Voeltz, Manfred Weber, and Elizabeth Weise. Finally, we wish to thank ten anonymous readers of Cambridge University Press for their constructive criticism and a wealth of additional information they contributed to this volume.¹

Research on which this volume is based was generously sponsored by the Deutsche Forschungsgemeinschaft (German Research Society), to which we wish to express our deeply felt gratitude. The first-named author also wishes to thank the Center for Advanced Study in the Behavioral Sciences, Stanford University, for offering him an academic home during the final phase of work on this book. The second-named author is grateful to the Osterlits Research Laboratory, CNRS (Centre National de la Recherche Scientifique), Paris, France, for its support.

¹ We have marked such examples with the phrase “anonymous reader.”
# Abbreviations and Symbols

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
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<td>ablative</td>
</tr>
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</tr>
<tr>
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</tr>
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<td>C1, C2, etc.</td>
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OBJ object
OBL oblique
OPT optative
P pidgin, in reference to specific languages
PA Arabic-based pidgin
PART particle
PARTCP participle
PARTV partitive
PASS passive
PAST past
PE English-based pidgin
PERF perfect
PFV perfective
PL plural
PLU pluperfect
PM participial marker
POESS postessive
POSS possessive
POST postposition
POT potential
PRED predicate marker
PREP preposition
PRES present
PROG progressive
PROH prohibitive
PRON pronoun
PROX proximate
PROXIM proximal
(demonstrative)
PERS person
PST participle of state
PURP purpose
PX proximity marker
Q interrogative
QUOT quotative
R relational suffix
REAL realis
REAS reason
REC reciprocal
REFL reflexive
REL relative (clause marker)
RES restrictive
RESULT resultative
RM relator, relation marker
SBST substantivizer
SG singular
SRDIR superdirective marker
SREL superrelative marker
SRESS superessive marker
SS same subject marker
STATS subject of a stative verb
SUB subordinator
SUBEL subelative marker
SUBJ subject
SBJUNCT subjunctive
SUF suffix
TAM marker of tense, aspect, or modality
TERM terminative
TNS tense
TOP topic
TR transitive
TRI trial
VEN venitive
VINC incremental
VN vowel on verbs
VOC vocative
1  first person
2  second person
3  third person
I  juncture I
II juncture II
=  clitic boundary
?  morpheme of unknown meaning
*  reconstructed item
( ) interlinear glosses tentatively volunteered by the authors
Over the course of the last three decades, a wealth of data has been published on the origin and development of grammatical forms. The main purpose of the present work is to make this wealth accessible to a wider readership. To this end, over 400 processes relating to the evolution of grammatical categories are discussed, using data from roughly 500 different languages. (See Appendix 3 for a list of languages figuring in this book.)

The readership we have in mind for this book includes first of all linguists. Grammaticalization theory, which is the framework adopted here (see §1.1), is concerned with language use across space and time; hence the findings presented may be of help for diachronic reconstruction, especially in areas where other tools available to the historical linguist, such as the comparative method and internal reconstruction, do not yield appropriate results. The descriptive linguist will find information, for example, on how and why different grammatical meanings can be related to one another in a principled way (i.e., on how to deal with issues like polysemy and heterosemy), on why there are some regular correspondences between grammatical forms and the meanings expressed by them, or on why certain linguistic forms have simultaneously lexical and grammatical functions. Anthropologists, sociologists, and psychologists may discover that the kind of human behavior held responsible for the evolution of grammatical forms is not all that different from the kind of behavior they observe in their own fields of study.

What distinguishes this work from relevant monographs on grammaticalization theory (e.g., Lehmann 1982; Heine and Reh 1984; Heine, Claudi, and Hünnemeyer 1991; Traugott and Heine 1991a, 1991b; Hopper and Traugott 1993; Bybee, Perkins, and Pagliuca 1994; Pagliuca 1994; Heine 1997b; Ramat and Hopper 1998) is its conception as a reference work. Accordingly, an attempt was made to collect many data from as many different languages as possible and to avoid theoretical biases – as far as this is possible and feasible.
1.1 Grammaticalization Theory

Grammaticalization is defined as the development from lexical to grammatical forms and from grammatical to even more grammatical forms. Since the development of grammatical forms is not independent of the constructions to which they belong, the study of grammaticalization is also concerned with constructions and with even larger discourse segments.

In accordance with this definition, grammaticalization theory is concerned with the genesis and development of grammatical forms. Its primary goal is to describe how grammatical forms and constructions arise and develop through space and time, and to explain why they are structured the way they are. Technically, grammaticalization involves four main interrelated mechanisms.

(a) desemanticization (or “semantic bleaching”) – loss in meaning content,
(b) extension (or context generalization) – use in new contexts,
(c) decategorialization – loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms, and
(d) erosion (or “phonetic reduction”) – loss in phonetic substance.

While three of these mechanisms involve a loss in properties, there are also gains. In the same way that linguistic items undergoing grammaticalization lose in semantic, morphosyntactic, and phonetic substance, they also gain in properties characteristic of their uses in new contexts. Grammaticalization requires specific contexts to take place, and it can be, and has been, described as a product of context-induced reinterpretation. Accordingly, context is a crucial factor in shaping the structure of grammatical forms – to the extent that they may express meanings that cannot immediately be derived from their respective source forms.

It has been argued that grammaticalization is not a distinct process, since the four mechanisms can be observed to be at work also in other kinds of linguistic change (Newmeyer 1998: 248ff.). There are a couple of reasons why we think that such a position is not justified. First, the main task of grammaticalization theory is to explain why grammatical forms and constructions are structured the way they are, and these four

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1 The term “grammatical forms,” or “grams,” roughly corresponds to what is also referred to as “functional categories.”
2 Newmeyer (1998: 240) raises doubts about whether we are really dealing with a theory here, and he rightly observes that much of the relevant literature on this subject is not very helpful on deciding this issue.
3 Newmeyer (1998: 260) refers to desemanticization as “appropriate semantic change,” to decategorialization as “downgrading analysis,” and to erosion as “phonetic reduction.”
mechanisms, as opposed to many other conceivable mechanisms, have been found to be relevant to achieve such explanations. Thus, irrespective of how one wishes to define a “distinct process,” one is led to conclude that these mechanisms are part of one and the same explanatory framework.

Second, grammaticalization, as conceived here, is above all a semantic process. This process is context dependent, and grammaticalization can therefore be described in terms of context-induced reinterpretation. Not every reinterpretation leads to the rise of grammatical meanings. Rather, it is only when forms for concrete (e.g., lexical) meanings are used to also express more abstract (grammatical) meanings that grammatical forms emerge; for example, when a form used for a visible object (e.g., the body part ‘back’) is used also to refer to a nonvisible item (the spatial notion ‘behind’), or a form used for an action (‘go to’) is used also to refer to a grammatical notion (future tense). On account of its specific directionality, context-induced reinterpretation has been described in terms of metaphorical transfer, leading, for example, from the domain of concrete objects to that of space, from space to time, from (“real-world”) space to discourse space, and so on.

Desemanticization thus results from the use of forms for concrete meanings that are reinterpreted in specific contexts as more abstract, grammatical meanings. Having acquired grammatical meanings, these forms tend to become increasingly divergent from their old uses: they lose in categorial properties characteristic of their old uses, hence undergoing decategorialization, and they tend to be used more frequently, to become more predictable in their occurrence, and, consequently, to lose in phonetic substance. Thus, the four mechanisms are not independent of one another; rather, desemanticization precedes and is immediately responsible for decategorialization and erosion. There are a few cases where it has not yet been possible to establish that decategorialization really followed desemanticization in time, and we do not wish to exclude the possibility that in such cases the two may have occurred simultaneously. However, such cases appear to be exceptional: new grammatical meanings arise, and it usually takes quite some time before any corresponding morphological, syntactic, and/or phonetic changes can be observed. In many languages, prepositions unambiguously serving a grammatical function still have the morphosyntactic structure of their earlier uses as adverbial phrases (cf. English by means of, in front of, with respect to) or verbal phrases (cf. Chinese ZAI’(to be) at’; Alain Peyraube, personal communication), and tense or aspect auxiliaries may still behave morphosyntactically largely like lexical verbs even if they have lost their lexical semantics and serve exclusively as functional categories (cf. English be
going to, used to, keep (doing), etc.). To conclude, there is evidence to suggest that grammaticalization can be defined as a distinct process.

It is sometimes assumed that grammaticalization invariably involves lexical categories; that is, that it is confined to the development from lexical to grammatical forms. This view tends to ignore that such cases account for only part of what falls under the rubric of grammaticalization. Equally commonly, as we will see in the course of this work, items already part of the inventory of grammatical forms give rise to more strongly grammaticalized items. Prepositions often develop into conjunctions, temporal conjunctions tend to give rise to causal or concessive conjunctions, demonstrative determiners develop into definite articles or relative clause markers, verbal perfect inflections may become past tense markers, and so forth – all developments that take place within the domain of functional categories. Such developments are distinguished mainly from developments involving lexical categories by the difficulty of identifying and reconstructing them.

Grammaticalization is a unidirectional process; that is, it leads from less grammatical to more grammatical forms and constructions. However, this process is not without exceptions: a number of examples contradicting the unidirectionality principle have been found (see, e.g., Joseph and Janda 1988; Campbell 1991; Ramat 1992; Frajzyngier 1996; and especially Newmeyer 1998: 260ff.). Yet, as acknowledged by most of the scholars who have identified exceptional cases, such examples are few compared to the large number of cases that conform to the principle⁴ (cf. Haspelmath 1999, 2000: 249). Furthermore, they can frequently be accounted for with reference to alternative forces,⁵ and finally, no instances of “complete reversals of grammaticalization” have been discovered so far (cf. Newmeyer 1998: 263).

Grammaticalization begins with concrete, lexical forms and constructions and ideally ends in zero – that is, grammatical forms increasingly

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⁴ Cf., e.g., Harris and Campbell (1995: 338), who summarize this situation thus: “there is a strong tendency for grammaticalization to proceed in one direction, though it is not strictly unidirectional.” Similarly, Joseph and Janda (1988: 198–200) observe that cases of demorphologization, a process that would contradict the unidirectionality principle, are rare and not seldom controversial. Finally, Newmeyer (1998: 275–6, 278) observes that cases conforming to the unidirectionality principle (“downgradings”) “have occurred at least ten times as often as upgradings,” and he concludes, “I suspect that, for whatever reason, there is a general directionality to the semantic changes observed in grammaticalization” (emphasis in original).

⁵ Such forces may be morphophonological or morphosyntactic in nature, but they may as well relate to specific sociocultural factors. Burridge (1995) discusses an example of reversed directionality in Pennsylvania German, where a modal auxiliary developed into a lexical verb, wotte ‘wish’. As Burridge shows, one factor contributing to this development can be found in the particular Mennonite religious principles held by the speakers of Pennsylvania German.
lose in semantic and phonetic content and, in the end, they may be replaced by new forms; grammaticalization has therefore been described as a cyclical process (Givón 1979a; Heine and Reh 1984). While there is some evidence to support this assumption, we have to be aware that, first, a grammaticalization process can stop at any point of development and, second, “worn-out” grammatical forms are not necessarily replaced by new forms. Thus, the metaphor of a grammatical cycle, though useful in certain cases, should not be generalized since it often does not apply for some reason or other.

In a number of works, grammaticalization is described as a process that involves the reanalysis of grammatical categories. Other authors have argued that there is no necessary relationship between grammaticalization and reanalysis (see especially Haspelmath 1998). In fact, reanalysis has been defined in a number of different ways (cf. Langacker 1977; Heine and Reh 1984; Harris and Campbell 1995: 61–96; Haspelmath 1998; Newmeyer 1998: 241–51). Whether grammaticalization involves reanalysis has turned out to be essentially a theory-dependent issue. To avoid any further confusion on this issue, we prefer to exclude “reanalysis” from our terminology of grammaticalization theory.

1.2 Problems

Grammaticalization is a complex subject matter; it relates in much the same way to diachronic and synchronic linguistics as to semantics, syntax, and morphology, and it is rooted in cognition and pragmatics. Obviously, an endeavor such as that found here is an ambitious one – one that has to take care of a wide range of problems. In this section we deal with the most serious of these problems in turn.

The findings presented in this work are meant to highlight processes of human behavior that can be observed across cultures; yet, these findings are based on data from hardly more than one-tenth of the world’s languages. One may therefore wonder what justification there is to call this work a “world lexicon.” Our main reason is this: underlying human behavior there appears to be a strategy of linguistic processing whereby more abstract functions are expressed in terms of forms for concrete concepts. We expect, for example, that in some unknown language there are

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6 Givón (1979a: 209) proposed the unidirectional cycle in (i), where the end point (Zero) marks the beginning of a new cycle again leading from Discourse to Zero:

(i) Discourse > Syntax > Morphology > Morphophonemics > Zero.

7 Newmeyer (1998: 238), for example, argues, “The standard definition of grammaticalization incorporates the notion of reanalysis; no definition that does not do so seems particularly useful.”
ways of expressing temporal concepts in terms of spatial ones, spatial relations in terms of forms for concrete concepts (such as body parts or salient landmarks), aspectual contours of events in terms of forms for actions and motions, or functions concerning the organization of texts in terms of linguistic forms for spatial or temporal deixis. Languages differ considerably in the way and the extent to which this strategy has given rise to grammaticalized constructions; nevertheless, we expect the effects of this strategy to be essentially the same across languages, including languages that are still undocumented.

Throughout this work we are concerned with the relation between two kinds of concepts, which we refer to as the “source” and “target” entities of grammaticalization. We convey the impression in this account that there is always a unidirectional development leading from one distinct entity to another entity. But this is not only a simplified account; it is also at variance with much of what we have argued for elsewhere, namely that, rather than being a development in discrete steps, grammaticalization must be described as a continuous or, more precisely, as a chainlike development (Heine 1992). To achieve the goal of having a treatment of grammaticalization processes in the form of a lexicon, we were forced to reduce continuous, chainlike structures to two salient uses of forms, viz., source and target uses.

Most of the over 400 grammaticalization processes discussed in this book are based on fairly reliable reconstruction work, but in some cases the evidence available is not yet satisfactory. We have pointed out such cases under the relevant entry.

A number of developments leading to the evolution of grammatical categories do not involve linguistic units like words or morphemes (Heine 1993; Bybee et al. 1994; Bisang 1998a); rather, they concern more complex conceptual entities, such as phrases, whole propositions, or even larger constructions. For example, the temporal conjunction taátenu ‘then’ of Kxoe, a Central Khoisan language of Namibia, is historically a clause meaning ‘when it is like that’ (see (1)).

(1) ta- á- te- nu xaváná //é kùùn-à- tê .....
  be:thus-JUNC-PRES-when again 1:M:PL go- JUNC-PRES
  ‘Then we went again. . . .’

A much better known example concerns the evolution of aspect and tense categories, where two or more different linguistic forms may simultaneously be involved: an auxiliary (e.g., be or have), a nonfinite marker (e.g., an infinitival, participial, or gerundival marker), and perhaps also a locative marker. Tense and aspect constructions in a number of languages worldwide not uncommonly involve three distinct morphological
elements, the English future marker *be going to* being a paradigm example. Another European example is the Latin verb *habere* ‘to have’, which in the Romance languages has given rise to perfect markers on the one hand and to future markers on the other. What accounts for this divergent development? The verb *habere* was not itself grammaticalized; rather grammaticalization involved entire periphrastic constructions, or event schemata: the construction *habere* + perfect passive participle gave rise to perfect expressions, while *habere* + infinitive periphrasis was responsible for the development of future constructions. In a lexicon project like the present one, such propositional structures had to be reduced to the salient segments of the constructions concerned, such as the *habere*-markers figuring in the expression of future tenses in Romance languages.

A related problem that we encountered concerns what one may call “complex grammaticalization”: a more complex linguistic structure can assume a grammatical function without involving the grammaticalization of any particular item figuring in this structure. Take (1) again: which of the various items figuring in the Kxoe word *taátenu* should be held responsible for the relevant grammaticalization? The most obvious answer would be that, rather than any particular item, the structure as a whole is responsible. In a treatment of the kind attempted here, however, which rests on the assumption that there is essentially a one-to-one correspondence between source and target, such an answer is not entirely satisfactory. What exactly should the lexicon entry be that takes care of this grammaticalization? Or take the following example: one widespread way of developing expressions for the grammatical concept of a comparative of inequality is to juxtapose two propositions that are in a polar contrast – one expresses the standard of comparison and the other the comparative notion. This opposition may be either antonymic, as in (2), or marked by the distinction of positive versus negative, as in (3).

**Cayapo (Stassen 1985: 184)**

(2) *Gan ga prik, bubanne ba i pri.*
you you big but I I small
‘You are bigger than I am.’

**Abipon (Stassen 1985: 184)**

(3) *Negetink chik naà, oagan nihirenak la naà.*
dog not bad yet tiger already bad
‘A tiger is more ferocious (lit.: ‘bad’) than a dog.’

What is grammaticalized in such constructions is not a specific element but rather some propositional relation, viz., *be big versus be small*, or *be
bad versus not be bad. In a treatment like this book, which is concerned
with segmentable linguistic forms, functions expressed by means of prag-
matic or syntactic relations between forms without involving morpho-
logical segments of necessity had to be excluded.

The sentence in (3) raises another question: At which point can we say
that grammaticalization has been concluded? Can we really say that (2)
and (3) are suggestive of a completed process of grammaticalization, or
do they merely represent contextually induced interpretations that are
irrelevant for the grammatical structures of the languages concerned? A
number of tests have been proposed in grammaticalization theory to deal
with this question; frequently, however, the information available on a
given language is not sufficient to allow for a successful application of
these tests. In such cases we have decided to adopt the solution proposed
by the author(s) dealing with that language.

In some cases we decided to rely on comparative findings to determine
whether a grammaticalization process has been concluded. For example,
one of our entries has the form ONE > INDEFINITE, according to which
the cardinal numeral for ‘one’ may grammaticalize to indefinite articles.
Now, it has been argued, for languages like English (a(n)) or German
(ein), for example, that the two, numeral and indefinite article, are the
same, their difference being due to contextual or other factors; that is,
that the relevant entry is not an instance of grammaticalization. That the
two meanings are in fact different is suggested by comparative observa-
tions. Thus, there are languages where a given linguistic item serves as
an indefinite marker but not as a numeral, and, conversely, there are
many languages where a given item denotes the numeral ‘one’ but not
indefinite reference. We take such observations as evidence that ONE and
INDEFINITE are in fact different concepts, even if in some languages the
same or a similar word is used for both.

Another problem concerns the directionality of grammaticalization
and how to achieve historical reconstruction. How do we know that
INDEFINITE is historically derived from ONE rather than the other way
around? In this case, there is diachronic evidence to give an answer: in
some languages, including a number of European ones, there is a marker
that is used for both the numeral ‘one’ and the indefinite article, and by
using historical records it is possible to establish that at some earlier stage
in the development of these languages the item only served as the
numeral expression before its use was extended to also designate indefi-
nite reference. Now, since grammaticalization is essentially unidirec-
tional, we are led to assume that in languages where no historical records
are available the evolution was the same.
Even in the absence of historical documents it is possible to recon-
struct directionality of change by using the mechanisms sketched in
the preceding section. For example, decategorialization has the effect that
the element concerned loses in morphosyntactic properties characteristic
of its less grammaticalized (e.g., lexical) source, such as the ability to
take modifiers or inflections, and it shifts from a category having many
members (e.g., an open class) to a category having only few members (a
closed class). Erosion again means that that element tends to become
shorter and/or phonetically less complex, to lose the ability to receive dis-
tinct stress or tone, and so on. Thus, if we find two different uses of a
given element, or two etymologically related elements, where one shows
the effects of decategorialization and erosion whereas the other does not,
then we can argue that the latter is less grammaticalized and then recon-
struct a directionality from the latter to the former, rather than the other
way around. Even if we had no previous knowledge of the history of
English we could nonetheless establish that the indefinite article *a(n)* is
a later development form of the numeral *one*, rather than the reverse,
since the article exhibits a number of effects of decategorialization and
erosion while the numeral does not. In this text we use this kind of evi-
dence for reconstruction in addition to any kind of historical evidence
that may be available.

Grammaticalization does not occur in a vacuum, and other forces also
shape the evolution of grammatical forms, language contact being one.
The rise of a new grammatical expression may be the result of gram-
maticalization, but it may also be due to the influence of another lan-
guage. The question of whether, or to what extent, a given development
is from language-internal as opposed to language-external factors can fre-
cently not be answered satisfactorily. Recent studies suggest that both
are often simultaneously involved.

These observations led us to the question of whether any restriction
in the kind of linguistic transmission should be imposed when selecting
the data to present in this volume. For example, should instances of
grammaticalization that clearly occurred due to borrowing be excluded?
Should we separate such cases from instances of grammaticalization that
have to do with continuous transmission within a given language?

A perhaps related issue concerns pidgins and creoles, which are a gold
mine for students of grammaticalization, and throughout the 1990s a
wealth of publications appeared demonstrating the relevance of gram-
maticalization theory to the study of these languages (see especially Baker
and Syea 1996). With the rise of pidgins and creoles, the question again
arises as to whether we are dealing with “natural” forms of transmission
and, if yes, whether grammaticalization processes behave the same way whether they have taken place, for example, between earlier and later forms of British English or between British English and Krio CE or Tok Pisin PE. The policy adopted here is to take all these kinds of data into account, at least as far as they are in accordance with principles of grammaticalization observed in “natural” language transmission. More recent research suggests that grammaticalization in pidgins and creoles does not behave essentially differently from that found in other languages. The reader is in a position to identify instances of borrowing or pidginization, or creolization, on the basis of the exemplification provided in this book.8

The terminology used to refer to grammatical categories differs from one author to another and from one language to another. Although we have tried to standardize terms, in many cases, this turned out to be impossible because of insufficient information. It is therefore to be expected that, in accordance with the conventions adopted by the relevant authors, one and the same grammatical function may be referred to by entirely different labels, both within a given language and across languages.

The quality of the data provided in this work crucially depends on the kind of information contained in the published sources that we were able to consult. Frequently it turned out that the information was not satisfactory. For example, when dealing with a verb as the source for a certain grammatical category, it is not enough to consider the lexical semantics of that verb; which grammaticalization it undergoes may depend entirely on its valency. In Southern Sotho, a Bantu language of Lesotho and South Africa, we find, among others, instances of grammaticalization like those presented in (4).

**Southern Sotho (Bantu, Niger-Congo; Doke and Mofokeng [1957] 1985)**

(4) Verbal source | Grammatical form
--- | ---
-ea ‘go (to)’ | -ea- immediate future tense
-tla ‘come (to)’ | -tla- future tense
-tsoa ‘come from’ | -tsoa- immediate past tense

These examples suggest that it is not the deictic semantics of ‘come’ or ‘go’ that can be held responsible for the particular functions the result-

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8 Pidgin (P) and creole (C) examples are marked by adding abbreviated labels after the language name. For example, “CE” stands for “English-based creole” (see Abbreviations). Note that the classification underlying this usage is a crude one, since terms like “English-based,” “Portuguese-based,” etc. are not unproblematic, and the boundary between pidgins and creole languages is not seldom fuzzy.
ing grammatical categories assume; rather, it is the kind of complements they take that determines their path of grammaticalization. If the verb takes an allative/goal complement, as in the case of Southern Sotho -ea and -tla, then the resulting function is future; if the verb takes an ablative/source complement, as in the case of -tsoa, then the result is a perfect or near past category (see Bybee, Pagliuca, and Perkins 1991). Unfortunately, most published sources that we were able to consult do not provide information of this kind. Due to such factors, our documentation must remain fragmentary in many cases.

This book is based on hypotheses on diachronic development. In a number of cases, these hypotheses have been adopted from the sources cited, but in others they were not contained in the relevant sources. For example, if in a given grammar the author states that the adverb ‘behind’ is “homophonous” with or “resembles” the noun ‘back’, or “may be historically related” to the noun ‘back’, then the assumption made here on the basis of a larger corpus of cross-linguistic data is that we are dealing with an instance of the grammaticalization of a body part noun to a locative adverb. The reader is therefore reminded that a given author whose work is cited as evidence for some reconstruction is not necessarily to be held responsible for the relevant reconstruction, such responsibility being entirely ours.

Perhaps the most crucial problem we were confronted with concerns directionality. As some recent works suggest, there are exceptions to the unidirectionality principle, and we certainly do not exclude the possibility that some of the reconstructions presented allow for an alternative analysis. Still, such cases are likely to be statistically insignificant: the tense markers listed in (4) can be assumed to be derived from verbs of motion, while we know of no language where there is compelling evidence that a verb meaning ‘go’ or ‘come’ is historically derived from a tense marker. Yet, the question of directionality is one that needs more attention in future work on grammaticalization.

This lexicon differs in a number of ways from Heine et al. (1993). Above all, whereas the discussion in Heine et al. (1993) was concerned with both the meaning and the morphosyntax of linguistic forms, we confine ourselves here to the analysis of grammatical “concepts.” Accordingly, no reference is made to the word or morpheme status of the items undergoing grammaticalization, unless there are specific reasons to do so.

All instances of conceptual shift are illustrated with examples from different languages whenever appropriate data were available. In a number

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9 A number of exceptions to the unidirectionality principle have been pointed out in recent works (see Newmeyer 1998 for a detailed discussion).
of cases, however, such data could not be found, and we had to rely on hypotheses put forward by other authors. In such cases, the reader is referred to the bibliographical references added for further information.

Another problem we were constantly confronted with was the following: how many examples should be adduced to illustrate a given instance of grammaticalization? There was no problem in cases where only a handful or even fewer examples were found for a certain path of grammaticalization. But for the many cases where the number of possible examples turned out to be exceedingly high, we adopted the policy of reducing exemplification to cases that illustrate both the genetic and areal distribution and the contextual diversity associated with the relevant grammaticalization process. Accordingly, the examples presented here do not necessarily reflect the entire mass of evidence that we were able to assemble. Nevertheless, in the vast majority of cases the amount of exemplification presented immediately correlates with the present state of our knowledge; that is, a grammaticalization process that is amply documented tends to receive a more extensive treatment than one where only a handful of examples have been found so far.

We noted earlier in this chapter that in recent years quite a number of studies have appeared reporting on new processes of grammaticalization (see especially Heine et al. 1991). However, the data presented in this volume constitute but a fraction of all instances of presumed or actual grammaticalization that we were confronted with. There were two reasons for reducing the vast amount of reported processes. First, to strengthen the hypothesis that we are really dealing with cross-linguistic regularities of grammatical evolution, we concentrated on cases where examples from more than one language family were available, even if in the end we decided to also include a number of less widespread instances of grammaticalization whenever there were specific reasons to do so. Second, we eliminated those cases where we were not convinced that the data allowed for fairly reliable reconstruction work. Not all of the processes that have been proposed in the course of the last three decades are substantiated by appropriate empirical evidence. In fact, deciding on whether there is “appropriate empirical evidence” turned out to be one of the major problems we faced when working on this volume.

Finally, we were also confronted with a problem that most lexicographers are confronted with: the closer one gets to completing a lexicon the more one tends to become convinced that one is dealing with an open-ended project and that one is still far from having exhausted the subject matter. But this problem is perhaps even more serious here than in conventional works on lexicography since grammaticalization is a young and rapidly expanding field of research. The reader should therefore be aware
that what is covered in this book might represent merely the tip of the iceberg of what future generations of researchers might discover on this phenomenon.

1.3 Conventions

For a better understanding of the Source-Target lexicon, the following conventions should be borne in mind:

(a) Entries contain two kinds of information. The first consists of data from different languages, especially from languages that, to our knowledge, are genetically “unrelated.” The second concerns our analysis of this information, that is, our classification and diachronic interpretation of these data. To distinguish these two, all information relating to the latter is printed in small capital letters. Items printed in small capitals each stand for a cluster of closely related meanings (or functions) that we assume to be suggestive of a cross-culturally relatively stable concept. The term “concept” is used as a pre-theoretical notion; no claim is made, for example, that the concepts presented are semantic primitives of any kind or that the label used to refer to a particular concept is suggestive of a prototypical manifestation of that concept.

(b) To save space, the concept labels are kept as short as possible. Thus, instead of writing “ablative case marker,” or “ablative gram,” we simply use the label “ABLATIVE.”

(c) Details on the cluster of meanings subsumed under the relevant concept label are provided in parentheses whenever this was felt to be desirable; this parenthetical information is maximally of three kinds. First, it may contain the concept that taxonomically includes the one preceding the parentheses. For example, the concept HEAD has the gloss ‘body part’ following it in parentheses, or ONE has ‘numeral’ added in parentheses. Such parenthetical information is presented in the index of grammatical concepts in Chapter 2. Whenever concepts are involved that do not figure in this index – that is, when lexical concepts are involved – this information is added in the main text (e.g., HEAD (body part)). Second, typical glosses are provided that one might expect to figure in English expressions for the given concept. Third, wherever necessary, these glosses are followed by further descriptive details on the relevant concept.

(d) At the end of an entry, there may be more general comments relating to the nature of the grammaticalization process in question.
(e) In the course of our work we were confronted with a number of orthographical issues and problems. As far as this was feasible, we rendered linguistic data in their original form, typically in the standard form used for the language (at least as far as the standard form is based on Roman script). For example, as one might expect, we are using the tilde to mark nasalized vowels (or consonants). There are, however, regional conventions that we also had to take into account. In Nama (of the Khoisan family), nasalized vowels are not marked by a tilde but rather by a circumflex (accent mark: \^); in the standard orthography of Kikuyu and Kamba there is again a tilde, but it does not mark nasalization but rather open vowels.

(f) Wherever possible we present examples with interlinear glosses. Those printed in parentheses stand for glosses (and in a few cases also translations) that are not in the original examples; for these we take full responsibility. In some cases there were no glosses in the original nor were we able to find appropriate glosses ourselves. We nonetheless decided to include such examples, hoping that the reader interested in more details will consult the bibliographical references cited.

(g) Our goal is to illustrate all examples with text material, where one text piece, marked by (a), would present the source use and a second text piece, marked by (b), the target use of the item. In most cases, however, no appropriate text material was available, and we had to be satisfied with presenting sentence examples or phrases, or with simply providing a target use without a corresponding source use. We hope that such inconsistency, which is inherent in comparative projects such as this one, is not an obstacle to the use of this work.
2

Grammatical Concepts Used in This Work

The following list is a classification of the grammatical concepts (or functions) figuring in this work, where the term concept is used in a pre-theoretical sense. Since we will be dealing with concepts, terms such as ablative or complementizer stand for semantic-functional, rather than morphological or syntactic, categories. No attempt is made here to trace a boundary between “grammatical concepts” and nongrammatical or “lexical concepts.” If one finds concepts such as only or together, for example, which one might not be inclined to treat as grammatical concepts, then we simply wish to say that these items exhibit more grammatical properties, or fewer lexical properties, than the concepts from which they are historically derived. Such properties relate in particular to the productivity, applicability to various contexts, and syntactic and paradigmatic status of the items. For example, grammatical forms are closed-class items, and whenever we found that a given concept is regularly derived from some closed-class item we decided to consider it a candidate for inclusion. Both only and together have the numeral one as one of their historical sources, and although numerals have a fairly large membership in some languages, they normally can be described as closed-class paradigms; hence we decided to tentatively include items such as these two in our treatment.

Furthermore, the characterizations and taxonomic labels that we propose are not intended to be definitions of the concepts; rather, they are meant to assist the reader in narrowing down the range of meanings that a given grammatical marker may convey (see, e.g., Bybee et al. 1994 for more details); in a number of cases, such characterizations consist of nothing but English translational equivalents – a procedure that certainly is far from satisfactory.

1 We wish to express our gratitude to Beth Levin for many critical comments on the terms presented in this chapter.
In addition to the concept label, the reader will find additional labels in parentheses referring to taxonomically superordinate, more inclusive categories. Since a given concept may belong to more than one more inclusive category, more than one term may appear in parentheses. For example, the entry ACROSS (spatial, case) stands for a concept across, which belongs to the concepts used for introducing nominal participants (case); at the same time, it is also part of the more inclusive category of spatial concepts. Rather than reflecting a taxonomy of grammatical concepts, this parenthetical information is simply meant to provide more information on the uses of the primary concept. Yet, there will be cases where the reader may be puzzled as to the exact meaning of a given concept label; in such cases, we refer to the language data presented in the Source-Target lexicon (Chapter 3), where more information on the use of these labels can be found.

Many of the terms presented here are used by other authors to refer to somewhat different, or even to entirely different, concepts. Wherever we are aware of such contrasting uses we point them out in footnotes. It is unlikely, however, that we are aware of all the terminological conventions that exist, and we apologize to the reader for any inconvenience that may result from our terminological choices.

<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
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</thead>
<tbody>
<tr>
<td>ABLATIVE (spatial, case)</td>
<td>‘(away) from’; also ‘from above/below/inside’; marker introducing a spatial participant; direction from</td>
</tr>
<tr>
<td>ABLATIVE (temporal, case)</td>
<td>‘from’, ‘since’; marker introducing a temporal (source) participant</td>
</tr>
<tr>
<td>ACCORDING TO (case, conjunction)</td>
<td>‘according to’; marker introducing a nominal or clausal participant</td>
</tr>
<tr>
<td>ACROSS (spatial, case)</td>
<td>‘across’; marker introducing a locative participant</td>
</tr>
<tr>
<td>ADDITIVE</td>
<td>‘plus’, ‘and’; marker introducing a quantifying participant</td>
</tr>
<tr>
<td>ADVERSATIVE² (conjunction)</td>
<td>‘but’, ‘however’, ‘nevertheless’; marker introducing an adversative participant</td>
</tr>
<tr>
<td>AFTER (temporal)</td>
<td>‘later than’, ‘after’; marker introducing a temporal participant</td>
</tr>
</tbody>
</table>

² Beth Levin (personal communication) points out that there are alternative uses of the term “adversative.”
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>AGENT (CASE)</td>
<td>e.g., ‘by’; marker for a participant that instigates or performs the action described by the main verb</td>
</tr>
<tr>
<td>AGREEMENT</td>
<td>marker of grammatical agreement, i.e., of the person, number, gender, or class, typically on the verb</td>
</tr>
<tr>
<td>ALLATIVE (SPATIAL)</td>
<td>‘to’; marker introducing an allative/directional participant; direction toward</td>
</tr>
<tr>
<td>ALREADY</td>
<td>‘already’; focus particle or marker</td>
</tr>
<tr>
<td>ALSO</td>
<td>‘also’, ‘too’, ‘as well’; marker modifying nouns and other categories</td>
</tr>
<tr>
<td>NP-AND (CONJUNCTION)</td>
<td>‘and’; noun phrase-conjoining marker</td>
</tr>
<tr>
<td>S-AND (CONJUNCTION)</td>
<td>‘and’; clause-conjoining marker</td>
</tr>
<tr>
<td>ANDATIVE</td>
<td>‘motion thither’; marker for a movement away from the speaker or deictic center; itive. Cf. VENITIVE</td>
</tr>
<tr>
<td>Anterior</td>
<td>see PERFECT</td>
</tr>
<tr>
<td>Antibenefactive</td>
<td>see MALEFACTIVE</td>
</tr>
<tr>
<td>ANTICAUSATIVE⁴</td>
<td>marker that typically reduces the valence of a verb by one participant, which as a rule is the agent</td>
</tr>
<tr>
<td>AROUND (SPATIAL, CASE)</td>
<td>‘round about’, ‘round and round’; marker introducing a locative participant</td>
</tr>
<tr>
<td>AVERTIVE (ASPECT)</td>
<td>‘almost, nearly’; marker for an action or event that was on the verge of taking place but did not take place. Cf. PROXIMATIVE</td>
</tr>
<tr>
<td>BEFORE (TEMPORAL, CASE)</td>
<td>‘before’, ‘earlier’; marker introducing a temporal participant</td>
</tr>
<tr>
<td>BENEFATIVE (CASE)</td>
<td>‘for’, ‘for the benefit of’; marker introducing a participant indicating that the action of the main verb is for the benefit or on behalf of someone else. Cf. MALEFACTIVE</td>
</tr>
</tbody>
</table>

⁴ According to Haspelmath (1990: 33), an anticausative “denotes a spontaneous process without an implied agent, while the basic verb denotes a transitive action.” Anticausative markers, which are not infrequently referred to as intransitivizing elements or intransitivizers, differ from passives in that no agent is implied.
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>BESIDE (SPATIAL, CASE)</strong></td>
<td>‘beside’, ‘at the side of’; marker introducing a locative participant</td>
</tr>
<tr>
<td><strong>CASE</strong></td>
<td>marker used for introducing a nominal (or pronominal) participant</td>
</tr>
<tr>
<td><strong>CAUSATIVE</strong></td>
<td>‘cause to be’, ‘cause to do’; a marker for an agent that brings about the action or state it describes</td>
</tr>
<tr>
<td><strong>CAUSE (CASE, CONJUNCTION)</strong></td>
<td>‘because of’, ‘since’, ‘on account of’, ‘therefore’; marker introducing a participant of cause or reason</td>
</tr>
<tr>
<td><strong>CERTAINTY (EPISTEMIC MODALITY)</strong></td>
<td>‘it is certain that’; marker used by the speaker to emphasize that the proposition is true</td>
</tr>
<tr>
<td><strong>CESSATIVE (ASPECT)</strong></td>
<td>indicates that an event stops but not necessarily that it is completed. Cf. COMPLETIVE</td>
</tr>
<tr>
<td><strong>CHANGE-OF-STATE</strong></td>
<td>‘become’, ‘turn into’; inchoative, ingressive. Cf. RESULTATIVE</td>
</tr>
<tr>
<td><strong>CLASSIFIER</strong></td>
<td>classificatory particle; a general term referring to the specific system of formatives that consists of quantifiers, repeaters, and noun classifiers proper (cf. Senft 1996: 16)</td>
</tr>
<tr>
<td><strong>COMITATIVE (CASE)</strong></td>
<td>‘(together) with’; marker introducing a comitative participant</td>
</tr>
<tr>
<td><strong>COMMON (GENDER)</strong></td>
<td>gender category that includes feminine and masculine, possibly also other concepts. Cf. NEUTER</td>
</tr>
<tr>
<td><strong>COMPARATIVE (CASE)</strong></td>
<td>‘than’; marker of standard in comparative constructions of inequality. See also EQUATIVE COMPARATIVE</td>
</tr>
<tr>
<td><strong>COMPLEMENTIZER (CONJUNCTION)</strong></td>
<td>‘that’; marker introducing complement clauses</td>
</tr>
<tr>
<td><strong>COMPLETIVE (ASPECT)</strong></td>
<td>indicates that something is done thoroughly and to completion. Cf. CESSATIVE</td>
</tr>
<tr>
<td><strong>CONCERN (CASE, CONJUNCTION)</strong></td>
<td>‘about’, ‘concerning’; marker introducing a nominal or clausal participant</td>
</tr>
<tr>
<td><strong>CONCESSIVE (CONJUNCTION)</strong></td>
<td>‘despite the fact that’, ‘even though’; marker introducing a concessive participant</td>
</tr>
<tr>
<td><strong>CONDITIONAL (CONJUNCTION)</strong></td>
<td>‘if’; marker of conditional protasis</td>
</tr>
<tr>
<td><strong>CONJUNCTION</strong></td>
<td>e.g., ‘and’, ‘accordingly’, ‘but’, etc.; marker used for conjoining clauses; clause connective, sentence connective</td>
</tr>
<tr>
<td>Concept Label</td>
<td>Approximate Gloss and Descriptive Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>CONSECUTIVE</td>
<td>‘and then’, ‘thereafter’; narrative discourse marker</td>
</tr>
<tr>
<td>(CONJUNCTION)</td>
<td></td>
</tr>
<tr>
<td>CONTINUOUS (ASPECT)</td>
<td>‘be doing’, ‘keep on doing’; marker for an event that is in progress at reference time; this term combines the notions of both progressive and durative aspects</td>
</tr>
<tr>
<td>COPULA&lt;sup&gt;4&lt;/sup&gt;</td>
<td>‘be’; predicate marker used in propositions of the type ‘X is (a) Y’; identifying copula, classifying copula. See also EXIST; LOCATIVE COPULA</td>
</tr>
<tr>
<td>DATIVE (CASE)</td>
<td>‘to’; marker for – typically – a human recipient; indirect object</td>
</tr>
<tr>
<td>DEFINITE</td>
<td>‘the’; definite article; nominal determiner</td>
</tr>
<tr>
<td>DEMONSTRATIVE</td>
<td>‘this/these’, ‘that/those’; nominal determiner</td>
</tr>
<tr>
<td>DEONTIC (MODALITY)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>is concerned with necessity or possibility of acts performed by morally responsible agents; see OBLIGATION; PERMISSIVE</td>
</tr>
<tr>
<td>DIMINUTIVE</td>
<td>‘smaller than normal’</td>
</tr>
<tr>
<td>DISTAL (SPATIAL)</td>
<td>‘far away’; deictic marker for spatial distance. Cf. PROXIMAL</td>
</tr>
<tr>
<td>DOWN (SPATIAL)</td>
<td>‘down’, ‘below’, ‘under’, ‘underneath’; marker used to introduce a locative participant</td>
</tr>
<tr>
<td>DUAL (NUMBER)</td>
<td>marker for a number unit consisting of no more and no less than two items</td>
</tr>
<tr>
<td>Durative</td>
<td>see CONTINUOUS</td>
</tr>
<tr>
<td>EARLIER (TEMPORAL)</td>
<td>‘earlier’, ‘before’, ‘ago’; temporal marker</td>
</tr>
<tr>
<td>EGRESSIVE (ASPECT)</td>
<td>‘stop doing’; see also CESSATIVE</td>
</tr>
<tr>
<td>ELATIVE&lt;sup&gt;6&lt;/sup&gt;</td>
<td>‘too’, as in too much, too big, etc. Cf. SUPERLATIVE</td>
</tr>
<tr>
<td>EMPHATIC</td>
<td>marker expressing emphasis or contrast</td>
</tr>
<tr>
<td>Emphatic reflexive</td>
<td>see INTENSIVE-REFL</td>
</tr>
<tr>
<td>EPISTEMIC (MODALITY)</td>
<td>is concerned with the speaker’s knowledge and beliefs about the state of affairs expressed in the utterance; see CERTAINTY; POSSIBILITY; PROBABILITY</td>
</tr>
</tbody>
</table>

<sup>4</sup> With the term COPULA, we are referring to a range of different predicative notions, including identification, classification, specification, and characterization (see Hengeveld 1992). Excluded are existential copulas (see EXIST) and locative copulas (see LOCATIVE COPULA).

<sup>5</sup> Deontic modality has also been called “agent-oriented modality” (see, e.g., Bybee et al. 1994) or “root modality” (Coates 1995).

<sup>6</sup> Note that this term is used in quite a different sense in the literature on case marking, where it refers to the notion ‘out of’. 
<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUATIVE</td>
<td>‘as . . . as’; comparative marker of equality; comparison of equality</td>
</tr>
<tr>
<td>COMPARATIVE</td>
<td></td>
</tr>
<tr>
<td>EQUATIVE COPULA</td>
<td>‘be’, as in <em>John is a teacher</em>; predicate marker</td>
</tr>
<tr>
<td>ERGATIVE</td>
<td>marker introducing the agent argument of a transitive verb in ergative languages</td>
</tr>
<tr>
<td>EVEN</td>
<td>‘even’; scalar focus particle</td>
</tr>
<tr>
<td>EVIDENTIAL</td>
<td>marker used by the speaker to indicate the source of the information on which a given assertion is based. The term is generally used to describe devices indicating perceptual evidence (both direct and indirect) and devices indicating evidence that is obtained from someone else.</td>
</tr>
<tr>
<td>EVIDENTIAL, INFERENTIAL</td>
<td>marker adding the following nuance of meaning to a given utterance: ‘I have evidence that it happened, and I infer that it must have happened.’</td>
</tr>
<tr>
<td>EXCLAMATION</td>
<td>e.g., ‘hi there!’</td>
</tr>
<tr>
<td>EXCLUSIVE</td>
<td>‘we excluding you’; a distinction made within (&gt; FIRST PERS-PRON), which excludes the hearer/addressee. Cf. INCLUSIVE</td>
</tr>
<tr>
<td>EXIST⁷</td>
<td>‘there is [X], ‘[X] exists’</td>
</tr>
<tr>
<td>FEMALE</td>
<td>‘female’; marker used as a nominal modifier to refer to female participants</td>
</tr>
<tr>
<td>FIRST (NUMERAL)</td>
<td>‘(the) first’; ordinal numeral</td>
</tr>
<tr>
<td>FIRST (PERS-PRON)</td>
<td>‘I’, ‘we’; first person pronoun</td>
</tr>
<tr>
<td>FIRST (TEMPORAL)</td>
<td>‘at first’, ‘to begin with’</td>
</tr>
<tr>
<td>FOCUS</td>
<td>marker used in sentences that focus on some participant, typically presenting that participant as new information</td>
</tr>
<tr>
<td>FREQUENTATIVE (ASPECT)</td>
<td>marker indicating that an event takes place frequently, i.e., neither once nor habitually</td>
</tr>
<tr>
<td>FRONT (SPATIAL, CASE)</td>
<td>‘in front of’, ‘before’; marker introducing a locative participant; “fronterior”</td>
</tr>
<tr>
<td>FUTURE (TENSE)</td>
<td>‘will’, ‘shall’; indicates that the speaker predicts an event to occur after the moment of speech</td>
</tr>
</tbody>
</table>

⁷ EXIST includes what Hengeveld (1992) refers to as existence and reality. EXIST markers are typically one-argument predicates (e.g., *There is coffee*); however, they can also have two participants (e.g., roughly, *There is coffee for you*), which differ drastically from one-participant markers in their grammaticalization behavior.
<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUTURE, NEAR (TENSE)</td>
<td>indicates that the speaker predicts an event to occur very soon after the moment of speech; near future, immediate future</td>
</tr>
<tr>
<td>HABITUAL (ASPECT)</td>
<td>‘do habitually’; marker for an event occurring habitually or usually, repeated on different occasions</td>
</tr>
<tr>
<td>HONORIFIC</td>
<td>marker of honorific reference</td>
</tr>
<tr>
<td>HORTATIVE</td>
<td>marker used by the speaker to encourage or incite someone to action</td>
</tr>
<tr>
<td>IMMEDIATE</td>
<td>see FUTURE, NEAR; PAST, NEAR</td>
</tr>
<tr>
<td>IMPERFECTIVE (ASPECT)</td>
<td>marker used to indicate that an event is viewed as unbounded temporally. Cf. PERFECTIVE</td>
</tr>
<tr>
<td>IMPERSONAL</td>
<td>marker for an agent that is suppressed but still understood</td>
</tr>
<tr>
<td>IN (SPATIAL)</td>
<td>‘in’, ‘inside’, ‘within’; marker introducing a locative participant; interior</td>
</tr>
<tr>
<td>IN (TEMPORAL)</td>
<td>‘in’, within’, ‘during’; marker introducing a temporal participant</td>
</tr>
<tr>
<td>INCEPTIVE (ASPECT)</td>
<td>‘start doing’, ‘begin doing’; inceptive, ingressive</td>
</tr>
<tr>
<td>Inchoative</td>
<td>see CHANGE-OF-STATE</td>
</tr>
<tr>
<td>INCLUSIVE</td>
<td>‘we including you’; a distinction made within (&gt;) FIRST PERS-PRON, which includes the hearer/addressee; cf. EXCLUSIVE</td>
</tr>
<tr>
<td>INDEFINITE</td>
<td>‘a, an’; indefinite article; nominal determiner</td>
</tr>
<tr>
<td>INDEFINITE PRONOUN</td>
<td>‘something’, ‘someone’, etc.</td>
</tr>
<tr>
<td>Ingressive</td>
<td>see CHANGE-OF-STATE</td>
</tr>
<tr>
<td>INSTEAD (CASE, CONJUNCTION)</td>
<td>‘instead of’; marker introducing a nominal or clausal participant; replacive</td>
</tr>
<tr>
<td>INSTRUMENT (CASE)</td>
<td>‘with’, ‘by means of’; marker used to present a participant as an instrument</td>
</tr>
<tr>
<td>INTENSIFIER</td>
<td>‘very’, ‘extremely’</td>
</tr>
<tr>
<td>INTENSIVE-REFL</td>
<td>‘-self’, as in The king himself, The king did it himself; emphatic reflexive, intensifier, identifier</td>
</tr>
<tr>
<td>INTENTION</td>
<td>‘to intend to’</td>
</tr>
<tr>
<td>Interrogative</td>
<td>see S-QUESTION, W-QUESTION</td>
</tr>
<tr>
<td>ITERATIVE (ASPECT)</td>
<td>‘do repeatedly’; repetitive; marker indicating that an action is repeated</td>
</tr>
<tr>
<td>LATE (TEMPORAL)</td>
<td>‘be late (be delayed)’</td>
</tr>
<tr>
<td>LATER (TEMPORAL)</td>
<td>‘then’, ‘thereafter’, ‘afterwards’, ‘later’</td>
</tr>
<tr>
<td>LOCATIVE</td>
<td>marker introducing a locative participant</td>
</tr>
<tr>
<td>Concept Label</td>
<td>Approximate Gloss and Descriptive Notes</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LOCATIVE COPULA</td>
<td>‘be at’, ‘be somewhere’; predicate marker used in propositions of the type ‘X is (located) at Y’</td>
</tr>
<tr>
<td>LOGOPHORIC</td>
<td>marker used in indirect quotes referring to the person being quoted; designating a particular category of anaphoric pronouns, personal and possessive, which refer to the author of a discourse or to a participant whose thoughts are reported</td>
</tr>
<tr>
<td>MALE</td>
<td>‘male’; marker used as a nominal modifier to refer to male participants</td>
</tr>
<tr>
<td>MALEFACTIVE (CASE)</td>
<td>‘to the detriment of’; marker for a participant indicating that the action of the main verb is to the detriment of someone else; antibenefactive. Cf. BENEFACTIVE</td>
</tr>
<tr>
<td>MANNER (CASE,</td>
<td>marker introducing a manner participant</td>
</tr>
<tr>
<td>CONJUNCTION)</td>
<td></td>
</tr>
<tr>
<td>MATERIAL (CASE)</td>
<td>‘from’, ‘with’; marker for a participant typically indicating the material from which an object is made</td>
</tr>
<tr>
<td>MIDDLE(^8)</td>
<td>marker indicating that the patient of the action is implicated as contributing to the action in some way</td>
</tr>
<tr>
<td>MIRATIVE(^9)</td>
<td>marker used for utterances reporting information that is new or surprising to the speaker regardless of whether the information source is first- or secondhand</td>
</tr>
<tr>
<td>NEGATION</td>
<td>‘not’, ‘no’; marker of negation</td>
</tr>
<tr>
<td>NEGATION, EXIST</td>
<td>‘there is not/no’</td>
</tr>
<tr>
<td>NEUTER (GENDER)</td>
<td>a gender category that is neither feminine nor masculine. Cf. COMMON</td>
</tr>
<tr>
<td>NEXT</td>
<td>‘the next’, ‘the following’</td>
</tr>
<tr>
<td>NO</td>
<td>‘no’; interjection</td>
</tr>
</tbody>
</table>

\(^8\) Kemmer (1993: 238) observes, “The semantic middle is a coherent but relatively diffuse category that comprises a set of loosely linked semantic sub-domains centering roughly around the direct reflexive.” It remains unclear whether we are really dealing with a distinct functional notion (Beth Levin, personal communication); we are including it tentatively on account of the discussion in Kemmer 1993.

\(^9\) Here we accept the standpoint taken by DeLancey 1997 that the mirative represents a category of its own. This view is radically different from the one presented in Lazard 1999, where the mirative is treated as one of the three “values” of a more abstract category of “mediative,” the other two values being hearsay and inference.
### Concept Label | Approximate Gloss and Descriptive Notes
---|---
No Longer | ‘no longer’
Not Yet | ‘not yet’
NP-and | see and
Object marker | see patient
Obligation (Deontic Modality) | ‘have to’, ‘should’, ‘must’; the agent is presented as being obliged to perform the action of the main verb
Obviative | marker indexing a change in the subject; switch reference
One (Numerical) | ‘one’; cardinal numeral
Only | ‘alone’, ‘merely’, ‘just’
Optative | the proposition represents the speaker’s will
Or (Conjunction) | ‘or’; alternative marker, conjoining noun phrases or clauses
Other | ‘another’, ‘other’
Out (Spatial) | ‘out’, ‘outside’
Partitive (Case) | marker introducing a participant expressing the notion ‘a part of’ or ‘partly affected’
Passive | a marker indicating that the action is viewed from the perspective of the recipient or patient of the verb, while the agent is suppressed or demoted
Past (Tense) | indicates that an event occurs before the moment of speech
Past, Near (Tense) | an event that occurred immediately before the moment of speech; recent past, near past, immediate past
Path (Spatial, Case) | ‘through’, ‘via’; marker introducing a locative participant; path marker
Patient (Case) | marker for a participant that is the undergoer of the action denoted by the verb; direct object
Perfect\(^{10}\) (Aspect) | marker indicating that a past event is relevant to the situation at reference time; anterior
Perfective (Aspect) | marker used to indicate that an event is viewed as bounded temporally. Cf. Imperfective
Permissive (Deontic Modality) | ‘be allowed to’; the agent is allowed to do the action of the main verb

\(^{10}\) Our term “perfect” corresponds to what Bybee et al. (1994) call the “anterior.”
<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERS-PRON (PRONOUN)</td>
<td>personal pronoun, pronominal marker. See also FIRST; SECOND; THIRD</td>
</tr>
<tr>
<td>PLURAL (NUMBER)</td>
<td>plural marker, typically on nouns</td>
</tr>
<tr>
<td>A-POSSESSIVE</td>
<td>‘of’; marker of attributive (nominal) possession; genitive case, associative, connective, nominal possessive. (For description of term, see Heine 1997a.)</td>
</tr>
<tr>
<td>B-POSSESSIVE</td>
<td>‘X belongs to Y’, ‘X is Y’s’; predicative possession, marker of belong-constructions. (For description of term, see Heine 1997a.)</td>
</tr>
<tr>
<td>H-POSSESSIVE</td>
<td>‘have’, ‘own’; predicative possession, marker of possessive have-constructions. (For description of term, see Heine 1997a.)</td>
</tr>
<tr>
<td>POSSIBILITY (EPISTEMIC MODALITY)</td>
<td>‘it is possible that’; marker expressing that the speaker indicates that the situation described in the proposition is possibly true</td>
</tr>
<tr>
<td>PRESENT (TENSE)</td>
<td>marker indicating an event is occurring simultaneously with the moment of speech</td>
</tr>
<tr>
<td>PROBABILITY (EPISTEMIC MODALITY)</td>
<td>‘it is likely that’; with such markers, the speaker indicates that the situation described in the proposition is probably true</td>
</tr>
<tr>
<td>Progressive</td>
<td>see CONTINUOUS</td>
</tr>
<tr>
<td>PROHIBITIVE</td>
<td>‘don’t do!’; negative imperative</td>
</tr>
<tr>
<td>PRONOUN</td>
<td>a marker standing for a noun or noun phrase</td>
</tr>
<tr>
<td>PRO-VERB</td>
<td>semantically empty predicate marker standing for other verbs in certain contexts; e.g., do as in do jogging</td>
</tr>
<tr>
<td>PROXIMAL (SPATIAL)</td>
<td>‘nearby’, ‘close to’; deictic marker for spatial proximity. Cf. DISTAL</td>
</tr>
<tr>
<td>PROXIMATIVE (ASPECT)</td>
<td>‘be about to’, i.e., ‘be on the verge of doing’. Cf. AVERTIVE</td>
</tr>
<tr>
<td>PURPOSE (CASE, CONJUNCTION)</td>
<td>‘in order to’, ‘so that’; a marker introducing the purpose of an action</td>
</tr>
<tr>
<td>S-QUESTION</td>
<td>marker of polar (yes-no) questions</td>
</tr>
<tr>
<td>W-QUESTION</td>
<td>‘who?’, ‘what?’, etc.; marker of word questions</td>
</tr>
<tr>
<td>QUOTATIVE</td>
<td>a marker introducing direct speech</td>
</tr>
<tr>
<td>RECIPROCAL (PRONOUN)</td>
<td>‘each other’; a marker indicating that participants act upon each other</td>
</tr>
</tbody>
</table>

11 Note that this term is also used in some other ways; here it refers exclusively to an aspectual notion (see Heine 1994b).
<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFLEXIVE (PRONOUN)</td>
<td>‘self’, as in <em>I saw myself in the mirror</em>; the patient is the same entity as the agent (i.e., the two have identical reference)</td>
</tr>
<tr>
<td>RELATIVE (CONJUNCTION)</td>
<td>‘who’, ‘which’, ‘that’; marker introducing relative clauses</td>
</tr>
<tr>
<td>Repetitive</td>
<td>see iterative</td>
</tr>
<tr>
<td>RESULTATIVE (ASPECT)</td>
<td>‘having reached a new state’. Cf. change-of-state</td>
</tr>
<tr>
<td>S-and</td>
<td>see and</td>
</tr>
<tr>
<td>S-question</td>
<td>see question</td>
</tr>
<tr>
<td>SAME</td>
<td>‘(the) same’, ‘identical’</td>
</tr>
<tr>
<td>SECOND (PERS-PRON)</td>
<td>‘you’, ‘you all’; second person pronoun</td>
</tr>
<tr>
<td>SIDE (CASE)</td>
<td>‘by the side of’, ‘on the side of’; marker introducing a locative participant</td>
</tr>
<tr>
<td>SIMILE (CASE, CONJUNCTION)</td>
<td>‘like’, ‘as if’, ‘thus’; marker of simile or similarity participants; similative</td>
</tr>
<tr>
<td>SINCE (TEMPORAL, CASE, CONJUNCTION)</td>
<td>‘since (the time when)’; marker introducing temporal participants</td>
</tr>
<tr>
<td>SINCE (CAUSAL, CONJUNCTION)</td>
<td>‘since, as, because’; marker introducing a causal participant</td>
</tr>
<tr>
<td>SINGULATIVE (NUMBER)</td>
<td>marker restricting the reference (of a noun) to a single entity</td>
</tr>
<tr>
<td>SOME (QUANTIFIER)</td>
<td>‘some’; approximative marker</td>
</tr>
<tr>
<td>SPATIAL (CASE)</td>
<td>marker introducing a spatial/locative participant</td>
</tr>
<tr>
<td>STILL</td>
<td>‘still’; focus particle or marker</td>
</tr>
<tr>
<td>SUBORDINATOR (CONJUNCTION)</td>
<td>marker introducing adverbial clauses</td>
</tr>
<tr>
<td>SUCCEED$^{13}$</td>
<td>‘manage to do’, ‘succeed in doing’</td>
</tr>
<tr>
<td>SUPERLATIVE</td>
<td>‘(the) most’; marker for ‘a position on top of or over’. Cf. elative</td>
</tr>
<tr>
<td>TEMPORAL</td>
<td>marker introducing a temporal participant</td>
</tr>
<tr>
<td>Terminative</td>
<td>see egressive</td>
</tr>
<tr>
<td>THEN (TEMPORAL)</td>
<td>‘then’, ‘afterwards’, ‘later’</td>
</tr>
<tr>
<td>THERE (SPATIAL)</td>
<td>‘there’; deictic marker of distal location. Cf. distal</td>
</tr>
<tr>
<td>THIRD (PERS-PRON)</td>
<td>‘he’, ‘she’, ‘it’, ‘they’; third person pronoun</td>
</tr>
</tbody>
</table>

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$^{12}$ RESULTATIVE is also used in other senses; here we use it exclusively as a term for a verbal aspect. Conceivably, RESULTATIVE and (>) CHANGE-OF-STATE can be grouped together.

$^{13}$ While ‘succeed’ is typically encoded as a lexical item, some languages appear to treat it as a functional category.
<table>
<thead>
<tr>
<th>Concept Label</th>
<th>Approximate Gloss and Descriptive Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOGETHER</td>
<td>‘together’</td>
</tr>
<tr>
<td>TRANSITIVIZER</td>
<td>marker transforming an intransitive verb into a transitive one</td>
</tr>
<tr>
<td>TRIAL (NUMBER)</td>
<td>marker for a number unit consisting of no more and no less than three items</td>
</tr>
<tr>
<td>TWO (NUMERAL)</td>
<td>‘two’; cardinal numeral</td>
</tr>
<tr>
<td>UNTIL (TEMPORAL,</td>
<td>‘until’, ‘up to’; marker introducing a temporal participant</td>
</tr>
<tr>
<td>CASE, CONJUNCTION)</td>
<td></td>
</tr>
<tr>
<td>UP (SPATIAL)</td>
<td>‘up’, ‘on’, ‘above’, ‘over’; marker introducing a locative participant; “superior”</td>
</tr>
<tr>
<td>VENITIVE</td>
<td>‘motion hither’, ‘motion towards’; marker for a movement toward the speaker or deictic center; ventive. Cf. ANDATIVE</td>
</tr>
<tr>
<td>VP-and</td>
<td>see AND</td>
</tr>
<tr>
<td>W-question</td>
<td>see QUESTION</td>
</tr>
</tbody>
</table>
‘Abandon’ see \textsc{leave}

\textbf{ABILITY > (1) \textsc{permissive}}

This is a well-researched instance of grammaticalization (see, e.g., Traugott 1972: 198–9; Kytö 1987; Bybee et al. 1991: 25; Bybee et al. 1994: 187–94; Table 6.3). Old Chinese (\textit{de} ‘to obtain’ >) \textit{de} ability marker > permissive marker. Ex.

\textit{Middle Chinese (tenth century a.d.; Zutangji 5/98/7; quoted from Sun 1996: 121)}

(a) \begin{tabular}{llllll}
\textit{hai} & \textit{jie} & \textit{pan} & \textit{de} & \textit{xu-kong} & \textit{bu}? \\
still & explain & judge & possible & empty & \textsc{neg}
\end{tabular}

‘Can (you) still tell what emptiness is?’

\textit{Middle Chinese (tenth century a.d.; Zutangji 1/153/3; quoted from Sun 1996: 124)}

(b) \begin{tabular}{llllll}
\textit{ni} & \textit{de} & \textit{ru} & \textit{men} & \textit{ye}. \\
you & possible & enter & door & \textsc{part}
\end{tabular}

‘You may enter the door (to join).’

Archaic Chinese \textit{neng} ‘be able’, ‘be capable’ > marker of possibility and permission (Alain Peyraube, personal communication). English \textit{may} have started out with a meaning of physical ability or power and has come to be used to report permission (Bybee et al. 1994: 193). German \textit{können} ‘to be able’ > ‘to be allowed to’. Ex.

\textit{German}

(a) \begin{tabular}{llllll}
\textit{Ich} & \textit{kann} & \textit{Auto} & \textit{fahr-} & \textit{en}. \\
I & can & car & drive-\textsc{inf}
\end{tabular}

‘I know how to drive.’

\textsuperscript{1} Concerning the meaning of grammatical concepts, see the list of grammatical concepts in Chapter 2.
Concerning a treatment of modality as a semantic map, see van der Auwera and Plungian 1998. See also GET; ABILITY > POSSIBILITY.

ABILITY > (2) POSSIBILITY

This again is a process that has been well described (see Bybee et al. 1994: 187–94; Table 6.3). Old Chinese (de ‘to obtain’) > de, ability marker > possibility marker. Ex.

Middle Chinese (tenth century A.D.; Zutangji 5/98/7; quoted from Sun 1996: 121)

(a) hai jie pan de xu-kong bu?
still explain judge possible empty NEG
‘Can (you) still tell what emptiness is?’

(b) ji fu de cheng?
several axe possible succeed
‘How many (strikes of) the axes can do (it)?’

Archaic Chinese neng ‘be able’, ‘be capable’ > marker of possibility and permission (Alain Peyraube, personal communication). German können ‘to be able’ > ‘to be possible’. Ex.

German

(a) Er kann Französisch.
he can French
‘He knows French.’

(b) Er kann Franzose sein.
he can French be
‘He could be French.’

Seychelles CF kapab ‘be able to do’, ability > ‘may be’, marker of possibility. Ex.

Seychelles CF (Corne 1977: 136)

(a) i pu kapab fer sa.
(3:SG Fut be:able do that)
‘He will be able to do it.’

(b) i n kapab ariv kek aksidà.
(3:SG Cpl be:able happen some accident)
‘There may have been an accident.’

2 The directionality of the German item können ‘be able, know how to do, can’ has not been established beyond reasonable doubt.
Bybee et al. (1994: 194) reconstruct the following path of grammaticalization for English: ability > root possibility > permission. The development from ABILITY to POSSIBILITY can be interpreted as an instance of a more general process whereby concepts of deontic (or agent-oriented or root) modality develop into concepts of epistemic modality. There are various hypotheses on how this process is to be explained. According to the one perhaps most frequently voiced, the development from deontic to epistemic meanings is suggestive of metaphorical transfer (see, e.g., Sweetser 1982; Bybee and Pagliuca 1985: 73; Heine et al. 1991: 175–8). Sweetser (1990: 52) argues that this development can be accounted for in terms of “sociophysical concepts of forces and barriers,” and Traugott (1989) suggests that we are dealing with an instance of subjectification in semantic change (see also Hopper and Traugott 1993: 86). For a treatment of modality as a semantic map, see van der Auwera and Plungian 1998. Compare DEONTIC MODALITY > EPISTEMIC MODALITY; OBLIGATION > PROBABILITY. See also ABILITY > PERMISSIVE; GET.

**ABLATIVE > (1) AGENT**

German *von* ‘from’, ablative preposition > agent marker in passive constructions. Ex.

**German**

**(a)** *Sie* kommt *vom* Bahnhof.

She comes from:the station

’She is coming from the station.’

**(b)** *Sie* wird *vom* Staat bezahlt.

She becomes from:the state paid

‘She is paid by the government.’

Krongo *nkA-*, *nkí-*, ablative marker (ABL) > agent marker in passive constructions (rarely used). Ex.

**Krongo (Reh 1985: 149, 229)**

\[
\begin{align*}
n- & \quad ác- & \quad éétá- & \quad átíñí & \quad nì & \quad nkà- & \quad káaw \\
\text{neut-} & \quad \text{part-} & \quad \text{kill-} & \quad \text{pass} & \quad \text{snake} & \quad \text{abl-} & \quad \text{person} \\
y- & \quad íkkì & \quad m- & \quad \text{that} \\
\end{align*}
\]

‘The snake has been killed by that man.’


**Bulgarian**

**(a)** *Toj* idva *ot* basejna.

He come:3SG:RES from swimming:pool:DEF

‘He is coming from the swimming pool.’
This grammaticalization is presumably related to another one whereby agents are encoded as locative participants, and both are probably part of a more general process whereby agents in passive constructions are expressed in terms of spatial concepts. See also COMITATIVE; HAND; LOCATIVE.

ABLATIVE > (2) COMPARATIVE

Latin ablative case suffix > standard marker in comparative constructions ‘than’. Ex.

**Latin (Stassen 1985: 27)**

Cato Ciceron-e eloquentior est.

*Cato:*nom Cicero- abl more:eloquent is

‘Cato is more eloquent than Cicero.’

Bulgarian *ot* ‘from’, ablative marker > ‘than’, standard marker in comparative constructions. Ex.

**Bulgarian**

(a) Toj idva ot basejna.

he come:3:sg:res from swimming:pool:def

‘He is coming from the swimming pool.’

(b) Toj trjabva da e po- mlad

he must to be:3:sg:pres more- young

ot neja s edna- dve godini.

from her with one- two years

‘He must be younger than her by a couple of years.’

Tibetan *-nas* ‘from’ > marker of standard noun phrases in comparative constructions ‘than’. Ex.

**Tibetan (Stassen 1985: 115)**

Rta- nas khyi chun- ba yin.

horse-from dog small-one is

‘A dog is smaller than a horse.’

Turkish *-den, -dan* ablative suffix > ‘than’, comparative marker (nominal suffix). Ex.

**Turkish (Rühl 1970: 25; Lewis [1967] 1985: 54)**

(a) ev- den çikacak.

house- abl go:3:sg:fut

‘He will leave the house.’
(b) kurşun-dan ağır
  lead- ABL heavy
  ‘heavier than lead’


Aranda (Wilkins 1989: 185–6)
(a) Re pmere-nge lhe-ke lhere- werne.
  3:SG:SUBJ camp-ABL go- PAST:CPL creek:bed-ALL
  ‘He went from the camp to the creek.’
(b) Kwementyaye kele anteme atyenge- nge arlpenty-ulker.
    Kwementyaye OK now 1:SG:DAT-ABL tall- more
    ‘Kwementyaye is already taller than I am.’

That, cross-linguistically, ABLATIVE markers do in fact form one of the most common, if not the most common, means of encoding standard noun phrases in comparative constructions has been demonstrated by Stassen (1985; see also Heine 1997b). This grammaticalization appears to be an instance of a more general process whereby spatial concepts are used as structural templates to express the standard of comparison; compare LOCATIVE; UP.

**ABLATIVE > (3) MATERIAL**

Bulgarian *ot* ‘from’, ablative marker > marker of material. Ex.

**Bulgarian**
(a) Toj idva ot basejna.
    he come:3:SG:PRES from swimming:pool:DEF
    ‘He is coming from the swimming pool.’
(b) Tazi bluza e ot koprina.
    this blouse is from silk
    ‘This blouse is made from silk.’


**Yagaria (Renck 1975: 43)**
yavá-toti’ lu’ elo hi-d- a- e.
  stone-from axe make-PAST-3:PL-IND
  ‘They made axes from stone.’


**Lezgian (Haspelmath 1993: 97)**
Werg- eri-kaj awu- nwa- j čiğirtma
  nettle- PL-SUBEL make-PERF-PARTCP čiğirtma
More research is required on the exact nature and the genetic and areal distribution of this process.

**ABLATIVE > (4) PARTITIVE**


**German**

Gib mir ein bißchen vom Käse!

‘Give me a bit of the cheese!’

**Bulgarian**

(a) Toj idva ot basejna.

‘He is coming from the swimming pool.’

(b) polovinata ot sâkrovîsteto

‘half of the treasure’

**Lezgian** *(Haspelmath 1993: 97)*

Kursant- ri- kaj gzaf- buru

cadet- PL- SUBEL many- SBST:PL(ERG)

ruš- ari- q̣ galaz q’uler- zawa- j.

girl- PL- POESS with dance- IMPFV- PAST

‘Many of the cadets were dancing with girls.’

In Krongo, the ablative marker *nkí, nkA*- has a partitive function when used in adnominal expressions. Ex.

**Krongo** *(Reh 1985: 149)*

k -ábálà kàlyá nkànááy ncáarè; . . .


‘Two of the children play; . . .’

Finnish separative (ablative) case *-tA* marker > partitive marker. Ex.

**Finnish** *(Huumo 1999)*

(a) kotoa

‘from home’
The modern Basque partitive -(r)ik appears to derive from an earlier ablative. Ex.

**Basque (anonymous reader)**

(a) **Maulerik**

Maule-(r)ik
Maule-ABL
‘from Maule’

(b) **Ez daukat dirurik.**

Ez da- uka- t diru- (r)ik
NEG PRES-have- 1:SG:ERG money- PARTV

‘I don’t have any money.’

Harris and Campbell (1995: 339–41) observe that the “development of a partitive out of the expression of a partial through a genitive or through a locative (in roughly the meaning ‘from’) . . . is a good candidate for a unidirectional change, to which we know no counterexamples.” See also Harris and Campbell 1995: 362–3 for examples from Finno-Ugric. Since PARTITIVE markers may go back to (> A-POSSESSIVE markers and the latter to ABLATIVE markers (see **ABLATIVE > A-POSSESSIVE**), we seem to be dealing with a more general grammaticalization chain: ABLATIVE > A-POSSESSIVE > PARTITIVE. Whether there is always an intermediate A-POSSESSIVE stage in this evolution is not entirely clear; as appears to be the case in some other grammaticalization processes, the evolution may proceed straight from the initial to the final meaning.¹ Note, however, that “partitive” does not appear to be a unified notion (Martin Haspelmath, personal communication).

**ABLATIVE > (5) NEAR PAST**

French **venir de** ‘to come from’ > near past tense marker.⁴ Ex.

**French**

(a) **Je viens de Lyon.**

I come from Lyon

‘I come from Lyon.’

(b) **Je viens de manger.**

I come from eat:INF

‘I’ve just eaten.’

¹ The latter is suggested by observations made by Harris and Campbell (1995: 363), who note, e.g., with reference to the evolution in Mordvin: “The Mordvin ablative can be used as a ‘restricting’ object case, for example where “to eat of/from bread” develops the meaning “eat some (of the) bread”, from which the grammatical function of the partitive case developed.’

⁴ Note that ABLATIVE markers are not uncommonly derived from verbs meaning (> ) ‘come from’.
Kala Lagau Ya -ngu ablative case marker > yesterday past marker (Blake 1994: 183).

**Pitta-Pitta** (Blake 1994: 182)

Tatyi-ka- inya nganytya.

eat- NOMIN-ABL I

‘I’ve just eaten.’

French *sortir* ‘come out’ > Haitian CF *sòti* ‘come (from)’, *sòt(i)* ‘to have just done’. Ex.

**Haitian CF** (Hall 1953: 55)

\[
\begin{align*}
{l-} & \quad fèk & \quad sòt & \quad rivé & \quad kéyi & \quad gnou \\
(3:SG-TAM) & \quad \text{come:from} & \quad \text{arrive} & \quad \text{gather} & \quad \text{a} \\
{kòk} & \quad \text{nut} & \quad \text{vin} & \quad \text{bà} & \quad \text{mwè.} \\
\text{nut} & \quad \text{come} & \quad \text{give} & \quad 1:SG) \\
\end{align*}
\]

“He has just gathered a nut for me.’

More research is required on the genetic and areal distribution of this process. Underlying this grammaticalization there appears to be a process whereby a tense (or aspect function) is expressed in terms of physical, spatial motion; compare COME TO > FUTURE; COME TO > PROXIMATIVE; GO TO.

**ABLATIVE > (6) A-POSSESSIVE**

Latin *de* ‘from’ (ablative preposition) > French *de*, marker of attributive possession (‘of’), Catalan *de*, genitive marker. Ex.

**Catalan** (anonymous reader)

\[
\begin{align*}
\text{la} & \quad \text{casa} & \quad \text{de} & \quad \text{Pedre} \\
\text{the:F:SG} & \quad \text{house} & \quad \text{of} & \quad \text{Peter} \\
\text{‘Peter’s house’}
\end{align*}
\]

Frisian *fan* ‘from’ > marker of attributive possession. Ex.

**Frisian** (Koptjevskaja-Tamm forthc.; quoted from Tiersma 1985: 54, 94)

(a) \[it \quad \text{komt} \quad \text{fan} \quad \text{Sjina.}\]

(it comes from China)

‘It comes from China.’

(b) \[de \quad \text{hoed} \quad \text{fan} \quad \text{Jetze}\]

the hat of Jetze

‘Jetze’s hat’

Old English *of* ‘from’ > Middle English possessive marker (‘of’; Traugott 1986b: 541). German *von* ‘from’ (ablative preposition) > marker of attributive possession (‘of’). Ex.

---

5. **A-POSSESSIVE** (= marker of attributive possession; Heine 1997a) stands for what is commonly translated in English by ‘of’.
German
(a) Er kommt von drüben.
he comes from over:there
‘He originates from the ex-GDR.’
(b) das Pferd von Peter
the horse from Peter
‘Peter’s horse’

Upper Sorbian (Koptjevskaja-Tamm forthc.; quoted from Corbett 1987: 302)

knihawotJan-a
book from/ofJan-GEN
‘Jan’s book’

Macedonian (Koptjevskaja-Tamm forthc.; quoted from Koneski 1982: 525)

patoto od Petre-ta
coat-DEF:NEUT:SGfrom/ofPeter-OBL
‘Peter’s coat’

In the following example, it is a belong-construction of possession (a B-
POSSESSIVE), rather than an A-POSSESSIVE (see Heine 1997a), that is
involved: Hawaiian no ‘from’ > ‘belong to’. Ex.

Hawaiian (Susanne Romaine, personal communication)
(a) No Maui ‘O Kimo.
fromMaui?Kimo
‘Kimo is from Maui.’
(b) No Kimo ka hale.
ofKimothehouse
‘The house is Kimo’s/belongs to Kimo.’

See also Lehmann 1982: 111 and Harris and Campbell 1995: 339–41. Note that
most of these examples relate to Indo-European languages; more research is
required on the genetic and areal distribution of this process.

ABLATIVE > (7) SINCE (TEMPORAL)

Romanian de ‘from’ > ‘since’; Polish od ‘from’ > ‘since’; Croatian od ‘from’ >
‘since’; Lithuanian nuo ‘from’ > ‘since’; Greek apó ‘from’ > ‘since’; Georgian
-dan ‘from’ > ‘since’; Maltese minn ‘from’ > ‘since’; Persian az ‘from’ > ‘since’;
Punjabi tō ‘from’ > ‘since’; Chinese cōng ‘from’ > ‘since’; Kannada -inda ‘from’
> -inda ‘since’; Tamil -leruntu ‘from’ > ‘since’ (Haspelmath 1997b: 66). For
more details, see Haspelmath (1997b: 66–8), who has proposed this instance
grammaticalization, which appears to be part of a more general process
whereby spatial concepts are used to also express temporal concepts; compare
ALLATIVE; BEHIND; IN; LOCATIVE.
ALL > (1) PLURAL

This grammaticalization process appears to achieve marking plural referents of nouns or personal pronouns. Colloquial southern American English y’all (second person plural pronoun). English all > Tok Pisin PE ol ‘they’ (third person plural subject pronoun). In Waŋkumara, the free form buka ‘all, together’ is commonly used as a plural marker (McDonald and Wurm 1979: 27). Portuguese todo(s) ‘all’ > Papia Kristang CP nos-túru ‘we’ (‘we all’, first person plural inclusive pronoun; Stolz 1992b: 281). French tous les ‘all the’ > Tayo CF tule, tle, te, nominal plural proclitic or prefix. Ex.

Tayo CF (Kihm 1995: 234, 237)

<table>
<thead>
<tr>
<th>Tle</th>
<th>fler-la</th>
<th>le</th>
<th>fini</th>
<th>puse</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL</td>
<td>flower-</td>
<td>def</td>
<td>TAM</td>
<td>CPL</td>
<td>grow</td>
</tr>
<tr>
<td>pi</td>
<td>sa</td>
<td>atra-de</td>
<td>puse</td>
<td>akor.</td>
<td></td>
</tr>
</tbody>
</table>

then they PROG grow still

‘The flowers have been growing, and they are still growing.’

Note that we have subsumed under this entry a number of different individual processes. More research is required on the exact nature and the genetic and areal distribution of this process.

ALL > (2) SUPERLATIVE

Latvian viss ‘all’ > superlative prefix vis-; Estonian kõik ‘all’ > superlative marker ‘of all’ (Stolz 1991b: 50–4). Amharic hullu ‘all’, used in superlative constructions. Ex.

Amharic (Ultan 1972: 134)

kọ- hullu yamral.

from- all he:is:handsome

‘He is the most handsome of all.’

Hamer wul-na ‘all’ + dative suffix > superlative marker. Ex.

Hamer (Lydall 1976: 433)

wul-na kisi sana dọ gọb.

all- for he fast exists runs

‘He runs fastest.’

Teso kere ‘all’ > superlative marker. Ex.

Teso (Kitching 1915: 25, 44)

(a) ajarit oni kere.
call:3:sg us all

‘He’s calling all of us.’

(b) etogo ɲol ɲes le- telekarit kere.

house that COP REL-surpass all

‘That house is the biggest one.’
Note that it is not ALL on its own that is responsible for this grammaticalization; in addition some comparative predication (expressed, e.g., in the Teso example by means of ‘surpass’) is required. Heine (1997b: 124) notes: “Perhaps the predominant pattern for forming superlatives is that of replacing an individual standard of comparison . . . by the entire class of possible individuals, which means typically that the standard is modified by the quantifier ‘all’ and the like.” For more examples, see Ultan 1972 and Heine 1997b: 124f.

**ALLATIVE > (1) COMPLEMENTIZER**

This grammaticalization path is suggested by Hopper and Traugott (1993: 181–2), who note that “the reanalysis of a dative-allative particle as a complementizer is widespread.” The following are among the examples adduced by them: Latin *ad* ‘to’, French *à* (< Latin *ad* ‘to’), and Maori *ki*, which is both a dative and an allative marker, “and is a complementizer with the same kinds of verbs as English *want*.” Ex.

**English (Hopper and Traugott 1993: 181)**

(a) *We handed the box to the Gypsy.*

(b) *We want to ask you a few questions.*

It would seem that we are dealing with a chain of grammaticalization of the following kind: ALLATIVE > PURPOSE > INFINITIVE > COMPLEMENTIZER (cf. Haspelmath 1989); see ALLATIVE; PURPOSE. Note that ALLATIVE itself is the target of other concepts; see under ARRIVE; GO TO; SEE.

**ALLATIVE > (2) DATIVE**

Tamil -*iṭam* ‘to’ (directional bound postposition) > bound postposition marking the indirect object. Ex.

**Tamil (T. Lehmann 1989: 41)**

\[
\begin{align*}
\text{kumar} & \quad \text{raajaa·v-}iṭam & \quad \text{oru} & \quad \text{pustakam} \\
\text{Kumar} & \quad \text{Raja-} & \quad \text{a} & \quad \text{book} \\
\text{kōtu-}tt- & \quad \text{aan.} \\
\text{give-PAST-3:SG:M} \\
\text{‘Kumar gave Raja a book.’}
\end{align*}
\]

Lezgian -*z* ‘to’, direction marker (nominal suffix) (> ‘for’ benefactive/malefactive marker) > dative marker. Ex.

**Lezgian (Haspelmath 1993: 88, 89)**

(a) *Zun* medinstitutdi- *z* fi- *da.*

I:ABS medical:school-DAT go-FUT

‘I’ll go to medical school.’

(b) *Ruša* gadadi- *z* cuk ga- *na.*

girl:ERG boy- DAT flower give-AOR

‘The girl gave a flower to the boy.’
Examples of a development from allative to dative functions can also be found in European languages. Thus, Latin *ad* ‘to’ has given rise to markers whose functions include that of a dative in some Romance languages; compare also English *to*. Ex.

**English**

(a) *I went to my teacher.*

(b) *I spoke to my teacher.*

The preposition *YU* of Pre-Archaic Chinese (fourteenth–eleventh centuries B.C.) had both an allative and a dative meaning. Alain Peyraube (personal communication) considers it more likely that the dative meaning preceded the allative one in time; that is, we might be dealing with a counterexample to the present grammaticalization. Note that ALLATIVE itself is the target of other concepts; see ARRIVE; GO TO; SEE.

**ALLATIVE > (3) INFINITIVE**

ALLATIVE markers tend to give rise to PURPOSE markers, which may further develop into INFINITIVE markers, a process that has been well described by Haspelmath (1989). For examples of the latter evolution, see PURPOSE > INFINITIVE. Note that ALLATIVE itself is the target of other concepts; see ARRIVE; GO TO; SEE.

**ALLATIVE > (4) PATIENT**

Spanish *a*, directional preposition > marker of human/definite objects. Imonda -m, direction marker > (a) optional object marker, (b) obligatory object marker in [+HUMAN] object-subject relations. Ex.

**Imonda (Seiler 1985: 165)**

\[
\begin{array}{llllll}
\text{aia-} & \text{edel-} & \text{ue-} & \text{ne-} & \text{uõl} & \text{fe-} \\
\text{father-NOM} & \text{human-GL} & \text{CLASS-eat-PL} & \text{do-PRES} \\
\end{array}
\]

‘Her father habitually eats humans.’

Lezgian -z ‘to’, direction marker, nominal suffix > experiencer object marker. Ex.

**Lezgian (Haspelmath 1993: 89)**

(a) *Zun medinstitutdi- z fi- da.*

I:ABS medical:school-DAT go-FUT

‘I’ll go to medical school.’

(b) *Kasbubadi- z tara- n xile- l.*

Kasbuba-DAT tree-GEN branch-SRESS

zurba sa quš aku-na.

big one bird see-AOR

‘Kasbuba saw a big bird on a tree’s branch.’

---

6 Latin shows evidence of a reversed process, in that the accusative suffix -m, inherited from Proto-Indo-European, serves as an allative in certain locutions (anonymous reader).
There may be two different pathways that are involved here, one leading from a dative (recipient) to a patient/accusative marker, and another leading to an experiencer marker (Martin Haspelmath, personal communication); see also dative > patient. Note that ALLATIVE itself is the target of other concepts; see arrive; go to; see.

**ALLATIVE > (5) PURPOSE**

Imonda -m, directional marker (NP-suffix) > purpose case marker (nominal suffix). Ex.

*Imonda (Seiler 1985: 161)*

(a) nē- m at uagl-n.
    bush-GL CPL go- PAST
    ‘He has gone to the bush.’

(b) tēta- m ai- fōhō- n.
    game-GL PL-go down-PAST
    ‘They have gone hunting for game.’

Albanian për ‘to’, directional preposition > preposition marking purpose. Ex.

*Albanian (Buchholz, Fiedler, and Uhlisch 1993: 403)*

punon për nesër
‘to work for tomorrow’

This process leads not only to the rise of PURPOSE case markers but also to PURPOSE proposition markers; for example, Imonda -m purpose marker > purposive clause marker. Ex.

*Imonda (Seiler 1985: 162)*

tōbtō soh- m ka uagl-f.
    fish search-GL I go- PRES
    ‘I am going to search for fish.’

Lezgian -z ‘to’, direction marker (nominal suffix) > -z/-iz, purposive marker (verbal suffix). Ex.

*Lezgian (Haspelmath 1993: 89, 156)*

(a) Zun medinstitutdi- z fi- da.
    I:ABS medical:school-DAT go- FUT
    ‘I’ll go to medical school.’

(b) I irid stxa čpi- n juldaš- ri-
    this seven brother selves-GEN friend- PL-
    qʰ galaz āustainable - z fe- na.
    poess with play- INF go- AOR
    ‘These seven brothers went to play with their friends.’

Basque -ra, the ordinary allative case marker, marks purpose when attached to a verb in the gerund. Ex.
Basque (anonymous reader)

(a) etxera noa.

etxe- ra n- a- oa
house- ALL 1:SG:ABS- PRES- go

‘I’m going home.’

(b) liburu hau irakurtzera noa.

liburu hau irakur- tze- ra n-
book this read- GER-ALL 1:SG:ABS-
a- oa
PRES- go

‘I’m going to read this book.’

This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adversative, causal, concern, concessive, and conditional relations; see, for example, LOCATIVE; SINCE; TEMPORAL; UP. Note that ALLATIVE markers themselves may be the target of other concepts; see ARRIVE; GO TO; SEE.

ALLATIVE > (6) TEMPORAL

German zu allative preposition > temporal preposition. Ex.

German

(a) Komm zu mir!

come to me

‘Come to me!’

(b) Er kommt immer zum Wochenende.

he comes always to:the weekend

‘He always comes on the weekend.’


Albanian (Buchholz et al. 1993: 403)

për tri javë
(to three weeks)
‘in/within three weeks’

Lezgian -z ‘to’, direction marker (nominal suffix) > temporal marker. Ex.

Lezgian (Haspelmath 1993: 88–9)

(a) Zun medinstitutidi- z fi- da.

I:ABS medical:school-DAT go-FUT

‘I’ll go to medical school.’

(b) M. Hažiev 1958 = jisa- n 22 = martdi-

M. Hažiev 1958 = year- GEN 22 = March-
This grammaticalization appears to be an instance of a more general process whereby spatial concepts, including motion in space, are used as structural templates to express temporal concepts; see also ALLATIVE > UNTIL; ABLATIVE; BEHIND; IN; LOCATIVE. Note that ALLATIVE itself is the target of other concepts; see ARRIVE; GO TO; SEE.

ALLATIVE > (7) UNTIL (TEMPORAL)
Chinese DAO ‘to’ > ‘until’. Ex.

Chinese (Alain Peyraube, personal communication)

Yao deng dao liu dian cai zou.
must wait until six hour then leave
‘(We) must wait until six before leaving.’

Old Norse til ‘goal’ > English till; Middle High German bi ze (= bei zu) ‘with to’ > bis ‘until’; Russian do ‘to’ > ‘until’; Croatian do ‘to’ > ‘until’; Bulgarian do ‘to’ > ‘until’; Arabic ʾilaa ‘to’ > ‘until’ (Haspelmath 1997b: 67). Lezgian -ldi, superdirective (SRDIR) marker ‘onto’, nominal suffix > ‘until’, temporal marker. Ex.

Lezgian (Haspelmath 1993: 101–2)

(a) Allahquli ruša- n diqet wiče-
Allahquli girl- gen attention self-
ldi ʾugwa- z alaqʰ- zawa- j.
SRDIR draw- INF strive- IMPFV- PAST
‘Allahquli was trying to draw the girl’s attention to himself.’

(b) Wun i ʾawa- ldi hina awa- j?
you:ABS this time- SRDIR where be:in- PAST
‘Where were you until now?’

This grammaticalization appears to be an instance of a more general process whereby spatial concepts, including motion in space, are used as structural templates to express temporal concepts; see also ALLATIVE > TEMPORAL; ABLATIVE; BEHIND; FRONT; IN; INTERIOR; LOCATIVE. Note that ALLATIVE itself is the target of other concepts; see ARRIVE; GO TO; SEE.

ALONE > ONLY
English alone. Ex.

English
(a) Susie was alone in the house.
(b) Among my friends, Susie alone smokes. (anonymous reader)

German allein ‘alone’ > ‘only’. Ex.
German
(a) Ich bin allein zu Hause.
I am alone at home
‘I am alone at home.’

(b) Allein wegen dem Duft mag ich Blumen.
alone because:of the smell like I flowers
‘I like flowers only because of the smell.’


(a) Deteto e samó v momenta.
child:the is alone:neut:sg in moment:the
‘The child is alone at the moment.’

(b) Ivan jade sómo kiselomljako za zakuska.
Ivan eat:3:sg:pres alone:neut:sg yogurt for breakfast
‘Ivan has only yogurt for breakfast.’

Basque bakarrik ‘by oneself’ is attested from the fifteenth century, but only from the seventeenth century is it attested as meaning ‘only’ (anonymous reader; Sarasola 1996: 95). Ex.

Basque (anonymous reader)
(a) bakarrik etorr-i d-a.
alone-advl come-pfv pres-aux
‘He has come by himself.’

(b) urtean behin bakarrik
year-loc once only
‘only once a year’

Swahili peke yake ‘alone’ (third person singular) > ‘only’. Ex.

(a) A-na-kaa peke yake.
c1-pres-stay alone
‘He lives alone.’

(b) A-na-taka chai peke yake.
c1-pres-want tea only
‘He wants tea only.’
More research is required on the exact nature and the genetic and areal distribution of this process. See also one.

**ALSO > NP-AND**

Cayuga *hni* ‘also’, ‘too’ > noun-phrase coordination conjunction. Ex.

**Cayuga (Mithun 1988: 341–2)**

(a) Akitakrá *hni*’ shē nyō: *n*’atō:tá:ke:.

I:fell also as far I:came:back

‘I fell on the way back, too.’

(b) Junior, Helen, Hercules *hni*’

Junior Helen Hercules also

‘Junior, Helen, and Hercules’

Kxoe *tama-xa* ‘also’, adverbial particle > NP-conjoining particle ‘and’, added to both conjunct constituents. Ex.

**Kxoe (Treis 2000b: 76; Köhler 1989: 182, 268)**

(a) Gòàvá- ñ tama-xa //’án- a-

Mbukushu- c:pl also settle- junc-

ko té- ḫī.

conv be- past

‘The Mbukushu also lived there.’

(b) /Gíríku- n tama-xa Kwáŋgari-

|Gíríku- c:pl also Kwangali-

n tama-xa . . .

‘the |Gíríku and the Kwangali . . .’

See Mithun 1988 and Treis 2000b for more details on this grammaticalization; see also comitative; dual; two.

This appears to be an instance of a more general process, whereby adverbial categories are pressed into service as coordinating elements.

**VP-AND > SUBORDINATOR**

That coordinating conjunctions ‘and’ may come to be used as subordinating conjunctions has been demonstrated by Harris and Campbell (1995: 290). The Mingrelian coordinating conjunction *da* ‘and’ has developed into a conditional clause marker, and Mingrelian *do* ‘and’ can be used as the temporal conjunction ‘as soon as’. Similarly, the coordinating conjunction *ta* ‘and’ of !Xun (northern dialect) serves as a marker of cause clauses but may also introduce other kinds of adverbial clauses.

**!Xun, northern dialect (Bernd Heine, field notes)**

(a) yà-ndu’à ke !xòlù dónɡí ta diísá

cl-dem past mount donkey and be:slow
and go
‘He rode the donkey slowly.’

(b) yà /oa tcí ta yà fi a ñëhi.
c1 NEG come and c1 PROG be:sick
‘He doesn’t come because he is sick.’

While such context-induced uses appear to be not uncommon in a number of languages, it is not entirely clear whether, or to what extent, VP-AND markers are really conventionalized to subordinating conjunctions. In any case, this grammaticalization appears to be part of a more general process whereby markers of clause coordination give rise to subordination markers.

ANTICAUSATIVE > PASSIVE
!Xun /’é (‘body’, noun > reflexive marker >) anticausative marker > passive marker. Ex.

!Xun, northern dialect (Bernd Heine, field notes)
(a) ma ke g//å mí /’é ke àngòlà.
1:SG PAST bear my self in Angola
‘I was born in Angola.’
(b) g//ú má ke tchì ká’ñ /’é ke mí.
water TOP PAST drink its self by 1:SG
‘The water has been drunk by me.’

This grammaticalization is well documented; it has been discussed in particular by Kemmer (1993: 151ff., 197); for details, see there and also Faltz [1977] 1985 and Heine 2000. Usually it has been described as involving “middle” forms as a source, but the notion “middle” is not without problems, essentially because it does not appear to refer to a clearly delineable grammatical function. Concerning the evolution from anticausative uses to passive ones in early Romance, see Michaelis 1998. Reflexive markers constitute one common source for anticausative markers; hence, there appears to be a fairly widespread, more general pathway REFLEXIVE > ANTICAUSATIVE > PASSIVE; see reflexive > passive and also body; head.

AREA (‘area’, ‘region’) > LOCATIVE

Imonda (Seiler 1985: 43)
ed- la- m ed li- f.
PX-area-LOC PX lie-PRES
‘It is around there.’
This grammaticalization appears to be an instance of a more general process whereby nouns that imply some spatial reference in their meaning may give rise to locative markers; compare home; house; place; side. More research is required on the genetic and areal distribution of this process.

‘Arm’ see hand

**ARRIVE (‘arrive at’, ‘reach’) > (1) ABILITY**

Koranko ké ‘reach’, arrive at’ > ‘can’, ‘be able’, modal auxiliary. Ex.

*Koranko (Raimund Kastenholz, personal communication)*

(a) kélaye ára ké fślọ bà
messenger TAM reach already Q

‘Has the messenger already arrived?’

(b) ní té ké táa-la. . . .
1:SG NEG reach go- at

‘I am not able to walk. . . .’


**MANDARIN CHINESE (LI AND THOMPSON 1981: 66)**

kàn- dào zhào- dào
see- arrive search- arrive

‘succeed in seeing’ ‘succeed in searching’

Conceivably, this pathway can be grouped together with (> **ARRIVE** > succeed. More research is required on this process.

**ARRIVE (‘arrive at’, ‘reach’) > (2) ALLATIVE**


**Chinese (Hagège 1975: 156; Alain Peyraube, personal communication)**

(a) tā dào le Zhongguó.
he arrive PERF China

‘He arrived in China.’

(b) tā dào Zhongguó qù le.
he to China go CRS

‘He went to China.’


**Haitian CF (Sylvain 1936: 131; Hall 1953: 55)**

Li broté tut pîtî-li rîvé Pako.
(3:SG take all child-3:SG to Pako)

‘She moved all her children to Pakot.’
This appears to be an instance of a process whereby process verbs on account of some salient semantic property give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GIVE; GO TO; LEAVE; SEE; TAKE.

**ARRIVE (‘arrive at’, ‘reach’) > (3) SUCCEED**

**Mandarin Chinese (Li and Thompson 1981: 66)**

\[
\begin{array}{llll}
\text{kan-} & \text{dào} & \text{zhào-} & \text{dào} \\
\text{see-} & \text{arrive} & \text{search-} & \text{arrive} \\
\text{‘succeed in seeing’} & \text{‘succeed in searching’} \\
\end{array}
\]

Lahu gà ‘reach’, ‘arrive at’ (after a main verb) > ‘manage to do’ (Matisoff 1973: 233). More research is required on the genetic and areal distribution of this pathway. See also ARRIVE > ABILITY.

**ARRIVE (‘arrive at’, ‘reach’) > (4) UNTIL (TEMPORAL)**

**Zande (Canon and Gore [1931] 1952: 23f.)**

(a) I nida awere.

‘They have arrived now.’

(b) Mo sungudi re da ho mi ka yega ni.

‘Wait for me until I come back.’


**Kikuyu (Benson 1964: 219–20)**

\[
\begin{align*}
\text{ikara} & \text{haha} \text{kinya} \text{nj- ok- e} \\
\text{(stay:IMP here arrive 1:SG-COME-SUBJUNCT)} \\
\end{align*}
\]

‘Stay here till I get back.’

This grammaticalization appears to be part of a more extensive chain: ARRIVE > ALLATIVE > UNTIL; compare ALLATIVE; ARRIVE > ALLATIVE. See alsoABLATIVE > SINCE; IN; LOCATIVE.

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**B**

**BACK (body part) > (1) AFTER**
Thai lañ ‘back’, noun > lañ-càag (lit.: ‘back from’) adverbial subordinator ‘after’ (Bisang 1998b: 773)

Icelandic (Stolz 1992a: 16)

bak jól- um
after Christmas-DAT:PL
‘after Christmas’

This process appears to be an instance of a more general process whereby body parts are grammaticalized to spatial concepts which again are used to also express temporal concepts; compare BEHIND > AFTER.

BACK (body part) > (2) BEHIND


Colonial Quiché (Dürr 1988: 58f.)

x- e- be chi r- ih ri vmul.
cpl-3:pl:abs-go loc 3:sg:erg-back def rabbit
‘They went after the rabbit.’


Kono (A. Donald Lessau, personal communication)

èè pàáàndé kɔŋgè kò
3:sg:tam far:ideo hill:det behind
‘It is behind the hill.’


Bambara (A. Donald Lessau, personal communication)

(a) ń fà kò
1:sg father back
‘my father’s back’

(b) à yé misi nyini kììlu kòfè.
3:sg tam cow look:for hill behind
‘He looked for the cow behind the hill.’


Baka (Brisson and Boursier 1979: 391; Brisson 1984: 142; glosses Christa Kilian-Hatz)

(a) pe- lè bà kè.
back-1:sg:poss asp ache
‘I have a backache.’
(b) ?á te te pé
3:SG:NAR fall with back:3:SG:POSS

‘He is falling backward.’


Aranda (Wilkins 1989: 315)

Re ingke-lhe-me atyenge- nge
ingkerne.
behind

‘He’s walking behind me.’


This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative position, are used as structural templates to express deictic location; compare BELLY; EYE; FACE; FOOT; HEAD. Concerning some of the implications of this process, see Aristar 1991, 1999.

**BACK (body part) > (3) CAUSE**


Moré (Alexandre 1953b: 325)

eb zaba tāba pagha:póře
they quarrel woman because:of

‘They quarreled because of a woman.’

Wolof ginnaaw ‘back’, body part noun > ginnaaw causal ‘since’, subordinating conjunction (Robert 1999). Shona musana ‘lumbar region’, ‘back’ > pa mu sana pa(kuti) (lit.: ‘in back of (to say)’) ‘on account of’, ‘for the reason that’, prepositional or conjunctual element (Marconnes 1931: 220). So far, only African examples have been found. It would seem, however, that we are dealing with a more general process whereby terms for body parts give rise to spatial markers that again may develop into markers for more abstract grammatical relations; compare HERE; LOCATIVE; PLACE.

**BACK (body part) > (4) EARLIER**

English back, body part noun > adverb; for example, three years back. Nanay xamasi ‘back’ > xamasi ‘ago’ (Haspelmath 1997b: 92). Estonian tagasi ‘back’ > tagasi ‘ago’. Ex.
Estonian (Haspelmath 1997b: 93)

Minu poeg naases kaks tundi
tagasi.

‘My son returned two hours ago.’


Bulu (Hagen 1914: 268)

melu metane mvus
(days five back)

‘five days ago’

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative position, are first used as structural templates to express deictic location and then develop further into temporal markers; compare back > after, back > then.

**Back (body part) > (5) Then**


Kikuyu (Barlow 1960: 189)

Nĩ- n- gü- kw- īra thutha, tw- oima nja.

‘I shall tell you afterward, when we go outside.’


Kikuyu (Barlow 1960: 189)

Thutha ū- cio nd- a- na- coka gü- tũ- ruma.

‘After that he did not again abuse us.’


Bambara (Kastenholz 1989: 100)

 extents 3:SG TAM 3:SG do basket down at

‘Then she put it down into the basket.’

Moré póré ‘back’, ‘the opposite’ > ‘then’, ‘thereafter’ (Alexandre 1953b: 325).

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative position, are first used as structural templates to express deictic location and then develop further into temporal markers; compare back > after.
BACK (body part) > (6) UP (SPATIAL)


**Mixtec (Brugman and Macaulay 1986: 318)**

\[ \text{saà ndéché sikí itú.} \]

bird fly animal:back cornfield

‘The bird is flying over the cornfield.’

Shuswap *ikú* ‘upper back’, ‘top’, ‘surface’ > TOP-REGION (Svorou 1994). This transfer has been described as being due to a zoomorphic metaphor, whereby the body of four-legged animals serves as a vehicle for spatial orientation (see Heine et al. 1991: 126–7; Svorou 1988, 1994).

BAD (‘bad’, ‘terrible’) > INTENSIFIER

English *bad* > *badly*; *That hurts badly / I need it badly*. German *furchtbar* ‘terrible’ > intensifier. Ex.

**German**

(a) *Das ist furchtbar.*

that is terrible

‘That is terrible.’

(b) *Der Pudding schmeckt furchtbar gut.*

the pudding tastes terribly good

‘The pudding tastes terribly good.’


**Baka (Brisson and Boursier 1979: 431f.)**

(a) *pe ko siti.*

3:SG very bad

‘That’s very bad.’

(b) *bo kê bâ meè bèlà siti na mêè.*

person DEM ASP do work bad INF do

‘This man works very well.’


**Siroi (Wells 1979: 19)**

\[ \text{kuen nyao masken nyao} \]

long bad far bad

‘extremely long’ ‘very far distant’

This grammaticalization illustrates a more general process whereby adverbs denoting negatively valued qualities may become intensifiers; compare English
awfully, fearfully, frightfully, terribly. In the course of this process they tend to lose their negative connotation and the emotional force they once had.

‘Be’ see copula

‘Become’ see change-of-state

**BEAT (‘to beat’, ‘to hit’, ‘to strike’) > pro-verb**

Swahili *ku-piga* ‘to beat’, ‘to hit’, verb > pro-verb. Ex.

<table>
<thead>
<tr>
<th>Swahili</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ku-piga</em> picha</td>
<td>to-beat</td>
<td>picture</td>
</tr>
<tr>
<td>‘to make a photo’</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>ku-piga</em> kelele</td>
<td>to-beat</td>
<td>noise</td>
</tr>
<tr>
<td>‘to make noise’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Ewe</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>fo</em></td>
<td>nú</td>
<td></td>
</tr>
<tr>
<td>‘to speak, talk’</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>fo</em></td>
<td>ḍa</td>
<td></td>
</tr>
<tr>
<td>‘to plait hair’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conceivably, this grammaticalization, whereby a frequently used action verb turns into a semantically empty predicate marker, constitutes an African areal phenomenon. See also *do*.

**BEGIN (‘to begin’, ‘to start’) > (1) FIRST (NUMERAL)**

The notion of an ordinal numeral ‘first’ may be expressed in a number of languages by means of constructions involving verbs meaning ‘begin/start’. In some languages this usage has given rise to conventionalized terms for the numeral, for example, Swahili *ku-anza* (INF-‘start’) ‘to start’, verb > -a *kwanza* ‘(the) first’, ordinal numeral. Ex.

<table>
<thead>
<tr>
<th>Swahili</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) a- na- taka</td>
<td>ku-</td>
<td>anza.</td>
</tr>
<tr>
<td>c1- PROG- want</td>
<td>INF-</td>
<td>start</td>
</tr>
<tr>
<td>‘He wants to start.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) mw- ezi w- a</td>
<td>kwanza</td>
<td></td>
</tr>
<tr>
<td>c3- month c3- POSS</td>
<td>first</td>
<td></td>
</tr>
<tr>
<td>‘the first month, ‘January’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

More research is required on the areal and genetic distribution of this process; compare **BEGIN > FIRST (TEMPORAL)**.

**BEGIN (‘begin’, ‘start’) > (2) FIRST (TEMPORAL)**

Swahili *ku-anza* ‘to begin’ > *kwanza* ‘the first’, ‘first’. Ex.
Swahili
(a) a-li-anza ku-sali.
   he-past-begin to-pray
   ‘He began to pray.’
(b) u-sali kwanza!
   you-pray first
   ‘You pray first!’


Kikuyu (Barlow 1960: 183)
   amba į-ikar-ē thī!
   ‘First sit down!’

While the examples of this grammaticalization are taken from one language family only (Niger-Congo), instances of incipient grammaticalization appear to exist in quite a number of languages; compare English to begin with in certain uses.

BEGIN (‘begin’, ‘start’) > (3) INCEPTIVE

English start to > inceptive marker; for example, They started to laugh (Hopper 1991: 23). Lingala -banda ‘start’ > ingressive auxiliary. Ex.

Lingala (Mufwene and Bokamba 1979: 244–6)
   Kāzi a-ko-banda ko-bēta ndembō.
   (Kazi he-will-start to-play soccer)
   ‘Kazi will start playing soccer.’

While being conceptually plausible, more examples are required on the genetic and areal distribution of this process, especially examples suggesting that the process has proceeded beyond the stages of incipient grammaticalization. Nevertheless, this grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare come to; do; finish; go to; keep; leave; put.

BEHIND (SPATIAL) > AFTER


This grammaticalization appears to be part of a more extended chain: BACK > BEHIND > AFTER; compare BACK. At the same time, it is also an instance
of a more general process whereby spatial concepts are used also to express temporal concepts; compare ablative; allative; in; locative.

**BELLY** (‘belly’, ‘stomach’) > (1) in (spatial)

Nama ḥnąb ‘belly’, ‘abdomen’ > ḥńá ‘in’ (postposition). Ex.

Nama (Krönlein 1889: 243)

Nē sa ḡaob ḥna ḥúna ḵha tarena?

‘What things are in your heart?’


**Baka (Brisson and Boursier 1979: 32)**

(a) ṭé à kè à bú-è.

3:SG ASP hurt LOC belly-3:SG:POSS

‘His stomach is aching.’

(b) ?anà bu nda!

sweep belly house

‘Sweep the (inside of the) house!’

?é à nɔd à bu ngo.

3:SG ASP run LOC belly water

‘He is running in the water.’


**Mixtec (Brugman and Macaulay 1986: 318)**

ni- kədzáa ini ndúčá.

cpl-drown stomach water

‘Someone drowned in the water.’


**Colonial Quiché (Dürr 1988: 58ff.)**

mauí nu- hox +bal, ri go

NEG 1:SG:ERG-fornicate +INSTRN DEF exist

chí nu- pam.

LOC 1:SG:ERG-stomach

‘It is not the result of fornication that is within me.’

Bowden (1992: 36) found eight Oceanic languages where terms for ‘belly’ or ‘stomach’ appear to have given rise to markers for IN. This grammaticalization
is an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, **BACK; BELLY; EYE; FACE; HEAD**.

**BELLY** (‘belly’, ‘stomach’) > (2) **IN** (TEMPORAL)

*Albanian (Buchholz et al. 1993: 50f.)*

\[
\begin{array}{ccc}
\text{në} & \text{bark} & \text{të} \\
\text{belly} & \text{ART} & \text{week} \\
\end{array}
\]

‘in the middle of the week’

This grammaticalization appears to be a metaphorical extension of **BELLY > IN** (SPATIAL), whereby locative concepts serve as structural templates for temporal ones; compare **BACK; EYE; IN; LOCATIVE**.

**BENEFACTIVE > (1) **DATIVE**
This grammaticalization, whereby benefactive markers develop into markers for typically human referents assuming the function, for example, of indirect objects, has been proposed in a number of works on grammatical evolution (see, e.g., Lehmann 1982; Heine and Reh 1984: 270; Heine et al. 1991; cf. Lord 1993: 31–45).

**Ewe** *ná ‘give’ > benefactive marker > dative marker. Ex.

*Ewe (Hünnemeyer 1985: 59)*

(a) \(\text{é- fi ga ná- m.}\)

\(3:SG-\text{steal money give-} 1:SG\)

‘He stole money for me.’

(b) \(\text{é- gbl- e ná- m.}\)

\(3:SG\text{say-} 3:SG\text{give-} 1:SG\)

‘He said it to me.’ (*‘He said it for me.’*)

The process may be described as involving desemanticization, whereby one meaning component (‘to do something for the benefit of’) is bleached out, with the effect that the relevant marker comes to accept complements other than benefactive ones, including malefactive participants. Typical contexts for this process appear to be verbs of speech (‘say to’, ‘tell’, etc.) or transaction (e.g., ‘sell’). Compare **ALLATIVE; GIVE**.

**BENEFACTIVE > (2) **A-POSSESIVE**
Arabic *li-*, benefactive preposition > *l(i)-*, genitive case marker. Ex.

---

7 **A-POSSESIVE** (= marker of attributive possession; Heine 1997a) stands for what is commonly translated in English by ‘of’.

(a) li-l-bayti
   ‘for the house’

(b) al-cima:ratu l-hadi:θatu li-l-ğa:micati
   ‘the modern building of the university’

Baka na, benefactive preposition > possessive marker. Ex.

Baka (Christa Kilian-Hatz, personal communication)

(a) ma ndé bèlà na wósè.
   1:SG without work BEN woman
   ‘I have no work for women.’

(b) dɔngɔ na dǐndɔ a kà?
   dress POSS baby in where
   ‘Where is the baby’s dress?’

In a number of English-based creoles, prepositions derived from English for have given rise to A-possessive markers; for example, Nigerian PE (“Anglo-Nigerian Pidgin”) fɔ ‘for’ benefactive/locative preposition (< English for) > ‘of’, marker of attributive possession. Ex.

Nigerian PE (Mann 1993: 59)

<table>
<thead>
<tr>
<th>Anti</th>
<th>Karo</th>
<th>bì</th>
<th>di</th>
<th>junio</th>
<th>sistà</th>
<th>fɔ</th>
</tr>
</thead>
<tbody>
<tr>
<td>aunt</td>
<td>Karo</td>
<td>is</td>
<td>the</td>
<td>younger:sister</td>
<td>POSS</td>
<td></td>
</tr>
<tr>
<td>mai</td>
<td>papa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>my</td>
<td>father</td>
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</tr>
</tbody>
</table>

‘Aunt Karo is my father’s younger sister.’

French pour ‘for’, benefactive preposition > Tayo CF pu, marker of attributive possession. Ex.

Tayo CF (Kihm 1995: 239)

De frer pu mwa le ni mor.
   two brother for me TAM CPL dead
   ‘My two brothers are dead.’

This process appears to be part of a more general evolution whereby adpositional concepts give rise to markers of attributive possession. For more examples, see Heine 1997a; compare ABLATIVE; DATIVE; LOCATIVE.

**Beneactive > (3) Purpose**

Bulgarian za ‘for’, benefactive marker > purpose marker. Ex.

Bulgarian

(a) Kupix mljako za decata.
   buy::SG:AOR milk for children::DEF
   ‘I bought milk for the children.’
(b) Ima li nešto za jadene?

have:3:sg:pres Q something for eating

‘Is there something for eating/to eat?’

English for, benefactive preposition > purpose preposition. Ex.

English

(a) I bought the mirror for Mary.

(b) I bought the mirror for the bedroom.

Yaqui bečibo ‘for’ > purpose marker. Ex.

Yaqui (Lindenfeld 1973: 100)

(a) i- me baa?am hu- me usi-

this- pl water this- pl child-
m bečibo.

PL for

‘This water is for the children.’

(b) ini- me baa?am hu- me usi-

this- pl water this- pl child-
m hi?i- ne bečibo.

PL drink- expected:asp for

‘This water is for the children to drink.’

Easter Island mo, benefactive preposition > purpose marker. Ex.

Easter Island (Chapin 1978: 145ff.)

(a) ina au ekō avai atu i te

NEG I NEG give away acc the

kai mo korua.

food for you

‘I won’t give you any food.’

(b) He patu mai i te puaka mo

past corral here acc the cattle purp

ma’u kiruga ki te miro.

carry into to the boat

‘(They) corralled the cattle in order to carry (them) onto the boat.’

Ewe ná, benefactive (< ná ‘give’) > purpose preposition before inanimate complements.

Baka (Christa Kilian-Hatz, personal communication)

(a) ma ndé bèlə na wósè.

1:sg without work ben woman

‘I have no work for women.’

(b) ma nè na lātì ode.

1:sg here purp sleep:vn neg

‘I am not here (in order) to sleep.’
Wherever there is more evidence available it appears that this grammaticalization is triggered by context expansion, whereby the use of benefactive adpositions is extended from human complements to inanimate complements (see Heine et al. 1991); nevertheless, more diachronic data are required to substantiate the directionality proposed.

**BODY > (1) INTENSIVE-REFL**


See Kemmer 1993; Heine 2000b; König and Siemund 2000; and Schladt 2000 for more details. See also Moravcsik (1972: 272) for further examples. Compare

**HEAD; OWNER.**

**BODY > (2) MIDDLE**

Krongo ðonó ‘body’ > middle marker. Ex.

**Krongo (Reh 1985: 172–3)**

(a) n- áa ámbí ìtì ðôñô.

1/2- IMPFV: dry I body

‘I dry my body.’ / ‘I dry myself.’

(b) n- ùwó ìtì ðôñô.

1/2- Pfv: enter I body

‘I’ve gone in.’

Duala nóló ‘body’ > ‘oneself’, reflexive, middle pronoun. Ex.

**Duala (Ittmann 1939: 177)**

bwelé bó dóm nóló.

‘the tree split’ (lit.: ‘the tree split itself’)

Bagirmi ro, pl. roge ‘body’ > emphasizing, reflexive, and middle marker. Ex.

**Bagirmi (Stevenson 1969: 45)**

ma njú g°o ro(m)-a.

‘I wash myself.’

---

8 The notion “middle” is semantically complex, and it remains unclear whether we are really dealing with a distinct grammatical function.
Lamang ghvà `body’ > -và, reflexive, middle marker (Wolff 1983: 120ff.; Heine 2000b). Since quite frequently middle markers go back to reflexive markers, we may be dealing with a more general development: BODY > REFLEXIVE > MIDDLE; see Haspelmath 1990; Kemmer 1993: 151ff. 197; Heine 2000b; and Schladt 2000 for more details.

**BODY > (3) RECIPROCAL**


This grammaticalization appears to be an instance of a more general process whereby certain body parts serve to express more abstract discourse functions. One of the sources for reciprocal markers consists of reflexive markers, and since nouns meaning `body’ appear to form the most common source for reflexive markers, the present pathway is likely to be part of a more general process: BODY > REFLEXIVE > RECIPROCAL. For more details, see Heine 2000b and Schladt 2000; see also Kemmer 1993: 151ff. Compare reflexive > MIDDLE.

**BODY > (4) REFLEXIVE**

Ibibio ídém `body’ > reflexive, emphatic reflexive marker (Essien 1982: 96ff.). Ex.

*Ibibio (Essien 1982: 107)*

<table>
<thead>
<tr>
<th>imé</th>
<th>ámà</th>
<th>átigha</th>
<th>idem</th>
<th>(amà).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ime</td>
<td>?</td>
<td>shot</td>
<td>body</td>
<td>his</td>
</tr>
</tbody>
</table>

‘Ime shot his body (as opposed to his head).’ / ‘Ime shot himself.’


**Yoruba (Awoyale 1986: 4)**

<table>
<thead>
<tr>
<th>Nwosu</th>
<th>rí</th>
<th>ara</th>
<th>rè.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nwosu</td>
<td>saw</td>
<td>body</td>
<td>his</td>
</tr>
</tbody>
</table>

‘Nwosu saw himself.’

**Baka (Christa Kilian-Hatz, personal communication)**

(a) ngòbò-lè bá kè.

body- my ASP pain

‘I am sick.’

(b) ?á à wò ngòbó-è.

3:SG ASP hide body- 3:SG:POSS

‘He is hiding.’


**Moré (Alexandre 1953b: 249–50)**

a kū a mēga.

he kill his body

‘He has killed himself.’


**Anywa (Reh 1996: 166–7)**

dëèD- wá ā- jàΔl- wá.


‘We blamed ourselves.’


**Yagaria (Renck 1975: 148)**

\[
\begin{align*}
d &\quad \text{ouva-di} \quad \text{begi-d- u- e.} \\
\text{my-body} &\quad \text{beat-PAST-1:SG-IND} \\
\end{align*}
\]

‘I hit myself.’


This grammaticalization (‘body’ + possessive attribute > reflexive marker) has taken place quite frequently in Romance-based and other creole languages; for example, French le corps ‘the body’ > Seychelles CF (possessive attribute +) lekor, reflexive marker. Ex.

**Seychelles CF (Papen 1978: 398)**

\[
\begin{align*}
I &\quad \text{ti} \quad \text{apel} \quad \text{só} \quad \text{lekor} \quad \text{Tom.} \\
\text{(he TNS call his body Tom)} \\
\end{align*}
\]

‘He called himself Tom.’

In creole language studies, the evolution BODY > REFLEXIVE is a much-discussed issue (see, e.g., Corne 1973, 1988a, 1988b, 1989; Carden and Stewart 1988, 1989). In African languages, nouns for ‘body’ appear to be the most frequent source for reflexive markers. In a sample of roughly 150 languages, Schladt (2000: 112) found that nouns meaning ‘body’ constitute by far the most common source for reflexive markers. For more details, see Schladt 2000 and Heine 2000b; see also Kemmer 1993: 151ff. This grammaticalization appears to be an instance of a more general process whereby certain concrete nouns develop into referential pronouns; compare **HEAD; MAN; PERSON**.

**BOTTOM > DOWN (SPATIAL)**


**Susu (Friedländer 1974: 40)**

\[
\begin{align*}
a &\quad \text{na tebeli bun(ma).} \\
\text{‘He is under the table.’} \\
\end{align*}
\]


**Hungarian (Halász 1973: 29, 440)**

\[
\begin{align*}
al &\quad \text{kar} \\
\text{‘forearm’} \\
\end{align*}
\]

**Aranda (Wilkins 1989: 316)**

(a) Artwe ampwe-le inte-lhile-ke
    man old-ERG design(lie-CAUS)-PAST:CPL
    pwerte kwene-ke.
    rock bottom-DAT
    ‘The old man made a design on the bottom of the rock.’ (lit.: ‘cause something to lie on’)

(b) Artwe ampw-le inte- lhile- ke
    man old-ERG design(lie-CAUS)-PAST:CPL
    pwerte-nge kwene (ahelhe-ke).
    rock-ABL beneath (ground-PAST:CPL)
    ‘The old man made a design beneath the rock (in the dirt).’

This grammaticalization is suggestive of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare bottom; interior; side; top.

**BOUNDARY** (‘border’, ‘boundary’) > UNTIL


**Swahili**

(a) m- paka w- a Kenya
c3- boundary c3- poss Kenya
‘the border of Kenya’

(b) mpaka kesho mpaka a- taka-
until tomorrow until c1- FUT-
‘until tomorrow’
    po- rudi
    REL- return
‘until she will come back’


Only examples from Africa have been found so far. Nevertheless, this appears to be another instance of a more general process whereby relational nouns give rise to relational (typically spatial or temporal) grammatical markers; compare bottom; home; side; top.

**BOWELS** (‘bowels’, ‘guts’, ‘intestines’) > IN (SPATIAL)

found five Oceanic languages where terms for ‘bowels’ appear to have given rise to IN markers.

More data is required on the genetic and areal distribution of this process. Nevertheless, there is hardly any doubt that we are dealing with another instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, back; eye; face; head; shoulder.

**BRANCH (‘branch’, ‘twig’) > CLASSIFIER**


This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also child; man; piece; song; tree; woman. More research is required on the genetic and areal distribution of this process.

**BREAST > FRONT**


This is a common instance of grammaticalization (see Heine et al. 1991: 126; Bowden 1992: 69). Especially among the Bantu languages of the southern half of Africa, it is perhaps the most frequently employed source for markers of FRONT. Instead of words for ‘breast’ it may also be words for ‘chest’ that develop into FRONT markers (cf. Heine et al. 1991: 126). This is another instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, back; eye; face; head; shoulder.

**BUTTOCKS > (1) BEHIND**


We are dealing here with an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, back; breast; eye; face; head; shoulder.
BUTTOCKS > (2) DOWN

*Bambara* (Kastenholz 1989: 100)

wùlu dò̂nna tábali jùkorọ.

(dog entered table below)

‘The dog went under the table.’

This is a common pattern of grammaticalization especially in African languages (see Heine et al. 1991, Chapter 5). We are dealing here with an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, BACK; BREAST; EYE; FACE; HEAD; SHOULDER.

C

CENTER (‘center’, ‘middle’) > (1) BETWEEN

*Vai* (Koelle [1854] 1968: 218)

(a) ná *tɛ*

‘the middle of my body’

(b) kéré ma bán’ge mute.

‘The war is not yet finished in our midst.’ (i.e., between us)


*Albanian* (Buchholz et al. 1993: 323)

*midis Tiranës e Elbasanit*

‘between Tirana and Elbasan’


*Aranda* (Wilkins 1989: 315)

*Alyweke unte kwerne-me yenpe-nge tyelke-nge mpwepe-ke.*

‘You insert the knife between the skin and the flesh.’
This grammaticalization is suggestive of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare \textit{bottom}; \textit{interior}; \textit{side}; \textit{top}.

\textbf{CENTER (‘center’, ‘middle’) > (2) IN (SPATIAL)}


\textit{Dullay (Amborn, Minker, and Sasse 1980: 102)}

\begin{align*}
\text{haâlecé} & \text{ kittacé} \quad \text{wórše} \quad \text{na-’áka.} \\
\text{calabash} & \quad \text{within} \quad \text{beer} \quad \text{it- is} \\
\text{‘There is beer in the calabash.’}
\end{align*}

We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare \textit{bottom}; \textit{interior}; \textit{side}; \textit{top}.

\textbf{CHANGE-OF-STATE (‘become’) > (1) COPULA}


\textit{Ngalakan (Hengeveld 1992: 253)}

\begin{enumerate}
\item \textit{f} - \textit{olko-men}-
\textit{3:sg-big- become-} \\
\text{‘He is getting big.’}
\item \textit{f} - \textit{olko-men- iñ.}
\textit{3:sg-big- cop-} \\
\text{‘He was big.’}
\end{enumerate}

Evidence for this grammaticalization is provided by Hengeveld (1992: 253–4), who also mentions Turkish \textit{olmak} ‘be’, ‘become’, ‘happen’, ‘mature’ as an example. Note, however, that we seem to be dealing with an incipient, context-dependent evolution that is confined to specific verbal tenses; see also Anderson 1975. There are some examples, such as Proto-Indo-European *\textit{bhu¯} ‘become’, that have given rise to copula-like markers; for example, German \textit{bin} ‘(I) am’, English \textit{been} (Lehmann 1982: 137).

\textbf{CHANGE-OF-STATE (‘become’) > (2) FUTURE}

German \textit{werden} ‘to become’, verb > future tense auxiliary. Ex.

\textit{German}

\begin{enumerate}
\item \textit{Er} \quad \textit{wird} \quad \textit{Arzt.}
\text{he} \quad \text{becomes} \quad \text{doctor} \\
\text{‘He becomes a doctor.’}
\end{enumerate}
Er wird kommen.

‘He’ll come.’

For a discussion of this pathway, see Dahl 2000a.

‘Chest’ see breast

Child > (1) classifier

Vietnamese con ‘child’ > classifier for living beings conceptualized as moving objects, frequently for females of inferior status (Löbel 1996: 138, 172). Kilivila gwadi ‘child’ > gudi, classificatory particle for child, immature human (Senft 1996: 20, 352). This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also branch; man; piece; song; tree; woman. More research is required on the genetic and areal distribution of this process.

Child > (2) diminutive

Awtuw ye’en ‘child’, noun > -ye’en, diminutive suffix, denoting the young of an animal or a small token denoted by the bare noun. Ex.

Awtuw (Feldman 1986: 43)
piyren-ye’en
   dog- child
   ‘puppy’
   knife- child
   ‘small knife’


Ewe
(a) tţutsu-vi
   man- child
   ‘boy’
(b) kpé- vi
   stone- DIM
   ‘small stone’ / ‘pebble’


Baka (Brisson and Boursier 1979: 198)
(a) mò tɛ lè pe?
   2:SG with child how:many
   ‘How many children do you have?’
(b) *le- nda
   DIM-house
   ‘small house’


**Londo** (Güldemann 1999b; quoted from Kuperus 1985: 228)
(a) *nw- áná- mì- ínà
   c1- child- c1- male
   ‘boy’
(b) *nw- áná- mè- kòrí
   c1- child- c3- hill
   ‘small hill’

Lingala *mwâna ‘child’ > *mwâ (+ noun), diminutive marker (van Everbroeck 1958: 35; 150). Ex.

**Lingala** (van Everbroeck 1958: 35)
(a) *mwâna akómi kotámbola.
   ‘The child starts walking.’
(b) *mwâ elò kò  mwâ ndámbo eké
   ‘a small matter’ ‘a small part’

!Xun (northern dialect) *ma, PL *mî èe ‘child’, ‘small one’ > -*ma, PL -*mî èe, nominal diminutive suffix. Ex.

**!Xun** (Bernd Heine, field notes)

\[
\begin{array}{llll}
\text{khì`ndà -} & \text{mà, PL} & \text{khì`ndà -} & \text{mî èe} \\
\text{cup-} & \text{DIM} & \text{cup-} & \text{DIM:PL} \\
\text{‘small cup’} & & & \\
\text{gláun-} & \text{mà, PL} & \text{gláun-} & \text{mî èe} \\
\text{tree-} & \text{DIM} & \text{tree-} & \text{DIM:PL} \\
\text{‘small tree’} & & & \\
\end{array}
\]

||Ani */oan ‘child’, noun > */oan ‘young’ when used with animate nouns, ‘small’ when used with inanimate nouns, derivative suffix. Ex.

**//Ani** (Heine 1999a: 55)

\[ngú- /oan\]

house- child

‘small house’

In many southern Bantu languages, such as Venda, Tonga-Inhambane, or Herero, there is a diminutive suffix typically of the form -*ana, which is derived from the Proto-Bantu nominal root *-yana ‘child’ (see Güldemann 1999b for details); for example, Venda -*ana diminutive suffix. Ex.
For a more detailed discussion of the present pathway, see Heine and Hünnemeyer 1988, and especially Jurafsky 1996. This appears to be an instance of a process whereby a noun, on account of some salient semantic property (in this case, relative size), gives rise to a grammatical marker highlighting that property; compare, for example, BRANCH; CIRCLE; PLACE; TREE.

**CHILD > (3) PARTITIVE**

Lingala mwâna ‘child’ > mwâ (+ noun), partitive marker; mwâ mái ‘a bit of water’; mwâ mikâl ‘a few days’ (van Everbroeck 1958: 35). Ewe sûkli ‘sugar’, sûkli-vi (lit.: ‘sugar-child’) ‘piece of sugar’, ‘a sugar cube’. Regarding various alternative grammaticalizations that the concept CHILD has undergone in Ewe, see Heine et al. 1991: 79–86.

More examples from other language families are required to substantiate this grammaticalization, especially since both languages cited belong to the Niger-Congo phylum.

**CHILDREN > PLURAL**


While these two examples stem from different language families, they both concern East African languages. More examples are needed to establish whether we are dealing with a cross-linguistically relevant process. Conceivably, this process is related to (> PEOPLE > PLURAL, where the plural form of a human noun has been grammaticalized to a plural marker.

**CIRCLE > AROUND (SPATIAL)**


Latin (Kühner and Holzweissig [1912] 1966: 935; Stolz 1991a: 7; Thomas Stolz, personal communication)

```
terra se convertit circum axem suum.
```

‘The earth turns around its own axle.’

Albanian (Stolz 1991a: 7)

rrreth tryezë- s
PREP table- ABL
‘around the table’

Icelandic hringur ‘ring’, ‘circle’ > kring ‘around’. Ex.

Icelandic (Stolz 1991a: 7)

i kring um hús- in
PREP around PREP house-DET:ACC:PL:NEUT
‘around the houses’


German (Stolz 1991a: 9)

rings um den Dom
around DET:ACC:SG: M cathedral
‘round about the cathedral’

Compare also Basque inguru or ingiru ‘vicinity’, which derives from Latin in gyru ‘in a circle’, ‘in a ring’. Ex.

Basque (anonymous reader)

etxearen inguruan
etxe- a- (r)en inguru- an
house- DET-GEN vicinity- LOC
‘around the house’ / ‘in the vicinity of the house’

This grammaticalization has so far been found to occur in European languages only. Nevertheless, it is an instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare, for example, BRANCH; CHILD; PLACE; TREE.

COME > (1) CONSECUTIVE

Kxoe yā̀a ‘come’ > ya(a) new-event marker (paraphrasable by ‘watch out, now something new is going to happen that is relevant to what follows’ (Heine 2000a). Ex.

Kxoe (Heine 1997e: 8, 19)

(a) xà- //ˈiàa  yàa- tè  úàn- m  ìà
dem- 3:M:SG come-PRES hare-3:M:SG POSS
//ˈià ki.
home LOC
‘And they came to the hare’s home.’
(b) tákò ya /x’ánn k’úú- á- hin then come very be:angry- JUNC- PAST
tad-||úún- cí ki. grandmother- 3:F:SG LOC
‘There he (the crocodile) got very angry with his grandma.’

Godié yi ‘come’ > sequential clause marker. Ex.

Godié (Marchese 1986: 144)

Godié yi | nú- | Godié yi | li.
he come:FACT then he come eat
‘He came and ate.’


Negerhollands CD (Boretzky 1983: 212)

am a kô fo kô nē slāvun.
(he ? come PURP come take slave)
‘He came to take slaves.’

Compare Traugott (1978: 384). In narrative discourse of some African languages, verbs for ‘come’ and ‘go’ have become new-event markers (Heine 2000a); that is, they may be used to present new (or unexpected) events and, in this capacity, tend to assume a CONSECUTIVE function. This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to markers used to structure narrative discourse; compare FINISH; GO.

COME > (2) CONTINUOUS


While the two languages belong to different phyla, more examples are required to substantiate this reconstruction. Nevertheless, this appears to be another instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; cf. BEGIN; COME TO; DO; GO TO; FINISH; KEEP; LEAVE; PUT.

COME > (3) HORTATIVE

German kommen ‘come’ > komm . . . ! (solidarity imperative marker). Ex.

German

Komm, denk darüber nach! Komm, geh jetzt!
come think about:it after come go now
‘Come on, think about it!’ ‘Come on, go now!’

Compare English Come on!, which is often used to urge a person or a team to make a greater effort or to succeed (anonymous reader). Baka dɔ ‘come’ > dɔ, marker of mitigated imperative. Ex.
Baka (Brisson and Boursier 1979: 66; Christa Kilian-Hatz, personal communication)

(a) ḏá  dɔ-  e  na  sià  lè.
     3:SG:NAR  come-PAST  INF  see  1:SG:OBJ
     ‘He has come to see me.’

(b) dɔ  go!
     come  go
     ‘(Come on,) go!’

Ngbaka Ma’Bo dɔ ‘come’ > marker of solidarity imperative. Ex.

Ngbaka Ma’Bo (Thomas 1970: 599, 601)

(a) ḏi  dɔ-  ḏa  mòlò  yèè.
     she  come-INF-kill  them
     ‘She came to kill them.’

(b) dɔ-  hā  nāā!
     come-take  wood
     ‘(Come on) take the wood!’

Nama haa ‘come’ > imperative marker. Ex.

Nama (Rust 1965: 75)

Sa  gòasa  ma  te  ha!
     ‘Come on, give me your knife!’

Compare also Nama hā ‘come’ > ha, a hortative marker (Krönlein 1889: 1, 141–2).

!Ora (Korana) hā ‘come’ > hortative/optative marker (called “imperative” by Meinhof 1930: 60). Ex.

Korana (Meinhof 1930: 54)

hā-  kham  !ū
     ‘Let’s go!’

This appears to be a process whereby certain verbs assume an interpersonal function in specific contexts involving commands and related interpersonal functions; compare go > HORTATIVE; LEAVE > HORTATIVE; LEAVE > PERMISSIVE.

COME > (4) VENITIVE


Lahu (Matisoff 1991: 395–6)

(a) mû-yè là ve
     ‘It’s raining.’ (lit.: ‘rain comes’)

(b) mɔ?  la.
     ‘Blow in this direction.’ / ‘Blow hither.’

Aranda *intye- ‘come’ (verb of motion) > -intye ‘associated motion’ (do the action denoted in the verb stem while coming), suffix (Wilkins 1989: 275, 277). Ex.
Aranda (Wilkins 1989: 275)

'alpe-rliw-ə-aye! Ularre uthne rr-intye-tyele!
‘(You mob) go home! Don’t come fighting with each in this direction!’
(old dog speaking to a pack of other dogs)

Mandarin lái ‘come’ (verb of motion) > -lái ‘toward the speaker’ (final component of a resultative verb phrase; Li and Thompson 1981: 59). Ex.

Mandarin (Li and Thompson 1981: 59)

ta¯ sòng-lái- le yi- ge xiāngzi.
3:SG send-come-PFV one-CLASS suitcase
‘S/He sent over (toward the speaker) a suitcase.’


Haitian CF (Sylvain 1936: 135)

Li ralé sˇèy- la vini.
(3:SG pull chair-DEF here)
‘He pulled the chair here.’

English come > Tok Pisin PE –kam, directional marker. Ex.

Tok Pisin PE (Givón 1991a: 89)

i- wokabaut i- kam.
PRED-move PRED-come
‘She moved/was moving toward (a reference point).’


This is an instance of a process whereby a verb on account of some salient semantic property gives rise to a grammatical marker highlighting that property; see also COME FROM; COME TO; CROSS; EXCEED; PASS; RESEMBLE.

COME FROM > (1)ABLATIVE (LOCATIVE, TEMPORAL)

Ewe tsó ‘come from’ > preposition ‘from’ (Westermann 1907: 97). Swahili kutoka ‘to come from’ (intransitive verb) > kutoka ‘from’ (locative or temporal preposition); kutoka Nairobi mpaka Mombasa ‘from Nairobi to Mombasa’. Lingala -úta ‘come from’ > útá, út’ó ‘since’, ‘from’. Ex.

Lingala (van Everbroeck 1958: 72, 158)

útá löbi naléi naíno te.
‘Since yesterday I haven’t eaten anything.’

French sortir ‘come out’ > Haitian CF sòt(i) ‘(out) from’. Ex.
Haitian CF (Hall 1953: 55)
yò pòté bagay sa yo sòt nà- mòn.
(they bring thing DEM PL from LOC-hill)
‘they bring these things from the hills.’

This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare, for example, come TO; CROSS; EXCEED; GO TO; PASS; RESEMBLE.

COME FROM > (2) NEAR PAST
Jiddu (Somali dialect) -ooku ‘come’ > near past tense marker. Ex.

Jiddu (Marcello Lamberti, personal communication)
(a) y- ooku.
3:M-come
‘He comes.’

(b) y- aam-ooku
3:M-eat- come
‘He has just eaten.’

Teso -bu, PL -potu ‘come’ > past (perfective) auxiliary. Ex.

Teso (Hilders and Lawrance 1956: 14; Heine and Reh 1984: 104)
a- bu ke-ner.
I- come I- say
‘I said.’

Sotho -tsôa ‘come from’ > -tsôa-, immediate past tense prefix. Ex.

Sotho (Doke and Mofokeng [1957] 1985: 204)
kê- tsôa- rèka.
‘I have just bought.’ (lit.: ‘I have come from buying’)

Klao de ‘come’ > past tense marker. Ex.

Klao (Marchese 1986: 124)
de de di.
he come thing eat
‘He just ate.’ (lit.: ‘He came from eating’)

Nyabo wo ‘come’ > marker of past actions. Ex.

Nyabo (Marchese 1986: 124)
wo gblà pi- è.
he come rice cook- NOMIN
‘She’s been cooking rice.’

Margi ghò d’á to come from’ > ‘to have done before’, ‘in the past’ (Hoffmann 1963: 220).
Compare also the following examples, where instead of a (near) past tense marker, a “perfect” morpheme has evolved: French *venir de* ‘come from’ > perfect. Ex.

**French**

(a) *Il vient de Paris.*

he comes from Paris

‘He comes from Paris.’

(b) *Il vient d’aller à Paris.*

he comes from go to Paris

‘He has just gone to Paris.’

**Yoruba** (Ward 1952: 139)

*O ti lọ.*

(he come:out go)

‘He has gone.’

**Malagasy**

*avy ni-lalao aho.*

come PAST-play I

‘I (have) played just now.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare *begin*; *come to*; *do*; *finish*; *go to*; *keep*; *leave*.

**COME TO > (1) BENEFATIVE**

This is a process that appears to have occurred repeatedly in Senufo languages and dialects. Pilara *pɔ* ‘come’ > benefactive marker. Ex.

**Pilara** (Carlson 1991: 212)

(a) *wi pɔ ga.*

3:SG come here

‘S/He came here.’

(b) *ki ká u pɔ.*

it give him/her to

‘Give it to him/her.’

Lahu *là* ‘come’ > *là*, benefactive particle (indicating that the verbal action is for the benefit of or impinges upon a nonthird person). Ex.

**Lahu** (Matisoff 1991: 395–6)

(a) *là.*

‘Come.’
(b) *cho là.*

‘Chop for me/us/you.’

This grammaticalization appears to be an instance of a more general process whereby verbs denoting location or motion serve as structural templates to express relational (adpositional) concepts; compare ARRIVE; COME FROM; GO TO; PASS.

**COME TO > (2) CHANGE-OF-STATE**

This grammaticalization includes processes leading to what tends to be described as resultative markers, for example, in Fijian, Vangunu, and To’aba’ita (Lichtenberk 1991a: 487–8); for example, To’aba’ita *mai* ‘come’ > *-mai*, in-gressive/resultative marker. Ex.

*To’aba’ita* (Lichtenberk 1991a: 487)

\[
\text{fanua’e rodo na- mai.} \\
\text{place it:PFV be:dark PERF-come}
\]

‘It has become dark.’

Perhaps related to this grammaticalization is the development of Chinese *lai*, which throughout Chinese history was used as a verb meaning ‘come’. In Early Mandarin (around the twelfth century) it developed uses of a perfect marker, its function being to relate “two time points, a point in the past and speech time,” possibly being a marker of “currently relevant state” (Sun 1996: 98). Ex.

*Early Mandarin* (Jingde chuandenglu; quoted from Sun 1996: 98)

\[
daxiong shan- xia cai junzi lai. \\
\text{Daxiong mountain- below pick fungi LAI}
\]

‘I have been to the foot of the Daxiong mountain to pick mushrooms.’

English *come* > linking verb; for example, *come true, come undone*. Sango *ga* ‘come to’ > ‘become’ (inchoative marker; Thornell 1997: 122). Ex.

*Sango* (Thornell 1997: 118)

(a) \( ^a \text{gà ge.} \)

\( ^{1:PL} \text{come:to here} \)

‘We come here.’

(b) *Tënë à:gä polêlê.*

\( \text{word AGR:become clear} \)

‘The speech became clear.’

This grammaticalization appears to be particularly common in pidgin and creole languages: Guyanese CF *vini* ‘come (from)’ > change-of-state marker. Ex.

*Guyanese CF* (Corne 1971: 90)

\( ^{3:SG} \text{vini malad.} \)

‘He has become sick.’
Seychelles CF *vin(i) ‘come’ > ‘become’. Ex.

Seychelles CF (Corne 1977: 63, 80)
(a) *i demânde si mô a kapab vini.
(3:SG ask if 1:SG fut be:able come)
‘He asks if/whether I will be able to come.’
(b) mô pu vin ris ê zur. i n vin larpâter.
(1:SG fut come rich one day) (he cpl come surveyor)
‘I shall be(come) rich one day.’ ‘He became a surveyor.’

Fa d’Ambu CP *bi ‘come’ > resultative aspect marker. Ex.

Fa d’Ambu CP (Post 1992: 159)

<table>
<thead>
<tr>
<th>tyipa</th>
<th>bi</th>
<th>sxa</th>
<th>dual</th>
<th>eli</th>
<th>kumu</th>
<th>pasa.</th>
</tr>
</thead>
<tbody>
<tr>
<td>stomach</td>
<td>come</td>
<td>part</td>
<td>hurt</td>
<td>3:SG</td>
<td>eat</td>
<td>surpass</td>
</tr>
</tbody>
</table>
‘His stomach hurt; he had eaten too much.’

Ghanaian PE *come ‘come’ > ingressive aspect marker (Huber 1996). Chinook Jargon čákwa or čáku ‘come’ is found before stative verbs and occasionally before active verbs in any of the forms čaku, čaw, č(u) with the meaning ‘become X’, ‘get to be X’; for example, Grand Ronde Chinook Jargon dákta čaw sik ‘the doctor becomes sick’ (Grant 1996: 236).

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to asceptual auxiliaries; compare *do; *finish; *go; *go to; *leave.

COME TO > (3) FUTURE

Bambara *nà ‘come’ > ná, remote future marker. Ex.

Bambara (Donald A. Lessau, personal communication)
(a) *ù té nà.
(3:PL neg:aux come)
‘They don’t come.’
(b) à ná sà.
3:SG fut die
‘He will die.’ (= everyone has to die some day)

Bambara bé auxiliary + *nà ‘come’ > bëna, near future marker. Ex.

Bambara (Donald A. Lessau, personal communication)
(a) *ù bé nà.
3:PL aux come
‘They come.’
(b) à bëna sà.
3:SG fut die
‘He will die (soon and/or surely).’

Kono (Donald A. Lessau, personal communication)

(a) í nà- á fén mà?
 2:SG come-TAM what for
‘What have you come for?’

(b) mbé náà n ´ kó- à.
 1:SG:TAM NFUT 1:SG wash-TAM
‘I’m going to wash myself (right now).’

Akan ba ‘come’ > be, bé, bɔ, bó, future tense marker. Ex.

Akan (Welmers 1973: 353–4; Marchese 1986: 123)

5- bé- bá.
he-FUT-come
‘He’s going to come.’

Wapa (Jukun dialect) bi ‘come’ > future tense marker. Ex.

Wapa (Welmers 1973: 354; Marchese 1986: 123)

ku ri bi ya.
he PROG come go
‘He’s going to go.’


Efik (Welmers 1973: 354–5; Marchese 1986: 123)

n- di- dép mbòró.
1:SG-come- buy bananas
‘I’m going to buy bananas.’


Koyo (Marchese 1986: 75)

(a) Abi yi du.
Abi come:FACT town
‘Abi came home.’

(b) Abi yi du mo.
Abi AUX town go
‘Abi will go to town.’

Duala (Heine and Reh 1984: 132)

\[ a \text{ mà- yà nanga wàsè.} \]
\[ \text{he PRES-FUT lie ground} \]

‘He will lie down right now.’

Ganda -\text{jjá ‘come’ > indefinite future marker. Ex.}

\[ \text{Ganda (Welmers 1973: 355; Marchese 1986: 124)} \]
\[ àjjá kúgéndá. \]
\[ \text{he:come INF:go} \]

‘He is going to go (sometime).’


\[ \text{Zulu (Mkhatshwa 1991: 96)} \]
\[ (a) \text{Ngî- ye- za.} \]
\[ (1:SG-? come) \]

‘I’m coming.’

\[ (b) \text{U- za- ku- fika.} \]
\[ (2:SG-FUT-INF arrive) \]

‘He’ll arrive.’

Acholi \text{bino ‘to come’ > -bi-, future tense marker. Ex.}

\[ \text{Acholi (Malandra 1955: 76; Bavin 1983: 151; Heine and Reh 1984: 92)} \]
\[ (a) \text{lyεc o- bino.} \]
\[ \text{elephant 3:SG-came} \]

‘The elephant came.’

\[ (b) \text{an a- bi- camo.} \]
\[ 1:SG 1:SG-FUT-eat:INF \]

‘I’ll eat.’

Teso \text{abunere (ko) ‘to come’ > -bun-, future tense marker. Ex.}

\[ \text{Teso (Hilders and Lawrance 1956, 1958)} \]
\[ e- \text{ bun- i a- anyun.} \]
\[ (3:SG come- PRES INF see) \]

‘He will see.’

Lotuko \text{‘tuna ‘to come’ > future tense marker. Ex.}

\[ \text{Lotuko (Muratori 1938: 161ff.; Heine and Reh 1984: 131–2)} \]
\[ a- \text{ ttu ni leten.} \]
\[ 1:SG-come I go \]

‘I’ll leave immediately.’

Tamil (T. Lehmann 1989: 217)

<table>
<thead>
<tr>
<th>naa</th>
<th>kumaar-ai-k</th>
<th>keet-k-a</th>
<th>varu- kir-</th>
<th>een</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>Kumar- ACC</td>
<td>ask- INF</td>
<td>come-PAST-</td>
<td>1:SG</td>
</tr>
</tbody>
</table>

‘I am going to ask Kumar.’


The process COME TO > FUTURE has been discussed in a number of different works; for more details, see especially Welmers 1973: 354–5; Ultan 1978a; Fleischman 1982a, 1982b; Bybee et al. 1991. For a cognitive interpretation of the process, see Emanatian 1992. This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; DO; FINISH; GO TO; KEEP; LEAVE; PUT.

COME TO > (4) PROXIMATIVE
Lahu là ‘come’ > (la venitive >) proximative aspect marker ‘almost coming to’, ‘nearly’. Ex.

Lahu (Matisoff 1991: 395–6)

(a) mú-yè là ve.

‘It’s raining.’ (lit.: ‘rain comes’)

(b) ši-la

‘be close to death’

Tchien Krahn gi ‘come’ > ‘almost’. Ex.

Tchien Krahn (Marchese 1986: 121)

<table>
<thead>
<tr>
<th>pidè</th>
<th>gi</th>
<th>kwɔ</th>
<th>la</th>
</tr>
</thead>
<tbody>
<tr>
<td>plantain</td>
<td>come</td>
<td>spoil</td>
<td>NOMIN</td>
</tr>
</tbody>
</table>

‘The plantain is almost spoiled.’

Compare NEAR; LOVE; WANT. This process is often confused with the development (> COME TO > FUTURE. While the latter process leads to the rise of a verbal tense, the present one results in an aspect function. This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; DO; FINISH; GO TO; KEEP; LEAVE; PUT.

COME TO > (5) PURPOSE
Chinese lái ‘come’ > subordinating conjunction of purpose clauses. Ex.
Chinese (Matisoff 1991: 401–2)

nǐ néng yòng shénme fāngfǎ lái bāngzhù ta ne?
2:SG can use what method (come) help 3:SG PART

How are you going to help him?

Sapo ̀di ‘come’ > goal/purpose clause marker (Marchese 1986: 144).

Since BENEFATIVE markers may also be derived from COME TO (see COME TO > BENEFATIVE) and may themselves develop into PURPOSE markers (see Heine et al. 1991), it is possible that PURPOSE is not immediately derived from COME TO but rather has BENEFATIVE as an intermediate stage. In Chinese, however, the development from LAI (lái) ‘come to’ to purpose marker does not appear to have involved an intermediate BENEFATIVE stage (Alain Peyraube, personal communication); more research is required on this point. This grammaticalization appears to be an instance of a more general process whereby verbs denoting location or motion serve as structural templates to express relational adpositional or subordinating concepts; compare ARRIVE; COME FROM; GO TO; LEAVE; PASS.

COMITATIVE > (1) AGENT

In this grammaticalization process comitative markers are pressed into service to introduce agents in passive constructions. Swahili na ‘with’, comitative preposition > agent marker in passive constructions. Ex.

Swahili

(a) a- li- ondoka na mke-we.
c1-PAST-leave with wife-his
‘He left (together) with his wife.’

(b) a- li- it- wa na mke-we.
c1-PAST-call-PASS by wife-his
‘He was called by his wife.’

(French avec ‘with’ >) Seychelles CF (av)ek ‘with’, general preposition > marker of the agent in passive constructions. Ex.

Seychelles CF (Corne 1977: 71)

(a) mò koz ek u.
(1:SG speak with 2:SG)
‘I speak to you.’

(b) ban brâs i n kase ek divà.
(pl. branch 3:SG CPL broken with wind)
‘The branches are/have been broken by the wind.’

(French avec ‘with’ >) Rodrigues CF (av)ek ‘with’, general preposition > agent marker in passive constructions. Ex.

9 Alain Peyraube (personal communication) tells us that the correct form of this item is fangfa.
Rodrigues CF (Corne 1977: 164–5)

\[ \text{lisie} \quad \text{ i } \quad \text{gay} \quad \text{morde} \quad \text{ek} \quad \text{pis}. \]

(\text{dog} \ 3:SG \ \text{get} \ \text{bite} \ \text{with} \ \text{flea})

‘Dogs get bitten by fleas.’

This grammaticalization needs further exemplification; as it stands, it is confined to languages spoken in the western Indian Ocean region. Martin Haspelmath (personal communication) suggests that this may not be a process leading straight from COMITATIVE to AGENT; rather it might involve an intermediate INSTRUMENT stage. More research is required on this pathway.

**COMITATIVE > (2) NP-AND**


**Ewe**

(a) \textit{è- yi} \quad \textit{kplé} \quad \textit{wo}.

\(3:SG\text{-go} \quad \text{with} \quad 2:SG\text{-OBJ}\)

‘She went with you.’

(b) \textit{Kofi} \quad \textit{kplé} \quad \textit{Kosi} \quad \textit{vá} \quad \textit{égbé}.

‘Kofi and Kosi came today.’


**Baka (Christa Kilian-Hatz, personal communication)**

\(\text{wòsè} \quad \text{o} \quad \text{te} \quad \text{mòkòsè} \quad \text{o} \quad \text{te} \quad \text{bo} \)

\(\text{woman-PL} \quad \text{COM} \quad \text{man-PL} \quad \text{COM} \quad \text{people}\)

\(\text{kòpe} \quad \text{wò} \quad \text{ngò} \quad \text{gë} \quad \text{jo!} \)

\(\text{all} \quad 3:PL \quad \text{should} \quad \text{seek} \quad \text{food}\)

‘Women, men, and all other people should look for food!’

Lingala (van Everbroeck 1958: 72)

(a) elɔngɔ  na  bongó
    together  with  them
    ‘together with them’

(b) bisó  na  yé
    3:SG  and  1:SG
    ‘he and I’


Moré (Alexandre 1953b: 268–9).

ba né ma
‘father and mother’

Kupto kán ‘with’ > ‘and’, listing connective (Leger 1991: 27). Yagaria -‘e’/-’ese’

Yagaria (Renck 1975: 43f)

(a) avo- ‘a- ’e’
    father-his-COM
    ‘with his father’
    or
    avo- ‘a- ’ese’
    father-his-COM

(b) dagae-’e’  yale-  di- ’e’
    1:SG-  and  people-my-and
    ‘I and my people’

Turkish ile ‘with’, comitative postposition > ‘and’, NP-conjoining conjunction. Ex.

Turkish (Lewis [1967] 1985: 86; Ergun Cehreli, personal communication)

(a) kim:in  ile  gittiniz?
    whom  with  go:PAST:3:PL
    ‘With whom did you go?’

(b) ben  ile  Ali  cinemaya  gidiyoruz.
    ‘Ali and I are going to the movies.’

French avec ‘with’ > Haitian CF ak ‘and’. Ex.

Haitian CF (Sylvain 1936: 79)

Wè  ak  tādē  pa  mēm.
    see  and  hear  NEG  same
    ‘To see and to hear are not the same.’

That the directionality proposed here is correct is suggested by evidence from Chinese. For example, the Chinese verb gong ‘to share (with)’ was grammati-
calized in Late Archaic Chinese (fifth – second centuries B.C.) to an adverb meaning ‘together’, and since the Early Medieval period (second – sixth century A.D.) it developed into a comitative preposition. Ex.

_Early Medieval Chinese (Bai yu jing; quoted from Peyraube 1996: 189)_

\[ gong \quad du \quad ren \quad zhong \quad zuo \quad yu \quad shi \]

with many people crowd sit at room

in

‘(We) sat inside the room with a crowd of many people.’

The first attested example of _gong_ as an NP-and conjunction is found in the Song period.

_Song period Chinese (Qi guo chunqiu pinghua 7; quoted from Peyraube 1996: 189–90)_

\[ wu \quad lai \quad jiu \quad Sunzi \quad an \quad die \quad gong \]

I come help Sunzi I father and

Yuan Da.

Yuan Da

‘I came to help Sunzi, my father, and Yuan Da.’

Thus, _gong_ experienced the following evolution: verb > adverb ‘together’ > pre-position ‘with’ > conjunction ‘and’. Furthermore, Peyraube (1996: 189) argues that Chinese _he_ was a verb meaning ‘to mix (up)’ and later ‘to stick together’. Since the beginning of the Tang period it came to mean ‘included’ and later to be used as a comitative preposition ‘with’. Already around the Mid-Tang period, _he_ is said to have become an NP-and conjunction (Peyraube 1996: 190). In a similar fashion, the Chinese verb _tong_ meaning ‘to share with’, ‘to accompany’ was grammaticalized probably during the Tang period to a comitative preposition. In Contemporary Chinese (i.e., from the nineteenth century onward), _tong_ began to function as a coordinating conjunction (Peyraube 1996: 190–1).

The evolution from comitative markers to markers of noun phrase coordination appears to be well established; see especially Stassen 2000 for details. Stassen observes that ‘the grammaticalization of a comitative encoding pattern into a ‘coordination-like’ construction prototypically involves the creation of a single constituent, in which both the ‘with’-phrase and the non-comitative NP are included, and in which the two NPs gradually come to be regarded as being of equal structural rank.’

**COMITATIVE > (3) S-AND**


_Swahili_

(a) _a- li- ku- ja_ \_na mke-we._

3:SG-PAST-INF-COME \_with wife-3:SG:POSS

‘He came with his wife.’
He came and left again.'

Mauritius CF \( (av)ek 'with', 'and' > 'and', combining verb phrases \( \text{(rarely used)} \). Ex.

\textbf{Mauritius CF} \( \text{(Boretzky 1983: 261)} \)

\texttt{Linze \text{ti} al Iden \text{ek} Zorz}

\((\text{Lindsay past go Eden and George})\)

‘Lindsay went to Eden (college) and George to Bhujharry.’

See Michaelis \( \text{(forthcoming)} \) for a more general treatment of the grammaticalization of \( (av)ek \). NP-AND markers appear to provide one of the sources for clause-connecting markers \( \text{('and')} \). Thus, we may be dealing with a more general evolution \( \text{COMITATIVE > NP-AND > S-AND} \). Concerning evidence on this directionality, see \( \text{COMITATIVE > NP-AND} \).

\textbf{COMITATIVE > (4) CONTINUOUS}

Umbundu \( kasi \) copula + \( la, l' \), comitative preposition + \( oku- \) infinitive > progressive. Ex.

\textbf{Umbundu} \( \text{(Valente 1964: 281; Blansitt 1975: 24)} \)

\texttt{okasi \ l’oku-tunga.}

‘He is building.’

\texttt{tu-li \ l’ okulya.}

‘We’re eating.’

\textbf{Ngbaka Ma’Bo} \( \text{t}é ‘with’ > progressive marker \( \text{(if followed by verbal nouns). Ex.} \)

\textbf{Ngbaka Ma’Bo} \( \text{(Thomas 1970: 17)} \)

\texttt{’è \ tè \ ’sù’sù.}

‘He with leaving’

‘He is leaving.’

Baka \( tè ‘with’, comitative preposition > progressive aspect marker \( \text{. Ex.} \)

\textbf{Baka} \( \text{(Kilian-Hatz 1992: 29)} \)

\texttt{wó tè na jo dandù.}

‘They are eating honey.’

Swahili \( na ‘with’ comitative preposition > -na-, verbal prefix marking progressive aspect \( \text{(in some dialects) and present tense \( \text{(in others).} \)

\textbf{Swahili}

\texttt{(a) a-li- fuat- ana na binti y- ake.}

\texttt{c1- past-follow-rec with c9:daughter c9-his}

‘He followed his daughter.’
Progressive and other kinds of continuous markers may develop into markers for habitual aspects. It is not surprising, therefore, that COMITATIVE also has given rise to habitual aspect categories: Baka te ‘with’ (comitative preposition) > marker of habitual actions. Ex.


Wàìtò kè ?é te na banà
Waito DEM 3:SG COM INF care
atìni jókò!
1:PL:INCL:OBJ well
‘Waito has always treated us well!’

Kala Lagau Ya -pu, comitative case marker > habitual aspect marker (Blake 1994: 183).

This grammaticalization appears to be an instance of a more general process whereby grammatical aspect functions are conceptualized and expressed in terms of locative or comitative constructions; see also locative.

### COMITATIVE > (5) EXIST

Swahili na ‘with’, comitative preposition > (locative class +) -na, existential marker. Ex.

**Swahili**

ku- na asali nyingi.
loc-be: with honey plenty
‘There is plenty of honey.’

Baka te ‘with’, comitative preposition > existential marker. Ex.

**Baka (Kilian-Hatz 1992: 42)**

?e te bo dàdì a bè.
3:SG COM people plenty LOC party
‘There are many people at the party.’

Note that this grammaticalization is confined to one phylum in Africa; more examples from other continents are required.

### COMITATIVE > (6) INSTRUMENT

Ga kè comitative marker > instrument marker. Ewe kplé ‘with’, comitative preposition > instrument preposition. Ex.

**Ewe (Claudi and Heine 1986: 321)**

(a) é- yi kplé wo.
3:SG-go with 2:SG:OBJ
‘She went with you.’

**Baka (Kilian-Hatz 1992: 58)**

`ma à kɔnɔ wa te ngbala.`

1:SG ASP cut firewood COM machete

‘I cut firewood with the machete.’

Ngbaka Ma’Bo té ‘with’, comitative preposition > instrument preposition. Ex.

**Ngbaka Ma’Bo (Thomas 1970: 115)**

`P’è ’bɔkɔ nzɔ- kánà- ngé te ndiká. . . .`

Then he hit head-mother-her with nuts

‘Then he hits his mother with nuts on the head. . . .’

Turkish ile ‘with’, comitative postposition > instrument postposition. Ex.

**Turkish (Lewis [1967] 1985: 86)**

(a) `kim-ile gittiniz?`

‘With whom did you go?’

(b) `vapur ile gittiniz.`

‘You went by boat.’


**Latin (anonymous reader)**

(a) `cum uxor- e`

‘with wife-ABL’

(b) `cum gladi- o`

‘with a sword’

Albanian me ‘with’, comitative preposition > instrument preposition. Ex.

**Albanian (Buchholz et al. 1993: 312)**

(a) `erdhi me té motrën.`

(3:SG:AOR:come with ART sister)

‘He came with his sister.’

(b) `e hapa me çelës.`

(ART 1:SG:AOR:open with key)

‘I opened it with the key.’
Hungarian -vel/-val, suffix marking the comitative case > suffix marking instrument. Ex.

**Hungarian (Tompa 1972: 120)**

(a) *barátjá-val*  
friend- with  
‘with the friend’
(b) *hajó-val*  
ship-with  
‘with a ship’

Bulgarian  
*s ‘with’, adposition > instrumental adposition. Ex.

**Bulgarian**

(a) *majkata s deteto*  
mother:DEF with child:DEF  
‘the mother with the child’
(b) *Toj piše s moliv.*  
he write:3:SG:PRES with pencil  
‘He writes with a pencil.’

Imbabura Quechua -wan comitative marker > instrumental marker. Ex.

**Imbabura Quechua (Cole 1982: 114)**

(a) *nuña wawki- wan kawsa- ni.*  
my brother- COM live- I  
‘I live with my brother.’
(b) *pamba- pi yunda- wan yapu- ni.*  
field- in pair:of:oxen- INSTR plow- I  
‘I plow in the field with a pair of oxen.’


**Yagua (Payne and Payne 1990: 404–5)**

(a) *sa- tiryqqa- ta- rá.*  
3:SG- lied:down- TA- INAN  
‘He lies down with it (e.g., a book).’
(b) *sa- jichityi- níí quiivq quiichiy- ta.*  
3:SG- poke- 3:SG fish knife- INSTR  
‘He pokes the fish with the/a knife.’

Concerning the directionality COMITATIVE > INSTRUMENT, see, for example, Lakoff and Johnson 1980; Lehmann 1982: 111; Heine et al. 1991: 163ff. More diachronic evidence is required to establish that the directionality proposed is correct.
**COMITATIVE > (7) MANNER**

German *mit* ‘with’, comitative preposition > manner preposition. Ex.

**German**

(a) Er kam mit seinen Kindern.

he came with his:PL child:PL

‘He came with his children.’

(b) Er hat es mit Absicht getan.

he has it with purpose done

‘He did it on purpose.’

Hausa *dà* ‘with’, comitative preposition > manner preposition. Ex.

**Hausa (Ma Newman 1990: 93, 307)**

*dà* saurī

‘fast’

Ngbaaka Ma’Bo té ‘with’, comitative preposition > manner preposition. Ex.

**Ngbaaka Ma’Bo (Thomas 1970: 591; glosses Christa Kilian-Hatz, personal communication)**

?é pá ndàà té ká’bú. . . .

he pass:at place:that with anger

‘Consequently he left that place full of anger. . . .’

Albanian *me* ‘with’, comitative preposition > manner preposition (Buchholz et al. 1993: 312). Hungarian -vel/-val, suffix marking the comitative case > suffix marking manner. Ex.

**Hungarian (Tompa 1972: 120)**

Szeretett-el (<vel) fogad- t- ak.

(love- with welcome-IMPERF-3:PL)

‘I was welcomed cordially.’

Tamil -ootu, suffix marking the comitative case (“sociative”) > suffix marking manner. Ex.

**Tamil (T. Lehmann 1989: 37–8)**

(a) kumaar tan manaiivi-y-ootu va- nt- aan.

Kumar he:(OBL) wife- COM come-PAST-3:SG:M

‘Kumar came with his wife.’

(b) kumaar anp-ootu ciri- tt- aan.

Kumar love-COM laugh-PAST-3:SG:M

‘Kumar smiled with love.’

This process probably does not lead straight from COMITATIVE to MANNER uses but appears to have INSTRUMENT as an intermediate stage, hence COMITATIVE > INSTRUMENT > MANNER. See also INSTRUMENT. Note
that the directionality proposed has not yet been established beyond reasonable doubt.

**COMITATIVE > (8) PASSIVE**

Baka *te* ‘with’, comitative preposition > passive marker (with impersonal agents). Ex.

*Baka* (Kilian-Hatz 1992: 63)

```
bèlà à mèlè te.
```

work ASP do:PAST PASS:3:SG

‘The job was done.’

Lamang *ndà* ‘with’, comitative preposition > passive proclitic. Ex.

*Lamang* (Wolff 1983: 171–2)

```
ndà d’a zùwì.
```

‘The rope is plaited.’ (cf. *d’a* ‘plait’)

While these examples involve different language phyla, we have so far found no instances of the process outside Africa. More data on the conceptual nature and areal distribution of the process are required.

**COMITATIVE > (9) H-POSSESSIVE**


**Swahili**

```
a- na gari.
```

3:SG-be:with car

‘He has a car.’


This grammaticalization has been described as a process whereby possession is conceptualized and expressed in terms of accompaniment (see Heine 1997a).
COMITATIVE > (10) TEMPORAL


**German**

Mit achtzehn begann sie ein neues Leben.

neu:neut life:neut

‘At the age of eighteen she started a new life.’

The Basque comitative case suffix -ekin can be used to express time as a less usual alternative to the more common locative. Ex.

**Basque (anonymous reader)**

(a) Mikelekin bizi naiz.

Mikel- ekin bizi n- a- iz.

Michael- com live 1:sg:abs-pres-aux

‘I live with Michael.’

(b) Andre Mari eguna ostegunarekin erortzen da aurten.

Andre Mari egun- a ostegun- a- (r)ekin lady Mary day- det Thursday-det-com

eror-tze- n d- a aurten.

fall- impfv-loc pres-aux this:year

‘Mary’s Day falls on Thursday this year.’


**Ngbaka Ma’Bo (Thomas 1970: 67; glosses Christa Kilian-Hatz, personal communication)**

?é d5- mū mbéèmbé té t5:kpé.

she come-see snail with morning

‘In the morning, she met the snail.’


**Hungarian (Tompa 1972: 120)**

Összel (ösz + vel) Kijevbe utaz- om.

(autumn:in Kiev travel-1:sg:pres)

‘In the autumn I go to Kiev.’

Albanian me, comitative preposition > ‘at’, time preposition. Ex.
Albanian (Buchholz et al. 1993: 312)

me të dalë dielli
(at ART going sun)
‘at dawn/sunrise’

Bulgarian

(a) majkata s deteto
mother:DEF with child:DEF
‘the mother with the child’

(b) Toj leža s meseci v bolnicata.
he lie:3:SG:AOR with months in hospital:DEF
‘He lay in hospital for months (on end).’

In addition to temporal noun phrase arguments, COMITATIVE markers also appear to have developed into temporal clause markers, that is, into temporal conjunctions. Baka te ‘with’, comitative preposition > ‘while’, ‘as soon as’, temporal conjunction. Ex.

Baka (Kilian-Hatz 1992: 34)

té ko ma lèkëè ?émina ma
COM so 1:SG prepare:PAST load
à 1:SG ASP go
‘As soon as I have packed my luggage I go.’


While there appears to be sufficient evidence to support this grammaticalization, more research is required on the conceptual basis of the process. Conceivably, TEMPORAL markers are not derived straight from COMITATIVE markers but rather are part of a more extended pathway: COMITATIVE > INSTRUMENT > TEMPORAL (Martin Haspelmath, personal communication).

‘Companion’ see comrade

COMPARATIVE (+ NEGATION) > NO LONGER


This grammaticalization appears to require contexts involving negative predications (see van Baar 1997 for details). It is not really clear whether the
more-markers figuring as source concepts are in fact comparative markers; more research is required on the nature of the process.

**COMPLEMENTIZER > PURPOSE**
Bulgarian če ‘that’, complementizer > če da ‘so that’, purpose clause marker. Ex.

**Bulgarian**

(a) Tja kaza, če šte dojde.

she said that FUT come:3:SG:PRES

‘She said that she would come.’

(b) Xajde, preobleči se, če da izlezem naj-posle!

come:on change:clothes:IMP REFL that to go:out:1:PL:PRES at:last

‘Come on, change your clothes so that we can go out at last!’

Kupto gà ‘that’, complementizer > ‘so that’, purpose clause marker (Leger 1991: 19). Dogon -ga ‘that’, complementizer > ‘so that’, ‘in order to’ (if the main verb is in the future tense or is nominalized). Ex.

**Dogon (Calame-Griaule 1968: 88–9)**

yù: kakáyadõ-ga vàlasõ.

‘I plant in order to eat millet.’

See also Saxena 1988a. The directionality proposed here has not yet been established beyond reasonable doubt. More data to substantiate this hypothesis are required.

‘Complete’ see FINISH

**COMRADE > (1) COMITATIVE**


**Basque (anonymous reader)**

(a) oinetako bat eta bere kidea

foot-INDEF-N one and same-GEN mate-DET

‘a shoe and its mate’

10 The origin of this form is a postpositional phrase meaning roughly ‘in the company of X’ (anonymous reader).
Anarekin

Ana- (r)e- kide- n
Anna- gen- company-loc

‘with Anna’

It remains unclear whether we are dealing here with an areally confined phenomenon. More data from non-European languages are required to establish this pathway. While the data supporting this pathway are not entirely satisfactory, we seem to be dealing with an instance of a more general process whereby relational nouns give rise to relational grammatical markers.

**COMRADE > (2) RECIPROCAL**

(The notion ‘comrade’ stands for a number of role relations, including ‘companion’, ‘friend’, ‘neighbour’, ‘relative’). Gola daye ‘comrade’ > reciprocal particle. Ex.

**Gola** (Westermann 1921: 51)

a kpoma daye.
(t)hey help comrade
‘They helped each other.’

Fulfulde band- ‘relative’, noun stem > reciprocal marker (Klingenheben 1963: 142). Koromfe dono, PL domba ‘comrade’ > domba (dono when only two participants are involved), reciprocal pronoun. Ex.

**Koromfe** (Rennison 1996: 110)

ba zâj domba gaba.
3:PL:hum take comrade:pl knife:pl
‘They take one another’s knives.’

Gabu aküsi ‘their neighbors’ > reciprocal marker. Ex.

**Gabu** (Santandrea 1961: 63, 1965: 87)

si dra si aküsi.
(t)hey insult them neighbors:their
‘They insulted each other.’


**Russian**

Oni nenavideli drug druga.
‘They hated each other.’

Seychelles CF kamarad ‘friend’ > ‘one another’, reciprocal marker. Ex.

**Seychelles CF** (Corne 1977: 48; Papen 1978: 303)

(a) mô kamarad i n tom malad
(my friend 3:SG CPL fall sick

(b) Anarekin

Ana- (r)e- kide- n
Anna- gen- company-loc

‘with Anna’
ier. . . .
yesterday)
‘My friend fell sick yesterday. . .’ (Corne 1977: 55)
(b) Nu a kapav trôp kamarad è zur.
(we FUT be:able cheat REC one day)
‘We’ll be able to cheat each other one day.’

More research is required on the exact nature and the genetic and areal distribution of this process. This is an instance of a process whereby concrete nouns are grammaticalized to pronouns expressing relations among clause participants; compare BODY; HEAD.

CONDITIONAL > CONCESSIVE
This path of grammaticalization has been proposed by Hopper and Traugott (1993: 180); compare English if > concessive marker in specific contexts. Ex.

*English (König 1986: 239)*

*This is an interesting, if complicated, solution.*

See König 1986 for details; more data from other language families are required to substantiate this hypothesis.

CONTINUOUS > (1) HABITUAL
Bybee et al. (1994: 158) note that progressive markers may develop into presents and imperfectives, and in this development the progressive extends to cover habitual functions, resulting in a gram of very general meaning. Conceivably, CONTINUOUS markers may constitute an intermediate stage on the way from verb to habitual marker; see GO; LIVE; SIT for examples. Kxoe //gè ‘lie, be lying’, verb > -//oè, (a) present tense (expressing an action performed while lying), (b) continuous marker, (c) habitual marker (Köhler 1981a: 530).

In Kui, the past tense forms of an auxiliary that can be traced back to the verb *manba* ‘to live’, ‘to exist’ are used for both progressive and habitual meaning in the past (Bybee et al. 1994: 158). The Margi progressive particle *vôr* may signal habitual if used in a past context11 (Hoffmann 1963: 176; Bybee et al. 1994: 158). More research is required to establish the significance of this pathway.

CONTINUOUS > (2) PRESENT
As has been established in a number of different studies, progressive/continuous aspect markers may assume the function of a present tense. Bybee et al. (1994: 141) propose the following interpretation of this process: “Since both present and imperfective meaning include the possibility of describing a

11 Bybee et al. (1994: 158) volunteer the following account for this observation: “The development of a habitual reading for a progressive in the past before the present is again due to the difference between default readings of present versus the past. The default reading of present continues to include habitual, but since the default reading of past does not include habitual, the progressive comes to be used in that capacity.”
situation as progressive, it is plausible to suppose that the more specific pro-
geressive grams may undergo development into either a present (in cases where
the progressive was restricted to the present) or an imperfective (in cases where
no temporal restrictions were in effect).” This grammaticalization appears to
be part of a more general process whereby verbal aspect markers develop
further into tense markers (see Comrie 1976: 99–101; Bybee 1985a: 196; Bybee
and Dahl 1989: 56–7); cf. PERFECT > PAST.

**COPULA > (1) AVERTIVE**
Russian bylo ‘be’ (3:SG:PAST:NEUT) + main verb (PAST) > avertive ‘was just
about to do something but . . .’ ‘nearly did something but . . .’ Ex.

**Russian (Kuteva 1998: 122)**

<table>
<thead>
<tr>
<th>Mašina</th>
<th>bylo</th>
<th>poexala,</th>
<th>no . .</th>
</tr>
</thead>
</table>

‘The car nearly started out . . .’ / ‘The car was just about to start but . . .’

Romanian era ‘be’ (PAST) + conjunctive particle + main verb > avertive, ‘was
just about to do something but . . .’ ‘nearly did something but . . .’ Ex.

**Romanian (Coseriu 1976: 104)**

<table>
<thead>
<tr>
<th>era</th>
<th>să</th>
<th>cad.</th>
</tr>
</thead>
<tbody>
<tr>
<td>be:3:SG:IMPERF</td>
<td>conj:part</td>
<td>fall</td>
</tr>
</tbody>
</table>

‘I nearly fell.’

Finnish olin ‘be’ (PAST) + first infinitive > avertive ‘was just about to do some-
thing but . . .’ ‘nearly did something but . . .’ Ex.

**Finnish (Kuteva 1998: 117)**

<table>
<thead>
<tr>
<th>Olin</th>
<th>kadota</th>
<th>kadulla.</th>
</tr>
</thead>
<tbody>
<tr>
<td>be:1:SG:PAST</td>
<td>fall:1:INF</td>
<td>in:the:street</td>
</tr>
</tbody>
</table>

‘I nearly fell (down) in the street.’

As is the case with other AVERTIVE markers, this grammaticalization is con-
fined to past tense uses of the main verb. It remains to be investigated what
exactly the contribution of the copula in this process is; more details and exam-
pies from other languages are required.

**COPULA > (2) CONDITIONAL**
Hopper and Traugott (1993: 179) observe that one of the sources of conditional
connectives consists of copula constructions, and they give the following exam-
pies: Swahili i-ki-wa ‘it being that’,33 Japanese nara ‘be’, and Chikasaw (h)oo ‘be’. Compare Russian est’ li ‘is it?’ > esli ‘if’ (Martin Haspelmath, personal com-

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12 There is a synchronic regularity of morpheme ordering that might support the present recon-
struction: “aspect occurs closest to the verb stem, followed by tense, and then by mood” (Bybee
1985a: 196).

13 Swahili i-ki-wa (c1-if-be) actually means ‘if it is’.
munication). See also Haiman 1985b and Traugott 1985b. Note too that Chinese SHI 'be' has given rise to a conditional marker 'if' (Alain Peyraube, personal communication). The conceptual nature of this process is still far from clear; conceivably, this process is related to the (>) S-QUESTION > CONDITIONAL pathway.

**COPULA > (3) CONSECUTIVE**

Vai á mu ‘it was’ > ámu, ámo ‘and’, ‘then’, continuity marker in narrative discourse. Ex.

*Vai* (Koelle [1854] 1968: 39, 138)

\[
\begin{array}{llll}
áwá & dóbēa, & ámo & fá.\\
3:SG & shoot & then & 3:SG & die
\end{array}
\]

‘He shot him, and (so that) he died.’

Shona *ndi* emphatic copula, clitic + infinitive > ‘and then’, same subject consecutive marker. Ex.

**Shona** (Fortune 1955: 373–4; O’Neil 1935: 156)

(a) *ndi- baba a- uya zìno uno.*

(cop-father rel:3:sg-come just now)

‘It is father who came just now.’

(b) *va- ka- oneka ndo-ku- enda zvavo.*

(3:pl-past-say:farewell cop-inf-go their:way)

‘They said farewell and then went their way.’

Kxoe *na* ‘be’ + *ko* subordination marker (lit.: ‘being thus’) > *nákò* ‘and’, conjunction (cf. Köhler 1989: 97ff.).

While this grammaticalization has been found in two different language phyla, more data are required to substantiate it. Conceivably, this process is related to the (>) COPULA > FOCUS grammaticalization.

**COPULA > (4) FOCUS**

Cora *pìrìkì* ‘be’ following a sentence-initial pronoun or demonstrative > focus marker (Casad 1984: 173). Lamang -à associative marker + copula *’yá* > -é, focus marker (Wolff 1983: 256–7; Heine and Reh 1984: 157). Rendille *’ádi i ‘be’ copula > nominal suffix -é, term focus marker (Heine and Reh 1984: 165–8). Similarly, the Japanese *Kakari-Musubi* construction is said to have involved the grammaticalization of a cleft construction to a focus construction; the *Kakari* particles can be traced back to forms of ‘be’ or of a verb functioning as ‘be’ (see Harris and Campbell 1995: 161 for a summarizing discussion).

French *c’est ‘it is’* > Haitian CF *se*, focus marker. Ex.

**Haitian CF** (Muysken and Veenstra 1995)

*Se sou chen mèg yo wè pis.*

`FOC LOC dog thin 3:pl see flee`

‘It’s on a thin dog that the fleas can be seen.’
Papiamentu CS ta copula > focus marker. Ex.

**Papiamentu CS** *(Kouwenberg and Muysken 1995: 220–1)*

(a)  

\[
\begin{aligned}
\text{Mi} & \quad \text{ta} & \quad \text{Pedro/grandi/na kas.} \\
1:SG & \quad \text{copula} & \quad \text{Pedro/big/ in house}
\end{aligned}
\]

‘I am Pedro/big/in the house.’

(b)  

\[
\begin{aligned}
\text{Ta} & \quad \text{e} & \quad \text{buki} & \quad m’- \quad \text{a} & \quad \text{duna-bu.} \\
\text{FOC} & \quad \text{the} & \quad \text{book} & \quad 1:SG-PAST & \quad \text{give-2:SG}
\end{aligned}
\]

‘I gave you the book.’

The focus function of copulas in creole languages has also been extended to question words (see Holm 1988: 180). Ex.

**Papiamentu CS** *(Holm 1988: 180)*

\[
\begin{aligned}
\text{Ta} & \quad \text{kiko} & \quad \text{Wan} & \quad \text{ta} & \quad \text{hasi?} \\
\text{(is what:thing John TAM do)}
\end{aligned}
\]

‘What is John doing?’

**Saramaccan CE** *(Holm 1988: 180)*

\[
\begin{aligned}
\text{Na} & \quad \text{un-sé} & \quad \text{a} & \quad \text{bi} & \quad \text{wáka?} \\
\text{(is which:side he TAM go)}
\end{aligned}
\]

‘Where did he go?’

For more examples from creoles, see Boretzky 1983: 220–3. What appears to characterize this evolution is that a copula having third person singular reference, functioning as the matrix predicate in a cleft construction, is reinterpreted as a marker of new information. However, since such constructions tend to involve a copular main clause plus a kind of relative clause, it may also happen that, rather than the copula, it is the relative clause marker that survives and is reinterpreted as a focus marker (see Harris and Campbell 1995: 155ff. for an example from Breton). Since copulas may be derived from demonstratives, there are languages where the focus marker resembles a demonstrative; that is, we may be dealing with an evolution: DEMONSTRATIVE > COPULA > FOCUS (cf. Byrne and Winford 1993; see also Hengeveld 1992 for more details). In fact, Chinese SHI might have undergone a development demonstrative > copula > focus marker (Alain Peyraube, personal communication). However, the situation appears to be more complex, as Diessel (1999b: 148ff.) has shown; see DEMONSTRATIVE > FOCUS for details.

**COPULA > (5) FUTURE**

Russian budu ‘I will be’ + infinitive > future marker (Binnick 1976: 43). Ex.

**Russian**

\[
\begin{aligned}
\text{Ja} & \quad \text{budu} & \quad \text{tancevat’} & \quad \text{segodnja} & \quad \text{večerom.} \\
1:SG & \quad \text{be:1:SG:FUT} & \quad \text{dance:INF} & \quad \text{today} & \quad \text{evening:INSTR}
\end{aligned}
\]

‘I will dance tonight.’
Mongolian ter alxax (bajna) (he to:walk is) ‘he will walk’ (Binnick 1976: 43).

This grammaticalization appears to require the main verb to be in a nonfinite (possibly a purposive) form. The conceptual nature of the present process is still far from clear. More data, especially from other languages, are required.

**COPULA > (6) OBLIGATION**

Latin esse ‘to be’; for example, Mihi est eundum ‘I have to go’ (Lehmann 1982: 30). English be to, marker of deontic modality. Mandarin Chinese shì ‘be’, copula > marker of modal distinctions. Ex.


\[
\begin{array}{ccc}
\text{guava} & \text{cop} & \text{eat-nomin} \\
\text{Ba¯lla¯ shì chı ¯-de.} & & \\
\end{array}
\]

‘Guavas are to be eaten.’ (‘Guavas are (things) to be eaten.’)

Yucatec yan in bin (exist 1:sg go) ‘I have to go’ (Lehmann 1982: 30). See also Hengeveld 1992: 268. More research is required on the exact nature and the genetic and areal distribution of this process.

**COPULA, LOCATIVE > (1) CONTINUOUS**

Godié kù ‘be at’ > progressive aspect. Ex.

*Godié (Marchese 1986: 63)*

(a) \( \odot \) kù sūkú.  
he be:at school  
‘He is at school.’

(b) \( \odot \) kù bli- dA.  
he be:at sing-place  
‘He is singing.’

Tyurama na ‘be at’ > progressive marker. Ex.

*Tyurama (Prost 1964: 105; Heine and Reh 1984: 117)*

\[
\begin{array}{ccc}
\text{me} & \text{na} & \text{me} \\
1:sg & be:at & 1:sg eat \\
\end{array}
\]

‘I am eating.’

Maninka yé . . . lá ‘be . . . at’ > progressive or durative aspect marker. Ex.

*Maninka (Spears 1972: 15–16)*

(a) \( \dot{\text{a}} \) yé bón lá.  
(h he be house at)  
‘He is in the house.’

(b) \( \dot{\text{a}} \) yé nà lá.  
(h he prog come prog)  
‘He is coming.’

Lingala -zala ‘be at’ > durative auxiliary. Ex.
Lingala (Mufwene and Bokamba 1979: 244–6)

(a) Kázi a- zal- í na ndáko.
Kazi he-be- PERF at house
‘Kazi is at home.’

(b) Kázi a- zal- í ko- lía.
Kazi he-be- PERF INF- eat
‘Kazi is eating.’

The Basque locative copula egon ‘be (in a location or a state)’ has a limited amount of use as a continuous marker. Ex.

Basque (anonymous reader; King 1994: 384)

(a) Bilbo-n dago.
Bilbo- n da- go.
Bilbao- LOC pres- be
‘He’s in Bilbao.’

(b) Telebista ikusten dago.
Telebista- a ikus-te- n da- go.
TV- DET see- IMPFV-LOC pres- be:in
‘He’s watching TV.’

Burmese nei ‘be at’ > continuative/progressive marker. Ex.

Burmese (Matisoff 1991: 416)

(a) θu ?ei nei te.
3:SG house be:at PART
‘He is at home.’

(b) θu zēgā pyó nei te.
3:SG words speak be:at PART
‘He is speaking.’

Thai jùu ‘be at’ > continuative/progressive marker. Ex.

Thai (Matisoff 1991: 416)

(a) khun phōc mâj jùu bān.
hon father NEG be:at home
‘Father is not at home.’

(b) khāw rian phasāa ?aŋrit jùu.
3:SG study language English be:at
‘He is still studying English.’


Chinese (Alain Peyraube, personal communication)

(a) Tā zài Beijing. Tā zài nar chifan.
he be:at Beijing he be:at there eat
‘He is in Beijing.’ ‘He eats there.’
(b)  Tà  zai  chifan.
    he  CONT  eat

‘He is eating.’

Lord (1993: 216) notes that “[a] locative verb is the probable source for an
incompletive aspect marker in the Kwa languages Igbo, Yoruba and Ewe, but
also in Mandarin Chinese, Thai, Irish, and Finnish. . . .” All evidence available
suggests that in this process it is not the locative copula on its own that turns
into a CONTINUOUS marker; rather, the locative copula is part of locative
proposition, called the “Location Schema” in Heine 1993; cf. Lord 1993 and
Bybee et al. 1994; see also LOCATIVE. This grammaticalization appears to be an
instance of a more general process whereby grammatical aspect functions are
conceptualized and expressed in terms of locative concepts.

COPULA, LOCATIVE > (2) COPULA, EQUATIVE
Kenya Pidgin Swahili iko ‘be at’, locative copula > equative copula. Ex.

Kenya Pidgin Swahili
(a)  Juma  iko  Nairobi.
    Juma  be:at  Nairobi
    ‘Juma is in Nairobi.’
(b)  Juma  iko  mwalimu.
    Juma  be  teacher
    ‘Juma is a teacher.’

More evidence is required on this process, which presumably is part of a more
extended pathway, namely, LOCATIVE COPULA > EXIST > COPULA. We
seem to be dealing with a case of desemanticization whereby the locative
content is bleached out, with the result that a classifying copula arises.

COPULA, LOCATIVE > (3) EXIST
English there is. Ex.

English
(a)  Thère  is  my  beer. (spatial)
(b)  There  is  beer  at  home. (existential)

||Ani  tin  ‘be  at’;  locative  copula  >  ‘exist’,  existential  copula.  Ex.
||Ani  (Heine 1999a: 24f.)
    âxùè  tshàá  tin  rê?  tin.
    there  water  exist  Q  exist
    ‘Is there water? There is.’

Swahili -ko ‘be at’ > ‘exist’ when there is no locative complement. Ex.

Swahili
(a)  Pombe  y-  angu  i-  ko  nyumba-ni. (spatial)
    beer  c9-my  c9-be:at  home-  at
    ‘My beer is at home.’
(b) *Pombe i- ko.* (existential)
  beer \(\text{c9- be:at}\)
  ‘There is beer; beer exists.’

Nubi CA *fi ‘be at’, locative copula > existential copula.* Ex.

**Nubi CA** *(Heine 1982b: 40, 54)*

(a) \(\text{uô fi iini.}\)
  he be:at here
  ‘He is here.’

(b) *yaá fi ákilí . . .\)
  TOP exist food
  ‘and there was food . . .’

This interpretation tends to arise whenever locative copulas are used without a locative complement. It would seem that in a number of languages, locative copulas assume an existential function once the locative complement is omitted.

**COPULA, LOCATIVE > (4) LOCATIVE**

Ewe *le ‘be at’ > ‘at’, preposition.* Ex.

**Ewe**

(a) \(\text{agbaléá le kpl5á dzí.}\)
  book:DEF be:at table:DEF on
  ‘The book is on the table.’

(b) \(\text{me kpó l5ri le mó dzí.}\)
  1:SG see lorry at street top
  ‘I saw a lorry on the street.’


**Kikuyu** *(Barlow 1960: 200)*

\(\text{Twara kwũ mũndũ ūcio.}\)
  (take to man that)
  ‘Take (it) to that man.’


**Chinese** *(Hagège 1975: 154)*

a) \(\text{tā zài jiā li.}\)
  he be:at house inside\(^{35}\)
  ‘He is at home.’

\(^{14}\) There is a possible counterexample to this grammaticalization: the Chinese locative copula *zài ‘to be at’* has been claimed to be derived from an adposition *zài ‘at’* *(see Peyraube 1996: 191).*

\(^{15}\) Alain Peyraube (personal communication) suggests that instead of ‘inside’, a more appropriate gloss would be ‘in’ since we are not dealing with a disyllabic localizer.
b) tā zài jiā lǐ xǐ yīfu.
   ‘He washes clothes at home.’


**Hmong** (Matisoff 1991: 418)

(a) kuv txiv tsis nyob hauv tsev.
   1:SG male NEG be:at inside house
   ‘My father is not at home.’

(b) nws pw nyob hauv txaj.
   3:SG lie be:at inside room
   ‘He’s sleeping in the room.’


This path of grammaticalization has been much discussed in the relevant literature; see, for example, Heine 1993 and Bybee et al. 1994. It appears to be a classical instance of desemanticization, whereby the predicate function of the copula is bleached out, with the result that there remains a relational locative marker.

**COPULA, LOCATIVE > (5) H-POSSESSIVE**

Lezgian gwa, locative copula > marker of temporary possession (predicative).

**Lezgian** (Haspelmath 1993: 318)

(a) Ruxwa-jar-ni ruš- ar sad- ni ada-n
   son-PL-and daughter-PL one-even he-GEN
   pataw gwa-č.
   near be:at-NEG
   ‘None of his sons and daughters are near him.’

(b) Dušman-ri- w tup- ar gwa-č.
   enemy-PL ADE canon-PL be:at-NEG
   ‘The enemies do not have canons.’

Lezgian awa ‘be in’, locative copula > ‘have’, marker of predicative possession.

**Lezgian** (Haspelmath 1993: 317f.)

(a) Tükwend- a gzaf mal awa.
   store-INE many goods be:in
   ‘There are many goods in the store.’

---

16 Alain Peyraube (personal communication) suggests that instead of ‘inside’, a more appropriate gloss would be ‘in’ since we are not dealing with a disyllabic localizer.
(b) *Pul* ada- qʰ gzaf awa.

money he- possess much be:in

‘He has a lot of money.’

Estonian (Lehiste 1969: 325)

ìsal on raamat.

(father:ade 3:sg:be book:nom)

‘Father has (a) book.’

Modern Irish (Orr 1992: 252)

tá leabhar agam.

is book at:me

‘I have a book.’

The source structure that can be held responsible for this grammaticalization process has been described by Heine (1997a) as the “Location Schema,” which has the form *Possessee is located at the possessor's place*; see also locative.

**CROSS (‘to cross’) > ACROSS**

Thai khâam ‘cross over’ > ‘across’, preposition (verposition). Ex.

**Thai (Matisoff 1991: 434)**

phûuujìŋ dɔ̀n khâam thɔ̀nɔ̀n paj léew.

woman walk cross street go already

‘The woman went off across the street already.’


**Tamil (Lehmann 1989: 130)**

en.kal. viiṭu koovil- ai-t taan.ti iru- kkir-

we:obl house temple-acc across be- pres-

atu.

3:sg:n

‘Our house lies across the temple.’


**Mandarin Chinese (Li and Thompson 1981: 59–60)**

tā tiào- guò nèi- tiáo hé le.

3:sg jump-cross that-class river crs

‘S/He jumped over that river.’

Conceivably, the development from CROSS to an adposition ‘through’, ‘by means of’ (Hagège 1993: 211) should also be considered here. This grammaticalization appears to be an instance of a more general process whereby verbs

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17 Alain Peyraube (personal communication) doubts, however, whether such a reconstruction is empirically justified.
denoting location or motion serve as structural templates to express relational (adpositional) concepts; compare come from; come to; follow; go to; leave; pass.

D

**DATIVE > (1) COMPARATIVE**

Easter Island *ki*, dative preposition > marker of standard of comparison. Ex.

_Easter Island (Chapin 1978: 147)_

<table>
<thead>
<tr>
<th>Poki</th>
<th>nei,</th>
<th>poki</th>
<th>(ata)</th>
<th>iti</th>
<th>ki</th>
<th>te</th>
</tr>
</thead>
<tbody>
<tr>
<td>boy</td>
<td>this</td>
<td>boy</td>
<td>more</td>
<td>small</td>
<td>DAT</td>
<td>the</td>
</tr>
</tbody>
</table>

`poki ena.`

boy that

‘This boy is smaller than that one.’

Susu *be*, benefactive/dative postposition > comparative postposition. Ex.

_Susu (Friedländer 1974: 62)_

<table>
<thead>
<tr>
<th>Afriki</th>
<th>fura</th>
<th>foretā</th>
<th>bē.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Africa</td>
<td>be:hot</td>
<td>Europe</td>
<td>for)</td>
</tr>
</tbody>
</table>

‘Africa is hotter than Europe.’

See Stassen 1985 for more examples. This pathway is probably related to a process whereby spatial case markers give rise to markers of standard of comparative constructions; compare ablative; locative; up.

**DATIVE > (2) PATIENT**

Dolakha-Newari -_ta_ (dative case marker) > patient marker. Ex.

_Dolakha-Newari (Genetti 1994: 51)_

<table>
<thead>
<tr>
<th>turi</th>
<th>-e</th>
<th>dani</th>
<th>-n</th>
<th>sā-</th>
<th>ta</th>
<th>khoŋ-an. . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>millet-GEN</td>
<td>owner-ERG</td>
<td>cow-DAT</td>
<td>see-</td>
<td>partcp</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘The millet owner saw the cow. . . .’

Old English _him_, third person dative masculine pronoun > Modern English _him_, third person masculine accusative/dative pronoun (García 1985: 281–4); Old English _hire_, third person dative feminine pronoun > Modern English _her_, third person accusative/dative pronoun (García 1985: 281–4). Spanish _a_, preposition marking dative objects > preposition marking accusative objects with animate nouns (Bossong 1985: 310); see also Lehmann (1982: 82, 109). This grammaticalization appears to be part of a more general path of grammaticalization, for which see allative > patient.

**DATIVE > (3) A-POSSESSIVE**

This grammaticalization has been described as one of the properties of the Balkan Sprachbund but it is in no way confined to this region; rather, it constitutes a grammaticalization of worldwide distribution.
Armenian (Koptjevskaja-Tamm forthc.)

(a) Yes girk’- tvec’i Petros-i- n.
I book-def gave Peter- DAT:SG-DEF
‘I gave the book to Peter.’

(b) Petros-i girk’-
‘Peter’s book’

Northern Swedish (dialect of Västerbotten; Koptjevskaja-Tamm forthc.)

(a) vis hara-num kort-e
‘to show the card to the hare’

(b) book- a prest- um
‘the priest’s book’

Standard Norwegian (Koptjevskaja-Tamm forthc.)

Hatt-en till mann-en
hat- DEF to man- DEF
‘the man’s hat’

Diyari -ya (and other suffixes), dative marker > marker of alienable possession.

Diyari (Austin 1981: 137)

ŋulu kuðu paku-yi wila- ya wana- li.
he:ABS hole:ABS dig- PRES woman-DAT digging:stick-ERG
‘He is digging a hole with a woman’s digging stick.’

Aranda (Wilkins 1989: 135, 179)

Toby-ke alere
Toby-DAT child
‘Toby’s child’

Baka pe, dative, benefactive particle > marker of A-possession. Ex.

Baka (Christa Kilian-Hatz, personal communication)

(a) ?é à yɔ pe- è jo.
3:SG ASP refuse DAT-1:SG:OBJ food
‘He refuses (to give) me food.’

(b) ma à geè pe- è mɔni.
1:SG ASP search POSS-1:SG:OBJ money
‘I am searching for my money.’

This process has occurred frequently in creole languages (see, e.g., Goodman 1964: 53 for French-based creoles). It has been described in Heine 1997a as involving a “Goal Schema.” The dative in Greek is a possible counterexample to the directionality observed here: it is said to be based on an older genitive dating back to the first centuries A.D. (Koptjevskaja-Tamm forthc.).
DATIVE > (4) B-POSSESSIVE

As the source of B-POSSESSIVE constructions, DATIVE appears to be fairly seldom made use of. French à, allative/dative preposition > marker of belong-possession. Ex.

French
(a) Donne le livre à Paul!
   give the book to Paul
   ‘Give Paul the book!’
(b) Le livre est à moi.
   the book is to me
   ‘The book belongs to me.’

German
(a) Er hilft mir.
   he help:3:SG:PRES 1:SG:DAT
   ‘He helps me.’
(b) Das Buch ist mir.
   the book is 1:SG:DAT
   ‘The book is mine.’

Colloquial German
(b) Das Buch ist mir.
   the book is 1:SG:DAT
   ‘The book is mine.’

For more details on this process, see Heine 1997a.

DATIVE > (5) H-POSSESSIVE

Lezgian -z, (direction marker >) dative marker > possessive marker. Ex.

Lezgian (Haspelmath 1993: 88f)
Ada-z xtul-ar awa.
   she-DAT grandchild:PL be:in
   ‘She has grandchildren.’

Breton (Orr 1992: 252–3)
ur velo c’hlas am eus.
a bike blue to:me is
   ‘I have a blue bike.’

Ik (Heine 1983: 157)
iá hoa nci- kɛ.
   be:at:3:SG house 1:SG:DAT
   ‘I have a house.’

Latin (Lyons 1967: 392)
Est Johanni liber.
   (is John:DAT book:NOM)
   ‘John has a book.’
This process has been described in Heine 1997a as involving the “Goal Schema,” which has also given rise to other kinds of possession; see dative > a-possessive, dative > b-possessive.

‘Defeat’ see exceed

**Definite > Superlative**

This process requires specific contexts to take place. Consider the following example from French, where definiteness is the only means of distinguishing superlative from comparative predications:

**French**

(a) Marie est plus sage.
    Mary is more wise
    ‘Mary is wiser.’

(b) Marie est la plus sage.
    Mary is the more wise
    ‘Mary is the wisest.’

Jensen (1934: 111) cites a number of languages in which definiteness appears to be the only means of marking superlatives, where an expression of the form ‘X is the big one’ has been grammaticalized to a superlative construction (= ‘X is the biggest’), and Ultan (1972: 124, 142) highlights that cross-linguistically superlatives tend to be associated with definite marking; note that, like definite participants, referents of superlative expressions are assumed to have unique reference (Heine 1997b: 126). In some languages, a personal pronoun, rather than a definite article, may be added to a predication to express the notion of a superlative. Ex.

||Ani (Heine 1999a: 63)

(a) khó- mà /éú-mà.
    person- m:sg big-m:sg
    ‘He is big.’

(b) khó- mà /éú-m xà- má.
    person- m:sg big-m:sg dem-m:sg
    ‘He is the biggest.’

More research is required on the exact conceptual nature of this process.

**Demonstrative > (1) Complementizer**

English *that*, demonstrative > complementizer. German *das* ‘that’, ‘the’, demonstrative pronoun and definite article of the neuter gender > *dass* ‘that’, complementizer. This process appears to be due to the reinterpretation of certain patterns of direct speech (e.g., *She said that: there is no money*) as a main clause + complement clause combination (*She said that there is no money*), where
the demonstrative object of the matrix clause, referring cataphorically to the next clause, is reinterpreted as a marker introducing a complement clause. Lockwood (1968) discusses this evolution using the following example from Faroese, where the demonstrative *tadh* ‘that’, illustrated in (a), developed into the complementizer *at*; compare (b).

Faroese (Lockwood 1968: 222–3; see also Heine et al. 1991: 180)

(a) *eg sigi tadh: hann kemur.*
   I say that he comes
   ‘I say this: he comes.’

(b) *eg sigi at hann kemur.*
   I say that he comes
   ‘I say that he comes.’

See also Traugott 1972 and Hopper and Traugott 1993: 185–9 for the evolution of English *that*, and Harris and Campbell 1995: 287f. on German *das/dass* ‘that’. So far, examples of a fully conventionalized grammaticalization have been found mainly in Germanic languages, but according to Lehmann (1982: 64), Welsh *a*, Accadian *ša* (< *šu*), and Nahuatl *in* provide further instances, and there appear to be cases of incipient uses of demonstratives for presenting complement clauses in a number of other languages. Still, more cross-linguistic data are required to establish that the present grammaticalization represents a more general phenomenon. Conceivably, the source of this grammaticalization is not a demonstrative but rather a relative clause marker (Martin Haspelmath, personal communication). Diessel (1999b: 115) points out that the particular pathway a demonstrative takes is crucially determined by the syntactic context in which it occurs:

Pronominal demonstratives develop into grammatical items that are either still used as pronouns (or have at least some of the properties of a pronominal). Adnominal demonstratives give rise to grammatical items that function as operators of nominal constituents. Adverbial demonstratives evolve into operators of verbs or verb phrases. And identificational demonstratives develop into grammatical markers that interact with nominal constituents derived from predicate nominals.

The evidence available suggests that the present pathway is an instance of a pronominal demonstrative (see Diessel 1999b: 123–5).

**DEMONSTRATIVE > (2) CONJUNCTION**

Discussion of the present process is based on Diessel (1997, 1999a, 1999b: 125–7), who observes that sentence connectives “are frequently formed from a pronominal demonstrative and some other element (e.g., an adverb or adposition) that indicates the semantic relationship between the conjoined propositions” (Diessel 1999b: 125). In Hixkaryana, for example, a combination of the
pronominal demonstrative *ire ke* (DEm because:of) and the causal postposition *ke* serves as a causal link between two propositions (‘therefore’; Derbyshire 1985a: 57, 1985b: 157), and in Epena Pedee the most common temporal relator linking propositions is *mapái* ‘and’, ‘so then’, consisting of the demonstrative *ma* ‘that’ and *-pái* ‘only’ (Harms 1994: 144). Khasi has a set of sentence connectives that are formed from a distal demonstrative and a bound morpheme; in the following example, the two clauses are linked by *najta* ‘then’, which consists of the adpositional marker *naj-* and the demonstrative root *-ta*:

**Khasi (Diessel 1999b: 126)**

<table>
<thead>
<tr>
<th>ART</th>
<th>khla</th>
<th>ART</th>
<th>la</th>
<th>ba:m</th>
<th><em>naj-</em></th>
<th><em>ta</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td>la</td>
<td>ART</td>
<td>thyú.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘The tiger ate and then he slept.’

Furthermore, German has a number of adverbs acting as clause connectives, such as *damit* ‘with that’ and *darum* ‘therefore’, which are historically derived from the pronominal demonstrative *das* ‘that’ plus an adposition (Diessel 1999b: 126). A more detailed treatment of this pathway across genetic and areal boundaries is required.

**DEMONSTRATIVE > (3) COPULA**

Egyptian *pw* ‘this’, proximal demonstrative > copula verb. Ex.

**Egyptian (Gardiner 1957: 103ff.)**

<table>
<thead>
<tr>
<th>Nwn</th>
<th>pw</th>
<th>jt</th>
<th>nčrw.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nun</td>
<td>this</td>
<td>father</td>
<td>gods</td>
</tr>
</tbody>
</table>

‘The father of the gods is Nun.’

Vai *me* ‘this’, demonstrative pronoun > *-me* ‘here is’, nominal suffix. Ex.

**Vai (Koelle [1854] 1968: 42, 186, 200)**

| sì:na:*me*. |
| seat-*here:is* |

‘Here is a seat.’

In a number of pidgin and creole languages, demonstrative pronouns appear to have given rise to copulas. Nubi CA *dé*, demonstrative/definite article > copula (Boretzky 1988: 73). English *there* > Sranan CE *de(e)*, *dè* ‘be (some-
where),’ ‘exist’, existential copula. Ex.

**Sranan CE (Boretzky 1983: 158)**

<table>
<thead>
<tr>
<th>taig</th>
<th>mi,</th>
<th>pe</th>
<th>den</th>
<th>dè.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(tell me where they COP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Tell me where they are.’

Sranan CE *da* (< Engl. *that* > *dati*) ‘that’, ‘it’, demonstrative/definite article, weak third person pronoun > *da, na, a* ‘it is’, equative, qualifying copula. Ex.
da somma da wan boen somma.

*That’s a good person.*

See also Boretzky (1983: 159).

As these examples suggest, demonstratives in their pronominal uses may give rise to various copular functions, such as existential, identifying, and qualifying functions. The development from resumptive pronoun to copula is described by Li and Thompson (1977); see also Eid 1983; Schuh 1983; Hengeveld 1992; Gildea 1993; Devitt 1994; Stassen 1997: 76–91. Hengeveld (1992: 250) observes that this evolution “goes hand in hand with a reinterpretation of the theme-clause construction as a subject-predicate construction.” Diessel (1999b: 145) argues that nonverbal copulas derived from demonstratives have identificational demonstratives, rather than pronominal demonstratives, as their source. Demonstratives may develop further into personal pronouns, which themselves may give rise to copulas. Thus, we seem to be dealing with a more extensive grammaticalization — DEMONSTRATIVE > PERS-PRON > COPULA — even though the development from identificational demonstrative to copula differs from that leading from personal pronoun to copula, as Diessel (1999b: 145ff.) convincingly argues (contra Li and Thompson 1977). See PERS-PRON, THIRD; see also COPULA > FOCUS.

**DEMONSTRATIVE > (4) DEFINITE**

English *that*, nonproximal demonstrative > *the*, definite article (Traugott 1980: 49). Bizkaian Basque *a* ‘that’ (< *har* distal demonstrative) > -a, definite article. Ex.

**Bizkaian Basque (anonymous reader)**

(a) gizon a

man that

‘that man’

(b) gizona

man- the

‘the man’

Vai *mɛ* ‘this’, proximal demonstrative > -mɛ ‘the’, definite article, nominal suffix. Ex.

**Vai (Koelle [1854] 1968: 42, 106, 200)**

án’da ní-mɛ gbí fa.

(3:PL:TAM bullock-DEF all kill)

‘They killed all the bullocks.’
Hungarian *az/a* ‘this’, ‘that’, demonstrative > ‘the’, definite article. Ex.

**Hungarian (Tompa 1972: 148)**

\[
\begin{align*}
\text{the} & \quad \text{idös-ebb} & \quad \text{boy} \\
\text{the older boy}
\end{align*}
\]

Many instances of this grammaticalization have been reported from pidgins and creoles; for example, (French *là* ‘there’, locative adverb >) Haitian CF -*la* demonstrative > -*la* (which tends to be reduced to -*a* following vowels), demonstrative/definite article. Ex.

**Haitian CF (Sylvain 1936: 55)**

\[
\begin{align*}
\text{the priest}
\end{align*}
\]


**Grand Ronde Chinook Jargon (Grant 1996: 234)**

\[
\begin{align*}
\text{the big house}
\end{align*}
\]

The present pathway constitutes the most frequent way in which definite articles evolve (see, e.g., Krámský 1972; Greenberg 1978; Vogel 1993; Himmelmann 1997; Laurý 1997). Diessel (1999b: 115) points out that the particular pathway a demonstrative takes is crucially determined by the syntactic context in which it occurs:

Pronominal demonstratives develop into grammatical items that are either still used as pronouns (or have at least some of the properties of a pronominal). Adnominal demonstratives give rise to grammatical items that function as operators of nominal constituents. Adverbial demonstratives evolve into operators of verbs or verb phrases. And identificational demonstratives develop into grammatical markers that interact with nominal constituents derived from predicate nominals.

The present process can be assumed to be an instance of an adnominal demonstrative; it is confined to attributive uses of demonstratives; see Greenberg 1978. This grammaticalization can be interpreted as being part of a more general process whereby markers having typically spatial reference are grammaticalized to markers for textual or discourse reference; compare demonstrative > relative and see also here; there.

When demonstrative determiners develop into definite markers, plural demonstratives may become markers of definite plural nouns. It seems that in
some languages this development has had the effect that the erstwhile demonstrative determiner becomes the primary means of expressing plurality, at least in contexts where definiteness is not at issue, and, hence, assumes the function of a nominal plural marker (see Frajzyngier 1997a for examples); see also Harris 1980 and Klausenburger 2000.

**DEMONSTRATIVE > (5) FOCUS**

There is a cross-linguistic grammaticalization chain – DEMONSTRATIVE > PERS-PRON > COPULA > FOCUS (see under the relevant items) – that can be held responsible, with or without an intermediate PERS-PRON stage, for the fact that focus markers can ultimately be traced back to, and may be polysemous with, demonstratives. However, there appears to be an alternative chain according to which the present process does not involve any intermediate stages but rather proceeds straight from what Diessel (1999b: 148–9) calls “identificational demonstratives” to focus markers. Diessel argues that in at least two different languages there is evidence that focus markers may develop straight from identificational demonstratives since the former show no obvious relationship to copulas. Thus, in Ambulas the distal demonstrative *wan* is frequently used as a focus marker. Ex.

**Ambulas (Wilson 1980: 157; Diessel 1999b: 149)**

\[ \begin{array}{cccccc}
\text{véte} & \text{dé} & \text{wak} & \text{a} & \text{wan} & \text{méné} & \text{kaapuk} \\
\text{see:and} & \text{he} & \text{said} & \text{ah} & \text{FOC} & \text{you} & \text{not} \\
\text{yéménén.} \\
\text{you:went} \\
\text{‘He saw him and said, “Ah, so you did not go”’.} \\
\end{array} \]

In a similar fashion, Diessel (1999b: 149) argues that the Mokilese focus marker *ioar* can be traced back to an old deictic form that is cognate to a demonstrative identifier in Ponapean, an Oceanic language closely related to Mokilese. Ex.

**Mokilese (Harrison 1976: 311; Diessel 1999b: 149)**

\[ \begin{array}{cccccc}
\text{ioar} & \text{Wilson} & \text{ma} & \text{pwehng} & \text{ih} & \text{mehu.} \\
\text{FOC} & \text{Wilson} & \text{REL} & \text{told} & \text{him} & \text{that} \\
\text{‘It was Wilson who told him that.’} \\
\end{array} \]

In Cahuilla, the demonstrative *ʔiʔ* ‘this’ appears to function as a focus (‘emphatic’) marker in certain contexts. Ex.

**Cahuilla (Seiler 1977: 115–16)**

(a) \[ \begin{array}{cccc}
\text{ʔi} & \text{nétas} \\
\text{this} & \text{my:uncle} \\
\text{‘this my uncle’} \\
\end{array} \]

(b) \[ \begin{array}{cccc}
\text{ʔi} & \text{man} & \text{hiwqal} & \text{ʔipaʔ} \\
\text{this} & \text{live} & \text{here} \\
\text{‘He lives here.’ (lit.: ‘(it is) this and he lives here’)} \\
\end{array} \]
We appear to be dealing with a process that can often be observed in grammatic-  
al evolution, according to which a process $X \rightarrow Y \rightarrow Z$ proceeds straight  
from $X$ to $Z$; that is, it may but need not involve an intermediate stage $Y$.  

Conceivably, the present pathway can be held responsible for an additional  
grammaticalization channel whereby focus markers derived from identifica-  
tional demonstratives give rise to expletive markers, that is, empty pro-forms,  
such as French *ce* ‘this’ plus *être* ‘be’, serving as matrix predicates in complex  

**French**

```
C'est lui que j'ai vu.
```

‘She is the one that I saw.’

**DEMONSTRATIVE > (6) THIRD PERS-PRON**

According to Givón (1984: 353–60), this process is part of a more general  
grammaticalization chain: `DEM PRON > third person PRON > clitic PRON > verb  
agreement` (see also Diessel 1999b: 120).

Casad (1984: 247) observes that in Cora “all third person free pronouns are  
demonstratives. In the role of pronouns, then, demonstratives show up as sub-  
jects, direct objects, and objects of postpositions.” Similarly, in Yindjibarndi all  
of the third person pronouns are also used as demonstratives (Wordick 1982: 71).  
Latin *ille* ‘that’, demonstrative (M) > French *il* ‘he’, third person masculine  
(M) pronoun. Egyptian *pw* ‘this’, proximal demonstrative > ‘he’, ‘she’, ‘it’, ‘they’,  
third person pronoun. Ex.

**Egyptian** (Gardiner 1957: 85f., 103)

(a) 

```
h-k3y pw
magician this
```

‘this (= thou) magician’

(b) 

```
Rc pw. ḥ-wrw pw.
Re this wretches this
```

‘This/He is Re.’ ‘They are wretches.’

Lezgian *a* ‘that’, demonstrative > *am* (*a* + absolutive) ‘he’, ‘she’, ‘it’, third person  
singular pronoun. Ex.

**Lezgian** (Hausp authorized 1993: 190; 401)

(a) 

```
a diünja
DEM world
```

‘that world’

(b) 

```
Gila za wa- z axtin
now I:ERG you- DAT such
alawa tars gu- da xi hič
additional lesson give- FUT PART PART```

`/hcrossed/`
sadra-ni wi rik’e- laj am
once- even you:GEN heart- srel it
alat- da- č.
fall:off- FUT-NEG
‘Now I’ll give you such a remedial lesson that you’ll never forget it.’

Turkish o, demonstrative pronoun > pronoun third person singular absolutive (Lewis [1967] 1985: 67–8). In Early Eastern Australian Pidgin English (EAPE) there are sporadic occurrences of dat (< English ‘that’) as a third pers-pronoun pronoun. Ex.

**Eastern Australian PE**

Dat make all black pellows get plentybark.
‘He made the Aborigines collect a lot of bark.’ (Baker 1995: 10)


Diessel (1999b: 115) points out that the particular pathway a demonstrative takes is crucially determined by the syntactic context in which it occurs:

Pronominal demonstratives develop into grammatical items that are either still used as pronouns (or have at least some of the properties of a pronominal). Adnominal demonstratives give rise to grammatical items that function as operators of nominal constituents. Adverbial demonstratives evolve into operators of verbs or verb phrases. And identificational demonstratives develop into grammatical markers that interact with nominal constituents derived from predicate nominals.

The present process is an instance of a pronominal demonstrative: the process is confined to the use of demonstratives as pronouns. See also Traugott 1980: 48; Heine and Reh 1984: 271; Campbell 1997; Klausenburger 2000.  

**DEMONSTRATIVE > (7) RELATIVE**

Canela-Krahó ita, demonstrative > relative pronoun. Ex.

**Canela-Krahó (Popjes and Popjes 1986: 171)**

(a) rop ita
dog this
‘this dog’

It would seem that Louisiana CF (“Negro-French”) provides a counterexample to this grammaticalization. In this creole, the markers -la, pl.-je serve as demonstratives and definite articles (Lane 1935: 10). Now, there is reason to assume that -je is historically derived from the French third person plural pronoun eux ‘they’. If this reconstruction is correct then we would be dealing with a development from personal pronoun (eux) to demonstrative (-je), hence with a reversal of the unidirectionality principle.

**Baka (Brisson and Boursier 1979: 137)**

(a) Iò peè ndò kè!
give:IMP DAT:1:SG banana this

‘Give me this banana!’

(b) bo kè ma mìngi lé
man REL 1:SG see:PAST 3:SG:OBJ
ngili nè, à gê.
yesterday REL 3:SG:NAR go:PAST

‘The man I saw yesterday has left.’

Ik nà, pl ni ‘this’, proximal demonstrative > Ik na, pl ni, relative clause markers. Ex.

**Ik (Heine 1983: 97, 110)**

(a) ceke na, pl cikámá ni
woman this women these

‘this woman’ ‘these women’

(b) itèl- ìa ima ná nk’ak’a.
see- 1:SG child:NOM REL:SG eat

‘I see a child who is eating.’

Buang ken, postposed demonstrative > relativizer. Ex.

**Buang (Sankoff 1979: 35–6)**

(a) Ke mdo byañ ken.
I live house this

(‘I live in this house.’)

(b) Ke mdo byañ ken gu le vkev.
I live house that you saw yesterday

(‘I live in the house that you saw yesterday.’)

Diessel (1999b: 115) points out that the particular pathway a demonstrative takes is crucially determined by the syntactic context in which it occurs:

Pronominal demonstratives develop into grammatical items that are either still used as pronouns (or have at least some of the properties of a pronominal). Adnominal demonstratives give rise to grammatical items that function as operators of nominal constituents. Adverbial demonstratives evolve into operators of verbs or verb phrases. And
identificational demonstratives develop into grammatical markers that interact with nominal constituents derived from predicate nominals.

The present process can be assumed to be an instance of a pronominal demonstrative; it constitutes probably the most frequent way in which relative clause markers evolve; see Sankoff and Brown 1976: 645; Downing 1978; Heine and Reh 1984: 271; Frajzyngier 1997a: 204 for details. For pidgin and creole languages, see especially Byrne 1988 and Bruyn 1995. This grammaticalization can be interpreted as being part of a more general process whereby markers having typically spatial reference are grammaticalized to markers for textual or discourse reference; compare DEMONSTRATIVE > DEFINITE; see also HERE; THERE.

**DEMONSTRATIVE > (8) SUBORDINATOR**

!Xun (northern dialect) ká-’ŋ (c4-dem) ‘this’, proximal demonstrative of noun class 4 > subordinating marker of adverbial clauses. Ex.

_!Xun (northern dialect) (Bernd Heine, field notes)_

(a) g!áún  ka-’ŋ
    tree  c4-dem
    ‘this tree’

(b) ká-’ŋ  yà  ke  tcí- à  me
    when  ci  past  come-r  1:sg:past
    kula  tc’ü.
    exist:neg  home
    ‘When he came I was not at home.’

Sango só ‘this’, ‘that’, demonstrative > marker of temporal and reason clauses. Ex.

_Sango (Byrne 1988: 358)_

(a) yáká  só  í  sára  só
    garden  that  we  make  that
    ‘the garden that we made’

(b) só  ndo  avokó  awe,  lo  goe  na
    when  place  blacken  pfv  she  go  with
    kóli  só.
    man  that
    ‘When night comes, she goes with that man.’

Saramaccan CE dísí ‘this’, demonstrative > di ‘when’, subordinate conjunction, marker of temporal clauses. Ex.

_Saramaccan CE (Byrne 1988: 347–8)_

<table>
<thead>
<tr>
<th>a</th>
<th>gó</th>
<th>dí</th>
<th>a</th>
<th>bi</th>
<th>tá</th>
<th>feši</th>
</tr>
</thead>
<tbody>
<tr>
<td>he</td>
<td>go</td>
<td>when</td>
<td>he</td>
<td>TNS</td>
<td>ASP</td>
<td>paint</td>
</tr>
<tr>
<td>dí</td>
<td>wóšu.</td>
<td>the</td>
<td>house</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘He went when he was painting the house.’
Haitian CF -la (demonstrative >) definite article > -(l)a marker used to nominalize clauses (Hall 1953: 60). Ex.

**Haitian CF (Hall 1953: 60)**

(a) *soté* lâtouraj-* la* yo  
(fence-jumping-DELF PL)  
‘the fence-jumpings’

(b) *pâdâ* m-* malad- la*  
(during 1:SG-be:sick-DEF)  
‘during [the time] I was sick’

This grammaticalization can be interpreted as being part of a more general process whereby markers having typically spatial reference are grammaticalized to markers for textual or discourse reference; compare **DEMONSTRATIVE > RELATIVE**; see also **HERE; THERE**.

**DEONTIC MODALITY > (1) EPISTEMIC MODALITY**

This constitutes a well-researched channel of grammaticalization. English auxiliaries *will, must, should*, and so on were used for deontic modality before their use was extended to also express epistemic modality (see, e.g., Sweetser 1982; Bybee and Pagliuca 1985; Traugott 1989; Heine et al. 1991; van der Auwera and Plungian 1998). Ex.

**English (Bybee et al. 1994: 284)**

(a) *The letter must arrive sometime next week.* (deontic)  
(b) *The letter must be in the mail.* (epistemic)

Our knowledge of this process on languages other than European in general and English in particular is limited. But there is also evidence from non-European languages (see Bybee and Fleischman 1995). For example, the Archaic Chinese item *KE* ‘should’ was first used for deontic modality before its use was extended to also express epistemic modality (Peyraube 1999: 38).

There are various hypotheses on how this process is to be explained. According to the one perhaps most frequently voiced, the development from deontic to epistemic meanings is suggestive of metaphorical transfer (see, e.g., Sweetser 1982; Bybee and Pagliuca 1985: 73; Heine et al. 1991: 175–8). Sweetser (1990: 52) argues that this development can be accounted for in terms of “sociophysical concepts of forces and barriers,” and Traugott (1989) suggests that we are dealing with an instance of subjectification in semantic change (see also Hopper and Traugott 1993: 86). Concerning a treatment of modality as a semantic map, see van der Auwera and Plungian 1998. See also **OBLIGATION > PROBABILITY; ABILITY > POSSIBILITY**.

**DEONTIC MODALITY > (2) FUTURE**

For details on this process, see Traugott 1972: 198–9; Bybee et al. 1991; Bybee et al. 1994; van der Auwera and Plungian 1998; see also **OBLIGATION > FUTURE**.
DESCEND (‘descend’, ‘go down’, ‘fall’) > DOWN

**Ewe (Hünne Meyer 1985: 108)**

(a) *me-* d’i le só dzí.
1:SG descend at horse on
‘I dismounted the horse.’

(b) *me-* tsó e da d’i.
1:SG take 3:SG put (descend)
‘I put it down.’


**Imonda (Seiler 1985: 109)**

*piha-* peha fe-* u!*
shoot- go:down do- IMP
‘Shoot down!’


**Mandarin Chinese (Li and Thompson 1981: 59–60)**

*wò fàng-xià wò-de shūbāo le.
I put-descend I- GEN satchel CRS
‘I laid down my satchel.’

This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare **COME FROM;** **COME TO;** **CROSS;** **EXCEED;** **FALL;** **PASS;** **RESEMBLE.**

‘Desire’ see **WANT**

DO (‘to do, ‘to make’) > (1) CAUSATIVE

**English (anonymous reader)**

(a) John made it. John washed the car.

(b) Susie made John wash the car.

**Lendu (Tucker 1940: 220)**

\[
\begin{align*}
\text{mgba-i} & \quad \text{bu} & \quad \text{ba} & \quad \text{mgba} & \quad \text{nju}.
\end{align*}
\]

child-mother makes milk child suck

‘The mother suckles the baby.’


**Tamil (T. Lehmann 1989: 193ff.)**

\[
\begin{align*}
\text{kumar} & \quad \text{emm-ai} & \quad \text{var-a} & \quad \text{vai-} & \quad \text{tt-} & \quad \text{aan}.
\end{align*}
\]

Kumar 1SG-ACC come-INF vai-PAST 3M:SG

‘Kumar made me come.’

Two additional processes appear to be part of this general evolution. One involves the formation of de-nominal verbs ('Make X > (cause) to be X’); for example, Ewe wɔ kpé ('make stone') 'be stony', wɔ ḃkitsu ('make man') 'be virile', wɔ tsi ('make water') 'be watery'.

Chinook Jargon mámuk, mamúk ‘make’, verb > m ank, ma uk, or m unk, causative auxiliary; for example, Grand Ronde Chinook Jargon m unk si m ('make swim') ‘make someone swim’ (Grant 1996: 236). Saramaccan CE mbéi ( < English make) ‘make’ > subordinator of consequence/cause clauses. Ex.

**Saramaccan CE (Veenstra 1996: 96–8)**

(a) \[
\begin{align*}
\text{a} & \quad \text{bi} & \quad \text{tá} & \quad \text{mbéi} & \quad \text{di} & \quad \text{témbe}.
\end{align*}
\]

3SG TNS ASP make DET:SG wood

‘He was making the wood carving.’

(b) \[
\begin{align*}
\text{de} & \quad \text{mbéi} & \quad \text{a} & \quad \text{siki}.
\end{align*}
\]

3PL make 3SG:SUBJUNCT sick

‘They had made him sick.’

The other process in this evolution, and probably related to the first, is the grammaticalization of DO-verbs to transitivizing grams: Newari ya-na 'having done' (participial verb) > -yana transitivity marker on ergative nouns (DeLancey 1983: 56–8). Lahu te ‘do’ > transitivizer, causativizer; te qè ve ‘widen’, ‘make wide’ (Matisoff 1991: 432).

**do (‘to do, ‘to make’) > (2) CONTINUOUS**

Southern Barasano main verb + ya ‘do’ > progressive. Ex.

**Southern Barasano (Smith 1973: 19–20; Blansitt 1975: 28)**

\[
\begin{align*}
\text{bago} & \quad \text{yamo}.
\end{align*}
\]

eat:F doing:she

‘She’s eating.’

Bongo (Heine 1993: 34; quoted from Tucker 1940: 75)

\[
\begin{align*}
\text{má-} & \quad \text{dɔ-} & \quad \text{ndɛrɛ}.
\end{align*}
\]

I- do- walking

‘I am walking.’
This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare begin; come from; come to; finish; go to; keep; leave; put.

**DO (‘to do, ‘to make’) > (3) EMPHASIS**

Do-verbs in some languages are used to emphasize the action described by the main verb; compare English He came versus He did come. South !Xun dù ‘to do’ > auxiliary used to emphasize the verb following it. Ex.

*South !Xun (Dickens 1992: 60)*

\[
\begin{array}{lll}
2:SG & \text{neg} & \text{fix} \quad \text{it:c4} \\
1:SG & \text{do fix} & \text{r it:c4}
\end{array}
\]

‘You did not fix it.’ ‘Hey! I did fix it.’

Imonda fe (‘make’, ‘do’) > emphasis marker. Ex.

*Imonda (Seiler 1985: 116)*

(a) bései adaia fe- f?
what work do-PRES

‘What are you doing?’

(b) pon ka- m ha fe- f.
hunger 1:SG-GOAL affect do-PRES

‘I am hungry.’

For further details on this development, see van der Auwera 1999.

**DO (‘to do, ‘to make’) > (4) OBLIGATION**


See Denning (1987) for more details. The exact nature of this pathway is still largely unclear, especially since there are no text examples illustrating the process.

**DO (‘to do, ‘to make’) > (5) PRO-VERB**


*Lahu (Matisoff 1991: 432)*

\[
\begin{array}{llllll}
\ddot{g}\ddot{i} & \ddot{y}\ddot{a} & \ddot{g}\ddot{i} & \ddot{t}\ddot{a} & te & ve.
\end{array}
\]

run descend run ascend do part

‘Keep running up and down.’

Hausa yi ‘do’, verb > pro-verb. Ex.

*Hausa*

(a) Yaa yi aiki.
3:M:SG do work

‘He worked.’
(b) yaa yi barci.  
3:M:SG do sleep  
‘He slept.’

Ewe wɔ ‘do,’ ‘make’ > pro-verb after certain nouns. Ex.

**Ewe**

(a) é wɔ dú.  
3:SG do work  
‘S/He worked.’

(b) é wɔ kpé.  
3:SG do stone  
‘It is stony.’

This grammaticalization has the effect that a frequently used action verb turns into a semantically empty predicate marker. For further details on this development, see van der Auwera 1999. See also **beat**.

**DUAL > NP-AND**


**Waropen (Stassen 2000; quoted from Held 1942: 90)**

<table>
<thead>
<tr>
<th>mangha</th>
<th>kisi</th>
<th>bingha</th>
</tr>
</thead>
<tbody>
<tr>
<td>man</td>
<td>3:DU</td>
<td>woman</td>
</tr>
</tbody>
</table>

‘the man and the woman’

West !Xun (tsa ‘two’, cardinal numeral >) sá, dual marker > particle conjoining noun phrases. Ex.

**West !Xun (Heikkinen 1987: 69)**

<table>
<thead>
<tr>
<th>sá</th>
<th>dàhmà</th>
</tr>
</thead>
<tbody>
<tr>
<td>the:two</td>
<td>wife</td>
</tr>
</tbody>
</table>

‘he and his wife’

Kxoe -tcà, third person dual suffix > marker of noun phrase coordination involving two participants. Ex.

**Kxoe (Treis 2000a: 105)**

(a) á- tcà  
DEM- 3:M:DU  
‘they (two male referents)’

(b) xàô- tcà /’é- tcà  
hippopotamus-3:M:DU fire-3:M:DU  
‘the hippo and the fire’

One of the ways in which markers of noun phrase coordination (‘and’) may arise is via the grammaticalization of numerals for ‘two’ to conjoining markers
(see Stassen 2000). It would seem, however, that this evolution may involve an intermediate stage where the numeral assumes the function of a dual marker before developing into a marker of noun phrase coordination, that is, that we are dealing with a more general pathway – TWO > DUAL > NP-AND – even if in some given language the intermediate stage may be skipped. See also TWO > DUAL; TWO > NP-AND.

‘Dwell’ see LIVE.

EAR (body part) > LOCATIVE

More examples on the genetic and areal distribution of this pathway are required. We are dealing with an instance of a process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; EYE; FACE; FLANK; HEART; NECK; SHOULD.

EARTH (‘earth’, ‘soil’, ‘land’, ‘ground’) > DOWN

Ex.

Kikuyu (Mathias Schladt, personal communication)
(a) thį nį nene mūno.
   ‘earth/world is big very
   ‘The world is very big.’
(b) ikara thį.
   ‘stay:IMP earth
   ‘Sit down.’

Kikuyu (thį noun class 9/10), thį ya (lit.: ‘earth of’) > thį ya ‘under’, preposition. Ex.

Kikuyu (Barlow 1960: 203)

rora thį ya ihiga riu!
(IMP:look earth of stone that)
‘Look under that stone!’


See Heine et al. 1991: Chapter 5 and Svorou 1994 for more details. Bowden (1992: 37) found twenty-four Oceanic languages where terms for ‘earth’ or ‘land’ have given rise to DOWN markers. This is an instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare HOME; SKY.

EAT > PASSIVE
Chinese CHI ‘eat’ > CHI, passive marker (Alain Peyraube, personal communication). Kharia jom ‘eat’ > -jom, passive suffix (Haspelmath 1990: 41). Juang jim ‘eat’ > -jim, passive suffix (Haspelmath 1990: 41). Korean meg- ‘eat’ > passive marker (with adversative and beneficial flavors) (Haspelmath 1990: 41). For more details, see Haspelmath 1990: 41, 64. The conceptual base of this grammaticalization is not entirely clear; more data are required to account for this process, which appears to be an instance of a more general process whereby constructions involving certain process verbs are grammaticalized to passive constructions. See also FALL; GET; SEE.

EDGE (relational noun) > LOCATIVE
Welsh ymyl ‘edge’, ‘border’ > yn ymyl > yn ymyl (PREP + ‘edge’) ‘near to’, preposition. Ex.

**Welsh (Wiliam 1960: 36)**

```
yn     ymyl    bae   Colwyn

PREP  edge    bay    Colwyn

near Colwyn Bay
```


This is an instance of a more general process whereby relational nouns give rise to relational (typically spatial or temporal) grammatical markers; see, for example, BOTTOM; BOUNDARY; HOME; SIDE; TOP.

‘Emphatic reflexive’ see INTENSIVE-REFL

‘End’ see FINISH

ENVIRONS (‘environs’, ‘vicinity’) > AROUND (SPATIAL)
More data are required on the genetic and areal distribution of this pathway, which appears to be an instance of a more general process whereby concrete nouns, on account of some salient semantic characteristic, are grammaticalized to markers highlighting that characteristic; compare BOUNDARY; EDGE; HOME; SIDE; TOP. See also CIRCLE.

‘Enough, be’ see SUITABLE

‘Evil’ see BAD

EXCEED (‘to exceed’, ‘to defeat’, ‘to surpass’)
> (1) COMPARATIVE

Duala buka ‘exceed’ > marker of standard noun phrases in comparative constructions, comparative auxiliary. Ex.

* Duala (Stassen 1985: 164)

Nin ndabo e kolo buka nine.
  this house it big exceed that

‘This house is bigger than that.’

Yabem -lelec ‘exceed’ > marker of standard noun phrases in comparative constructions. Ex.

* Yabem (Stassen 1985: 164)

Tamoc kapoeng ke-lelec ae su.
  father is:big he-exceed me ready

‘My father is taller than me.’


* Thai (Stassen 1985: 165)

Khaw jaj kwaa phom.
  he big exceed me

‘He is bigger than me.’

Vietnamese hon ‘exceed’ > marker of standard noun phrases in comparative constructions. Ex.

* Vietnamese (Stassen 1985: 165)

Vang qui hon bac.
  gold valuable exceed silver

‘Gold is worth more than silver.’

Yoruba ju ‘exceed’ > marker of standard noun phrases in comparative constructions. Ex.
Yoruba (Stassen 1985: 165)

$Ile\ mi\ kere\ ju\ tiwon.$

‘My house is smaller than theirs.’

Bari to-tongun (INF-exceed) ‘to exceed’ > marker of standard noun phrases in comparative constructions. Ex.

Bari (Stassen 1985: 168)

$Körsuk\ a\ lokong\ to-\ tongun\ Jökö.$

‘Körsuk is wiser than Jökö.’

Wolof gen ‘exceed’ > marker of standard noun phrases in comparative constructions. Ex.

Wolof (Stassen 1985: 169)

$Sa\ yai\ gen\ na\ à\ bakh\ sa\ bai.$

‘Your mother is better than your father.’

Igbo ka ‘exceed’ > ‘more’, comparative marker. Ex.

Igbo (Stassen 1985: 167)

$Ge\ ka\ m\ ike.$

‘You are stronger than me.’

Margi mdia ‘exceed’ > ‘more’, comparative marker. Ex.

Margi (Stassen 1985: 167)

$Naja\ ga\ mdia-\ da\ de\ dzegam-kur.$

‘He is taller than me.’


Banda (Stassen 1985: 168)

$Anda\ ne\ mo\ dere\ ne\ ze\ de\ ayan.$

‘My house is bigger than your house.’

Fulfulde buri ‘exceed’ > ‘more’, comparative marker. Ex.

Fulfulde (Stassen 1985: 176)

$Samba\ buri\ Amadu\ (i)\ mawn-de.$

‘Samba is taller than Amadu.’
Swahili *ku-shinda* ‘to defeat’, ‘surpass’ > *kushinda* ‘more than’, comparative marker. Ex.

**Swahili**

(a)  *a-me- ni- shinda.*

3:SG-PERF-1:SG-defeat

‘He defeated me.’

(b)  *mnazi ni mrefu kushinda mwembe.*

coconut:tree COP tall to:defeat mango:tree

‘A coconut tree is taller than a mango tree.’


**Kikuyu (Barlow 1960: 63)**

\[
\begin{align*}
nukwa & \quad wa & \quad m\text{m}nd\text{\-}u & \quad \text{u-}cio & \quad n\text{i} \\
\text{strap} & \quad \text{of} & \quad \text{person} & \quad 3\text{-}that & \quad \text{COP} \\
m\text{\-}r\text{\-}aya & \quad gu\text{\-} \text{\-}kir\text{a} & \quad w\text{-}ak\text{\-}wa. & \\
3\text{-}long & \quad \text{INF-defeat} & \quad 1\text{-}my \\
\text{‘That person’s strap is longer than mine.’ (lit.: ‘long, to surpass (or surpassing) mine’)}
\end{align*}
\]


**Ewe**

(a)  *é- wú m.*

3:SG-defeat 1:SG:OBJ

‘He defeated me.’

(b)  *nétí kó wú detí.*

coconut:tree be:high defeat oil:palm

‘A coconut tree is taller than an oil palm.’ (Claudi and Heine 1986: 305)


**Bulu (Hagen 1914: 35, 224)**

\[
\begin{align*}
\text{Madu} & \quad a & \quad \text{dañ} & \quad \text{Obo} & \quad \text{ñgu(l)}. \\
\text{Madu} & \quad \text{TAM} & \quad \text{surpass} & \quad \text{Obo} & \quad \text{strength} \\
\text{‘Madu is stronger than Obo.’}
\end{align*}
\]

Gbaya *gân* ‘surpass’ > ‘than’, marker of standard noun phrases in comparative constructions. Ex.

**Gbaya (Stassen 1985: 164)**

\[
\begin{align*}
\text{Ngma} & \quad \text{mo} & \quad \text{gan} & \quad \text{ó} & \quad \text{ngay} & \quad \text{gân} & \quad \text{nzapa} & \quad \text{na}. \\
\text{some} & \quad \text{NEG} & \quad \text{is} & \quad \text{strong} & \quad \text{surpass} & \quad \text{God} \\
\text{NEG} & \\
\text{‘There is nothing stronger than God.’}
\end{align*}
\]

**Susu** (Friedländer 1974: 62)

\[
\begin{array}{llllll}
\text{khimbeli} & \text{na} & \text{Könakiri} & \text{dangi} & \text{Kankan} & \text{na}.
\end{array}
\]

(humidity POST Conakry surpass Kankan POST)

‘Conakry is more humid than Kankan.’


**Teso** (Kitching 1915: 25, 120)

\[
\begin{array}{ll}
e- & \text{ka-} \text{kin’ok} \\
3:\text{sg:pass} & \text{M:your}
\end{array}
\]

‘My dog is bigger than yours.’

This process has been described by Stassen (1985: 42–4) under the label “Exceed-Comparative” and by Heine (1997b: 112–14) under “Action Schema.” This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see, for example, fall; finish; pass.

**EXCEED** (‘to exceed’, ‘to defeat’, ‘to surpass’) > (2) ELATIVE\(^{19}\)


**Baka** (Brisson and Boursier 1979: 486)

(a) ?e gòlò à wɔ̀d.

\[
\begin{array}{ll}
\text{it is} & \text{far ASP pass}
\end{array}
\]

‘It is very far.’

(b) ?e ko dàdì à wɔ̀d.

\[
\begin{array}{ll}
\text{it is} & \text{really much ASP pass}
\end{array}
\]

‘That is far too much.’

Moré lôghé ‘to pass’, ‘surpass’, ‘exceed’ > ‘too much’ (following the main verb). Ex.

**Moré** (Alexandre 1953b: 236)

(a) dë lôgha m pàga.

‘This exceeds my strength.’

(b) a nyü ti lôghé.

‘He has drunk too much.’

\(^{19}\) This term must not be confused with the use of “elative” in the literature on case marking.
So far, evidence for this instance of grammaticalization comes mostly from the Niger-Congo family. But compare English exceeding(ly), Fa d’Ambu CP pasa ‘surpass’ > elative/superlative marker. Ex.

_Fa d’Ambu CP (Post 1992: 159)_

\[
\begin{array}{llllll}
tyipa & bi & sxa & dual & eli & kumu \\
stomach & come & PART & hurt & 3:SG & eat \\
pasa & surpass & \\
\end{array}
\]

‘His stomach hurt, he had eaten too much (lit.: ‘most’).’

While the present pathway appears to be conceptually plausible, more examples are needed. What seems to be involved is that the use of EXCEED verbs without complement may give rise to a superlative or elative interpretation.

**EXIST > (1) CONTINUOUS**

Kongo _kala_ ‘to be’, ‘exist’, ‘remain’, verb > _ka(la)_ , progressive aspect marker. Ex.

_Kongo (Laman 1912: 159–80; Heine and Reh 1984: 88)_

\[
y- a- ka(la) kanga.
\]

(1:SG-PAST-exist bind)

‘I was binding.’

Yagaria _hano_ ‘exist’, ‘be’ > _no’/-ne’-, progressive aspect marker, prefix (Renck 1975: 90).

Since CONTINUOUS markers may further develop into HABITUAL aspect markers, some EXIST-verbs also express habitual events; for example, Yagaria _hano_ ‘exist’, ‘be’ > _no’/-ne’-, habitual aspect prefix (Renck 1975: 90). Ghanaian PE _dèy_ , locative/existential copula (< English _there_ ) > progressive/habitual (“nonpunctual”) marker. Ex.

_Ghanaian PE (Huber 1996; see also Turchetta 1998)_

\[
\begin{array}{llllll}
s & that & place & wey & rain & dèy & fall \\
(so & that & place & where & rain & PROG & fall \\
they & dèy & come. \\
they & PROG & come) \\
\end{array}
\]

‘So they were coming to where it was raining.’

More research is required on the exact nature and the genetic and areal distribution of this process.

**EXIST > (2) H-POSSESSIVE**

Mandarin Chinese _yòu_ ‘exist’ > _yòu_ , verbal possession marker. Ex.

\[\text{h-possessive} \text{ stands for a marker of predicative possession, typically expressed in English by have; see Heine 1997a.}\]
Mandarin Chinese (Li and Thompson 1981: 513)

$t\tilde{a} \ y\check{ou} \ s\ddot{a}n- \ ge \ h\acute{a}\text{i}zi$.

3:SG exist three-CLASS child

‘S/He has three children.’

North !Xun $g\ddot{e}$ ‘exist’ $>$ have-construction. Ex.

North !Xun (Bernd Heine, field notes)

$m\acute{i} \ #\text{hole} \ g\ddot{e}.$

1:SG dog exist

‘I have a dog.’

The Turkish adjectives $v\ddot{a}r$ ‘existent’ and $y\ddot{k}$ ‘nonexistent’ are the ordinary means of expressing the H-POSSESSIVE in this language. Ex.

Turkish (anonymous reader; Lewis [1967] 1985: 142f.)

(a) $k\ddot{o}\text{s}\text{- de} \ b\acute{e}r \ k\ddot{a}h\nu \ v\ddot{a}r$.

corner-LOC one coffee exist

‘There’s a café on the corner.’

(b) $a\text{raba-m} \ v\ddot{a}r. \ a\text{raba-m} \ y\ddot{k}$.

car- my existent car my nonexistent

‘I have a car.’ ‘I don’t have a car.’

This process has been described by Heine (1997a: 58–9) under the heading “Genitive Schema,” having the propositional structure (‘X’s Y exists’). It requires the possessor to be encoded as a genitival modifier of the subject, which presents the possessee.

Seemingly, this process violates the unidirectionality principle, since there is another instance of grammaticalization exhibiting a reverse directionality: H-POSSESSION $>$ EXIST. As a matter of fact, however, the two are part of a more extensive pathway, which is described by Heine (1997a: 96) in the following way:

\begin{align*}
\text{Existence} & \quad > \quad \text{Possession} \quad > \quad \text{“Nuclear” existence} \\
(Y \text{ exists with} & \quad (X \text{ has } Y) \quad (It \text{ has } Y > Y \text{ exists}) \\
\text{reference to } X) & \end{align*}

In the present case (i.e., the Genitive Schema) we are dealing with the first part of this pathway, where existence involves two participants, while in the case of “nuclear” existence there is only one participant (see Heine 1997a: 94–6).

‘Exit’ see leave

**EYE (body part) $>$ (1) BEFORE**

Bambara $\text{ny}\ddot{e}$ ‘eye’, ‘face’ $>$ $\text{ny}\ddot{e}$, $\text{ny}\ddot{e} \ f\ddot{e}$ (lit.: “eye at”), temporal postposition. Ex.

Bambara (Raimund Kastenholz, personal communication)

$\ddot{a} \ n\ddot{a}- \ n\acute{a} \ n\ddot{e} \ n\acute{y}\ddot{e}$.

3:SG come-PAST 1:SG:EMPH before

‘She arrived before me.’
Conceivably, the present grammaticalization is part of a more extended evolution: (EYE >) FACE > FRONT > BEFORE. This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are first used as structural templates to express deictic location and then may develop further into expressions for temporal deixis; see also BACK; BELLY; FACE; HEAD. While there is only one clear example to support the present grammaticalization, we have nevertheless included it since it is suggestive of a widespread pathway whereby certain concrete nouns are grammaticalized to spatial markers that themselves may further develop into temporal markers. Nouns for ‘eye’ appear to be a widespread source for ‘face’; hence the two belong to one polysemy set in some languages. For various other grammaticalizations of nouns meaning ‘eye’ or ‘face’ in the Mixtecan language family, see Hollenbach 1995.

**EYE** (body part) > (2) FRONT


**Baka (Brisson and Boursier 1979: 189)**

\[ ?é \quad gbè \quad wò\-\_è \quad a \quad là-\_è. \]

3:SG beat:PAST woman-his LOC eye-my

‘He beat his wife in front of me.’

Bambara *nyé* ‘eye’, ‘face’ > *nyé, nyé fè* (lit.: ‘eye at’), locative adverb or postposition. Ex.

**Bambara (Donald A. Lessau, personal communication)**

(a) *nì \quad fà \quad nyé*

1:SG father face

‘my father’s face’

**Bambara (Kastenholz 1989: 100)**

(b) *à \quad bè \quad tíga \quad fèere \quad misiri \quad nyé fè.*

3:SG TAM peanut sell mosque in:front:of

‘He sells peanuts in front of the mosque.’


**Susu (Friedländer 1974: 40)**

\[ \text{bankhi} \quad \text{yara} \]

‘in front of the house’


This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; FACE; HEAD; NECK. For various other grammaticalizations of nouns...
meaning ‘eye’ or ‘face’ in the Mixtecan language family, see Hollenbach 1995. While terms for ‘face’ and ‘eye’ appear to be the primary sources for FRONT markers, not uncommonly there are also verbal sources. Bowden (1992: 38) has identified twenty-two Oceanic languages where FRONT markers appear to go back to verbs meaning ‘precede’.

**FACE (body part) > (1) FRONT**

Mixtec *nùù* ‘face’ > ‘top surface’ or ‘front surface’ of a boxlike object (Brugman and Macaulay 1986: 318). Ex.

*Mixtec (Brugman and Macaulay 1986: 319)*

\[
\text{rù?ù hindi-ri nùù Maria.}
\]

'I stand-1:SG face Maria

'I am standing in front of Maria.’

Copala Trique *rian* ‘face’ > ‘area in front’. Ex.

*Copala Trique (Hollenbach 1995: 174–5)*

(a) \[
\text{rian}^{12} \text{ ne?e}^{3h} \text{ a}^{12} \text{DEC}
\]

‘the baby’s face’

(b) \[
\text{rian}^{12} \text{ we}^{3} \text{ a}^{12} \text{DEC}
\]

‘the area in front of the house’

*Colonial Quiché* *vach* ‘face’ > -*vach* ‘in front of’, locative preposition. Ex.

*Colonial Quiché (Dürr 1988: 58–9)*

\[
\text{x- u- cat ri pom ch- u- vach}
\]

\[
\text{CPL-3:SG:ERG:heat DEF incense LOC-3:SG:ERG-face ri ah.}
\]

DEF reed

‘She burned incense in front of the reeds.’


See Svorou 1994: 70–9, 124–43; for various other grammaticalizations of nouns meaning ‘face’ in the Mixtecan language family, see Hollenbach 1995.
Bowden (1992: 36) found forty-nine Oceanic languages where terms for ‘face’ appear to have given rise to FRONT markers. This grammaticalization has received quite some treatment in the relevant literature; see, for example, Heine et al. 1991; Svorou 1994; Heine 1997b. It appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; EYE; HEAD; NECK; SHOULDER. While terms for ‘face’ and ‘eye’ appear to be the primary sources for FRONT markers, not uncommonly there are also verbal sources. Bowden (1992: 38) has identified twenty-two Oceanic languages where FRONT markers appear to go back to verbs meaning ‘precede’.

FACE (body part) > (2) UP


Nama (Krönlein 1889: 64)

(a) éis á- tsa //ā è- ts. . .
   (face poss-2:M:SG wash so:that-2:M:SG)
   ‘Wash your face so that you. . .’

(b) ti /hawi- s éi ≠nā re nē
   (my wound-3:F:SG on pour IMP this
   sō/oa- ba.
   drug-3:M:SG)
   ‘Pour this medicine on my wound.’

Copala Trique rian ‘face’ > ‘on top of’. Ex.

Copala Trique (Hollenbach 1995: 174, 179)

(a) rian 1 2  ne?e 3 h  a 3 2
   face baby DEC
   ‘the baby’s face’

(b) oto 3 2 h  lu 3  rian 3 2  yana 1 2  a 1 2
   sleeps cat face platform DEC
   ‘The cat is sleeping on top of the platform.’

Researchers have found 2 out of 125 African languages and 6 out of 104 Oceanic languages to derive a locative marker UP(on) from a noun meaning ‘face’ (Heine et al. 1991: 126; Bowden 1992: 36). For various other grammaticalizations of nouns meaning ‘face’ in the Mixtecan language family, see Hollenbach 1995.

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; EYE; HEAD; NECK; SHOULDER.
FAIL (‘to fail’, ‘to lack’, ‘to miss’) > AVERTIVE

French *faillir* ‘fail’, ‘sin’, ‘err’ > *failli*, past participle + infinitive > avertive marker ‘was on the verge of do-ing but did not do’. Ex.

French (Kuteva 1998: 116, 118)

a) *Elle a failli.*
   - she have:3:SG:PRES sin/err:PAST:PARTCP
   - ‘She has sinned.’ (or ‘She has born an illegitimate child.’)

b) *La route est glissante et j’ai failli tomber.*
   - DEF road be:3:SG:PRES slippery and 1:SG
   - have:PRES fall/sin:PAST:PARTCP fall:INF
   - ‘The road is slippery and I nearly fell.’

Turkish -*yaz-* ‘sin’, ‘err’, ‘fail’, ‘miss’ > -*yaz-* ‘was on the verge of do-ing but did not do’, auxiliary. Ex.

Turkish (Kuteva 1998: 116)

   - öl- e- yazdi.
   - die- GER- sin/err/fail/miss:3:SG:PAST
   - ‘He nearly died.’


Tariana (Aikhenvald 1997: 28)

   - ha- na- nuku nu- hweta- mayā
     - this- CL:VERTICAL-TOP 1:SG- fall:CAUS-ALMOST
   - nhupa- ka.
   - 1:SG:grab- DEC
   - ‘I almost dropped this long one (pen) but managed to grab it.’


Haitian CF (Hall 1953: 55)

   - li mākè fè- m pèdi pitit mwè.
     - (3:SG miss make-1:SG lose child my)
   - ‘He almost made me lose my child.’

This grammaticalization appears to be an instance of a more general process whereby verbs are grammaticalized to auxiliaries denoting tense, aspect, or modal functions; compare *BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; KEEP; LEAVE; PUT*. FAIL verbs may also give rise to plain negation markers; see Givón 1979a and also LACK > NEGATION.
**FALL (‘to fall (down)’) > (1) DOWN**


The evidence for this hypothesis is far from satisfactory, the more so since it is confined to African examples. We have nonetheless included it, first, on account of evidence presented by Svorou (1994), according to whom fall-verbs may be grammaticalized to spatial grams for DOWN. Second, this would appear to be an instance of a more general process whereby process verbs, on account on some salient semantic property, give rise to grammatical markers highlighting that property; see, for example, descendent; exceed; finish; pass.

**FALL (‘to fall (down)’) > (2) PASSIVE**


This process, proposed by Haspelmath (1990), has not yet been sufficiently described; more research is required on its exact nature and genetic and areal distribution. It appears to be an instance of a more general process whereby constructions involving certain process verbs are grammaticalized to passive constructions; see eat; get; see; see also descendent.

**FATHER > MALE**

Nouns for ‘father’ have been grammaticalized in some languages to closed-class categories denoting male participants, typically as adjectival modifiers or derivative affixes. !Xóõ àa ‘father’, noun > ‘male’, modifier. Ex.

!Xóõ (Güldemann 1999b: 69; quoted from Traill 1994: 154, 174)

<table>
<thead>
<tr>
<th>tâa</th>
<th>àa</th>
<th>gûmi</th>
<th>àa</th>
</tr>
</thead>
<tbody>
<tr>
<td>person father</td>
<td>cattle father</td>
<td>‘man’</td>
<td>‘ox’</td>
</tr>
</tbody>
</table>

More cross-linguistic data are required to establish this grammaticalization, which appears to be an instance of a more general process whereby human nouns, on account of some salient semantic characteristic, give rise to grammatical markers highlighting that characteristic; see also child; man; mother; woman.

**FIELD > OUT**


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21 An anonymous reader of an earlier version of this book noted that the target sense of Basque landa “is more commonly ‘except for’, ‘besides’, ‘in addition to’, rather than ‘outside’, though ‘outside’ is securely attested, as in Euskal Herririk landa ‘outside the Basque Country’.”
information on the areal and genetic distribution of this process is required. This appears to be an instance of a process whereby a noun, on account of some salient semantic property (in this case, location outside the home), gives rise to a grammatical marker highlighting that property; see, for example, back; earth; sky.

**FINISH** (‘to finish’, ‘to complete’, ‘to end’) > (1) AFTER


The exact nature of this process is not entirely clear. Conceivably, it is conceptually related to the (>) FINISH > CONSECUTIVE grammaticalization.

**FINISH** (‘to finish’, ‘to complete’, ‘to end’) > (2) ALREADY


**Swahili**

(a) *i- me- (kw-)*isha.

\[\text{c9-PERF-INF-finish}\]

‘It is finished.’

(b) *i- me- (kw-)*isha *fika*.

\[\text{c9-PERF-INF-finish arrive}\]

‘It has arrived already.’


**Sranan CE** (Plag 1995: 125)

\[\text{Mi memree wie abie piekienwan kaba.}\]

I think we have little:one already

‘I thought we already had little ones.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare **begin; come from; come to; do; go to; keep; leave; put**.

**FINISH** (‘to finish’, ‘to complete’, ‘to end’) > (3) COMPLETIVE

Medieval Chinese (eighth–tenth centuries A.D.) liao ‘to finish’, ‘to accomplish’, verb used as *V₂* in a series of two verb phrases > *le* completive marker, aspect-

\[\text{According to Sun (1996: 85), liao was used mostly in the sense of ‘to complete’, ‘to understand’, or ‘to be obvious’ in Middle Chinese.}\]

**Middle Chinese (Jinshu Fuxian zhuan; quoted from Sun 1996: 85)**

(a) guan- shi wei yi liao ye.

official- matter NEG easy complete PART

‘The government matter is not easy to finish.’

**Modern Mandarin Chinese (Sun 1996: 89)**

(b) wo chi le fan le.

I eat ASP food CRS

‘I have eaten.’

Lingala -sila ‘finish’, ‘end’, verb > egressive auxiliary (Mufwene and Bokamba 1979: 244–6). Yabem bacnê ‘end, be finished’ > terminative auxiliary (coordinate to main verb, inflected only in the third person singular). Ex.

**Yabem (Thomas Müller-Bardey, personal communication)**

bôc seng aèacma janggom gê- bacnê.

pig 3:PL:eat our corn 3:SG:be:finished

‘The pigs have eaten up our corn.’

Sango a-we ‘be finished’ > awe, perfective marker (Thornell 1997: 122). Ex.

**Sango (Thornell 1997: 119)**

(a) Kua a- we.

work AGR-be:finished

‘The work has finished.’

(b) Mbï fatigué awe.

I get:tired PFV

‘I am tired.’

Ewe vọ ‘end’, ‘be finished’, verb > terminative particle. Ex.

**Ewe**

(a) é- vọ.

3:SG:end

‘It is finished.’

(b) é- dë u i vọ.


‘He has eaten it up.’


**Engenni (Lord 1989: 365)**

ò kpei dhe me.

he wash finish me

‘He finished washing me.’

**Rama (Craig 1991: 476)**

(a) `tabulaak tkeeruk nsu- atkul- u.
evening grave 1:PL- finish- TNS

‘We finished (digging) the grave in the evening.’

(b) `dor y- aakang- atkul- u.
door 3- shut- ASP- TNS

‘She shut the door tight.’


**Bari (Heine and Reh 1984: 127)**

```
nan a- jo k n.
1:SG PAST- PLU do
```

‘I had done it.’


**Spanish (Halm 1971: 160)**

```
No acab- o de entender- lo.
(NEG finish-1:SG PREP understand-3:M:SG:OBJ)
```

‘I don’t understand that completely.’

Siroi sulu- ‘finish’ > completive aspect marker, auxiliary. Ex.

**Siroi (Wells 1979: 57)**

```
nde- ke sulu- wam- ngat.
go:down-CL finish- INT- 3:SG:FUT
```

‘It will fall down entirely.’


**Sri Lanka CP (Stolz 1987a: 296)**

```
E:li ja: fōla: e:w ja: ka: fōla:
3:SG PAST say 3:SG PAST PERF say
```

...
folatu.
say:QUOT
‘He said he (had) told (you).’

Negerhollands CD kabáá (< Portuguese acabar) ‘finish’, action verb > comple-
tive aspect auxiliary. Ex.

Negerhollands CD (Stolz 1986: 185, 186)

\[
\begin{array}{cccccc}
tee & am & a & kabáá & kup & it & de \\
\text{till} & 3:SG & PERF & finish & cut & out & DET \\
place & & & & & & \\
‘till he had finished clearing the field.’
\end{array}
\]

This grammaticalization appears to be an instance of a more general process
whereby process verbs are grammaticalized to auxiliaries denoting tense or
aspect functions; compare BEGIN; COME FROM; COME TO; DO; GO TO; KEEP;
LEAVE; PUT. Since COMPLETIVE markers may develop further into PAST
tense markers (see Bybee et al. 1994), we also find PAST markers being derived
from FINISH verbs; for example Ewe kq ‘end, ‘have finished’ > “Dahome”
dialect of Ewe -kq-, verbal past prefix. Ex.

“Dahome” dialect of Ewe (Westermann 1907: 139–40)

\[
m- kq- sa.
1:SG-PAST-sell
‘I sold.’
\]

FINISH (‘to finish’, ‘to complete’, ‘to end’) > (4)
CONSECUTIVE

Swahili i-ki-isha ‘if it is finished’ > consecutive marker kisha ‘then’. Kxoe tá-xú-
nò (lit.: ‘thus–quit/finish-if’, ‘if it is over like that’) > ‘(and) then’, consecutive
discourse marker. Ex.

Kxoe (Köhler 1989: 565, 566)

(a) yà- xú nò //áé-m ó-ká té
come-TERM if home-3:M:SG at stay
nò. . . .
if
‘When you arrive and you are at your residence. . . .’

(b) tāá- xú- nò cii //ó- yi-
thus-TERM-if go:to lie:down-
ti- hí . . .
FREQ-PAST
‘and then they used to go (there) and to sleep. . . .’

||Ani tiò khúrí nù ‘then when it is finished’ > ‘after that’, marker introducing a
new discourse paragraph. Ex.
Portuguese *acabar* ‘to finish’, ‘complete’ > Kabuverdiano CP *cabá*, temporal conjunction (‘then’). Ex.

**Kabuverdiano CP** (Stolz 1987a: 296–7)

\[
\begin{array}{cccccc}
El & cendê & candêr, & el & sentá & pêl & d’ \\
3:SG & light & candle & 3:SG & caress & skin & of \\
cara, & cabá & el & bá & abri. & \\
face & then & 3:SG & go & open & \\
\end{array}
\]

‘She lit a candle, caressed her face and went then to open the door.’

See also Bavin (1983: 160). This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to markers used to structure narrative discourse; compare *come*; *go*.

**FINISH** (‘to finish’, ‘to complete’, ‘to end’) > (5) PERFECTIVE


This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare *begin*; *come from*; *come to*; *do*; *go to*; *keep*; *leave*; *put*.

**FIRST (TEMPORAL) > BEFORE**


**Basque (anonymous reader)**

\[
\begin{array}{cccccc}
etxe- & ra & joan & baino & lehen \\
house- & ALL & go & than & first \\
\end{array}
\]

‘before going home’
This hypothesis (see Haspelmath 1997b) does not appear to be well established; conceptually it would seem equally plausible that there is also a reverse directionality. More research is required on this issue.

‘Fitting, be’ see suitable

**FLANK (body part) > SIDE (SPATIAL)**


It would seem that this grammaticalization starts out with a body part noun (‘flank’) that acquires the additional meaning ‘side’. Subsequently, the noun may grammaticalize into an adverbial (e.g., ‘aside’) or an adpositional item (‘beside’; cf. Svorou 1994: 72). This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also back; belly; buttocks; eye; face; head; neck; shoulder.

**FOLLOW > (1) ACCORDING TO**

Latin sēqui ‘follow’, sēcundus ‘following’ (gerund, de-verbal adjective) > preposition sēcundum ‘along’, ‘(immediately) after’, ‘according to’, ‘for (the benefit of)’ (Kühner and Holzweissig [1912] 1966: 935). Swahili ku-fuatana na ‘to follow each other’ > kufuatana na ‘following’, ‘according to’.

More research is required on the exact nature and the genetic and areal distribution of this process. Nevertheless, it appears to be an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare come from; give; go to; leave; see; take.

**FOLLOW > (2) BEHIND**


**Albanian** (Buchholz et al. 1993: 391–2)

```plaintext
nga       pas
from behind
```

Bowden (1992: 38) found seven Oceanic languages where verbs for ‘follow’ have given rise to BEHIND markers. This is an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to locative markers; compare arrive; cross; descend.

**FOLLOW > (3) COMITATIVE**

preposition (Hagège 1993: 204; Peyraube 1996: 191). The first instances of gen as a comitative preposition are attested in the eighteenth century, and its further development into a conjunction started in the nineteenth century (Peyraube 1996: 191). Hagège (1993: 204) notes that at present this item has in 8 percent of its occurrences the lexical meaning ‘follow’, while the grammatical uses account for 92 percent of its appearances.

Conceivably, the development of the Chinese verb tong can be related to this general process. In Archaic Chinese tong meant ‘to be the same as’ and later ‘to share with’ and ‘to accompany’. Probably during the Tang period, tong was grammaticalized to a comitative preposition. Ex.

*Tang period Chinese (Han Shan shi; quoted from Peyraube 1996: 191)*

<table>
<thead>
<tr>
<th>bai</th>
<th>yun</th>
<th>tong</th>
<th>he</th>
<th>fei.</th>
</tr>
</thead>
<tbody>
<tr>
<td>white</td>
<td>cloud</td>
<td>with</td>
<td>crane</td>
<td>fly</td>
</tr>
</tbody>
</table>

‘White clouds are flying away (together) with the crane.’

In Contemporary Chinese (i.e., from the nineteenth century onward), tong began to function as a coordinating conjunction (Peyraube 1996: 190–1).

This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare come from; give; go to; leave; see; take. See also COMITATIVE > NP-AND.

### FOOT > DOWN

Silacayoapan sàʔà ‘foot’ > ‘bottom of’. Ex.

*Silacayoapan (Hollenbach 1995: 178; quoted from Shields 1988: 317)*

<table>
<thead>
<tr>
<th>kándúʔù</th>
<th>nà</th>
<th>sàʔà</th>
<th>yítò</th>
</tr>
</thead>
<tbody>
<tr>
<td>are:lying</td>
<td>they</td>
<td>foot</td>
<td>tree</td>
</tr>
</tbody>
</table>

‘They are lying [at] the base of the tree.’


*Kisi (Childs 1995: 130)*

<table>
<thead>
<tr>
<th>ò</th>
<th>wá</th>
<th>kùŋndáŋ</th>
<th>ò</th>
<th>bɔɔ</th>
<th>bèŋgú</th>
</tr>
</thead>
<tbody>
<tr>
<td>he</td>
<td>aux</td>
<td>groan</td>
<td>to</td>
<td>bush</td>
<td>foot</td>
</tr>
</tbody>
</table>

‘He was groaning under the bushes.’

See Hagège 1993: 214 and Heine et al. 1991: Chapter 5 for more examples. For various other grammaticalizations of nouns meaning ‘foot’ in the Mixtecan language family, see Hollenbach 1995. Bowden (1992: 36) found ten Oceanic languages where terms for ‘feet’ or ‘legs’ have given rise to DOWN markers. This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative position, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; EYE; FACE; FLANK; HEAD; NECK.
FOOTPRINT > BEHIND


Zande (Canon and Gore [1931] 1952: 38)
(a) Fuo bahú du crē.
   ‘A lion’s footprints are here.’
(b) Mi nandu fuo ko.
   ‘I am going after him.’

While this appears to be a conceptually appealing process, examples have so far been found only in African languages. Nevertheless, this appears to be an instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also back; earth; sky; trace.

FOREHEAD > FRONT


Dullay (Amborn et al. 1980: 102)

<table>
<thead>
<tr>
<th>Payisa</th>
<th>yéela</th>
<th>miínacé</th>
<th>ákkád’i.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payisa 1:SG:LOC in:front:of sits</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Payisa sits in front of me.’

Bulu asu ‘forehead’, ‘front’, noun > ósu ‘ahead’, locative adverb (Hagen 1914: 215, 291). There are only two African language phyla where this process has been documented. Nevertheless, it appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also back; belly; breast; buttocks; eye; face; flank; head; neck.

‘From’ see ablative

FRONT > (1) BEFORE


Kwaio (Keesing 1991: 335)
(a) na’o-na ‘ifi
   ‘in front of the house’
(b) na’o-na omea
‘before the mortuary feast’

Compare Chinese qian ‘front’ > ‘earlier’. Ex.

Chinese (Alain Peyraube, personal communication)

qian san nian
front three year
‘the last three years’

See Haspelmath 1997b for further information on this development. This grammaticalization appears to be an instance of a more general process whereby spatial concepts are used to also express temporal concepts; see, for example, ABLATIVE; ALLATIVE; BEHIND; IN; LOCATIVE.

FRONT > (2) LATER

Shona mberi ‘front’, noun of noun class 8 > ‘ahead’, time adverb. Ex.

Shona (Hannan 1987: 339)

zvi-uya zvi-ri mberi- yo.
(c8-excellent c8-be front- DEM)

‘Good things are ahead.’

Moré bēoghé ‘go ahead’, ‘be in front’ > bēoghо ‘tomorrow’, ‘the following day’ (Alexandre 1953b: 36f.). More research is required on the exact nature and the genetic and areal distribution of this process. Nevertheless, it appears to be an instance of a more general process whereby spatial concepts are used to also express temporal concepts; compare ABLATIVE; ALLATIVE; BEHIND; IN; INTERIOR; LOCATIVE.

FUTURE > EPISTEMIC MODALITY

English will, future tense marker > marker of epistemic modality in certain contexts that rule out a future meaning. Ex.

English (anonymous reader)

(a) Susie will be at the party (tomorrow).
(b) That will be Susie. (on hearing the doorbell)

German werden (+ infinitive), future tense marker > marker of epistemic modality. Ex.

German

(a) Sie wird bald kommen.

she will soon come

‘She will come soon.’

(b) Sie wird jetzt zu Hause sein.

she will now at home be

‘She will be at home by now.’
Bulgarian ște, future marker > marker of epistemic modality. Ex.

**Bulgarian**

(a) *Konferencijata ște se sástoi v* conference:def fut refl take:place in Berlin.

‘The conference will take place in Berlin.’

(b) *Tja ște e pri prijatelja si* she fut be:3:sg:pres at boyfriend refl

po tova vreme.
at this time

‘She will be at her boyfriend’s place at this time.’

Swahili -ta-, future tense prefix > marker of epistemic modality. Ex.

**Swahili**

(a) *A-ta- ku- ja.*

cl-fut-inf-come

‘He will come.’

(b) *A-ta- ku- wa nyumba-ni sasa.*

cl-fut-inf-be house-loc now

‘He will be at home by now.’

For other languages expressing future and epistemic modality (possibility, probability) by means of the same marker, see Bybee et al. 1994: 205ff., 347–8; a more detailed treatment on Greek can also be found in Tsangalidis 1999. Concerning a treatment of modality as a semantic map, see van der Auwera and Plungian 1998.

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**GET** (*‘to get’, ‘to receive’, ‘to obtain’) > (1) ABILITY


**Khmer** *(Matisoff 1991: 425–6)*

(a) *look cong baan choo-kuh tee?* 2:sg want get matches q

‘Do you want to get some matches?’

(b) *kñom sdap baan.* (1:sg ? get)

‘I can understand.’

**Vietnamese (Kuhn 1990: 9)**

(a) sáng nay chị to:i d’u’q’c tho.

morning this sister 1:SG receive letter

‘This morning, my (elder) sister received a letter.’

(b) to:i bà’t hai con cá d’u’q’c.

1:SG catch two CLASS fish receive

‘I am able to/can catch two fish.’


**Old Chinese (300 B.C.; Shijing Guangsui; quoted from Sun 1996: 112)**

(a) qiú zhi bu de.

want her NEG obtain

‘(The lord) wished (for) her, (but) did not get (her).’

**Middle Chinese (tenth century A.D.; Zutangji 5/98/7; quoted from Sun 1996: 121)**

(b) hai jie pan de xu-kong bu?

still explain judge possible empty NEG

‘Can (you) still tell what emptiness is?’

Réunion CF gay‘ ‘to get’, verb (< French gagner ‘gain’) > ‘to be able’. Ex.

**Réunion CF (Corne 1977: 166)**

m i gay lir.

(1:SG CPL get read)

‘I can (am physically able to) read.’

Since ABILITY markers may give rise to PERMISSIVE and POSSIBILITY uses (see ABILITY), GET-verbs can also acquire these meanings (see Bybee et al. 1994 for details).

**GET (‘to get’, ‘to receive’, ‘to obtain’) > (2)**

**CHANGE-OF-STATE**

English get drunk, get rich. Rodrigues CF gan‘ get’ > marker of change-of-state in examples such as the following:


(a) mo fin gan sa avek li.

(1:SG CPL get it with 3:SG)

‘I got it from him.’

---

21 Note that the orthography used for Vietnamese in Kuhn 1990 differs from that of Haspelmath 1990.
kâ kan gan ˆ gro, nu kup li.
(when cane get big 1:PL cut 3:SG)
‘When the cane gets (to be) big, we cut it.’

See also Anderson 1975. This process appears to be associated primarily with contexts where get has adjectives and related words as complements.

**GET (‘to get’, ‘to receive’, ‘to obtain’) > (3) OBLIGATION**


**Old Chinese (300 B.C.; Shijing Guangsui; quoted from Sun 1996: 112)**

(a) qiú zhì bu de.
want her NEG obtain
‘(The lord) wished (for) her, (but) did not get (her).’

**Modern Mandarin Chinese (Sun 1996: 160)**

(b) hai deí chi rou.
still should eat meat
‘(One) still has to eat meat.’

Mandarin Chinese dë ‘get’, ‘obtain’, ‘take’ > marker of strong obligation (Denning 1987: 48; the strong obligation meaning is recent and geographically restricted).

This is an instance of a pathway whereby process verbs give rise to markers for tense, aspect, and modality; compare begin; come from; come to; do; finish; go to; keep; leave; put.

**GET (‘to get’, ‘to receive’, ‘to obtain’) > (4) PASSIVE**


**Old Chinese (Shiji; quoted from Sun 1996: 63)**

(a) bei shuí hán zhí hai.
receive water cold REL damage
‘Receive damage from flood and cold.’

²⁴ Note that the orthography used for Vietnamese in Haspelmath 1990 differs from that of Kuhn 1990.
²⁵ Originally, bei was a noun meaning ‘blanket’. It later turned into a verb meaning ‘to cover’, ‘to wear’ before acquiring the meanings ‘to receive’, ‘to suffer’, ‘to be affected’ (Peyraube 1996: 176).
²⁶ The first Chinese passive constructions using bei did not involve agents (Alain Peyraube 1989 and personal communication).
Early Medieval Chinese (Shi shuo xin yu: fang zheng; quoted from Peyraube 1996: 176)
(b) Liangzi bei Su Jun hai.
   Liangzi bei Su Jun kill
   ‘Liangzi was killed by Sun Jun.’

Old Chinese de ‘to obtain’, verb > Middle Chinese de, passive marker. Ex.

Old Chinese (300 B.C.; Shijing Guangsui; quoted from Sun 1996: 112)
(a) qiu zhi bu de.
   want her NEG obtain
   ‘(The lord) wished (for) her, (but) did not get (her).’

Middle Chinese (Shiji Zhang Shezhi zhuan; quoted from Sun 1996: 118)
(b) qihou you ren dao gaomiao qian
   later have man steal high:temple front
   yuhuan bu-de.
   jade:ring catch-obtain
   ‘Later there was (a) man stealing the jade ring in front of the high temple and was caught.’


Colloquial German (Lehmann 1991: 517)
   Sie kriegt den Wagen repariert.
   she got the car repaired
   ‘She got the car repaired.’


Welsh (Haspelmath 1990: 42)
   Cafodd y bachgen ei rybuddio gan
   got the boy his warning by
   y dyn.
   the man
   ‘The boy was warned by the man.’

Rodrigues CF gay ‘get’, verb (< French gagner ‘gain’) > passive marker. Ex.

Rodrigues CF (Corne 1977: 164–5)
(a) mo fin gay sa avek li.
   (1:SG CPL get it with 3:SG)
   ‘I got it from him.’

27 Alain Peyraube (personal communication) doubts whether this is really an example of a process from DE ‘to obtain’ to passive marker.
Seychelles CF (Seselwa) gaỵ ‘get’ > passive marker. Ex.

Seychelles CF (Haspelmath 1990: 42)

zot pa ti gaỵ ěvite dā sa festē.
they not PAST PASS invite in that party
‘They did not get invited to that party.’

See Corne 1977: 159–68 for a discussion of ga黟-passives in Indian Ocean creoles. Conceivably, this grammaticalization is related to another pathway, namely (> SUFFER > PASSIVE. This process appears to be an instance of a more general process whereby constructions involving certain process verbs are grammaticalized to passive constructions; see eat; fall; see.

GET (‘to get’, ‘to receive’, ‘to obtain’) > (5) PAST

Khmer baan ‘get’ > past tense/’already’ marker. Ex.

Khmer (Haiman 1999: 156)

haj baan haw Thombaal mɔɔk cuɔp
and PAST call Thombaal come meet
‘and summoned Thombaal to a meeting’


The evidence supporting this process is far from satisfactory, and we may be dealing with a genetically and/or areally defined phenomenon. Still, this grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare begin; come from; come to; do; finish; go to; keep; leave; put.

GET (‘to get’, ‘to receive’, ‘to obtain’) > (6) PERMISSIVE

Since ABILITY markers may give rise to PERMISSIVE and POSSIBILITY uses (see ability), GET-verbs, after having developed into ABILITY markers, can also acquire these meanings (see Bybee et al. 1994 for details). English get to > ‘manage to’, ‘be permitted to’. Early Archaic Chinese (tenth–second centuries B.C.) de ‘to obtain (something after making an effort)’, verb > Late Archaic Chinese huo ‘to obtain (something after making an effort)’, verb > Late Archaic Chinese huo, marker of
permission (Peyraube 1999). This is an instance of a more general pathway whereby process verbs give rise to markers of tense, aspect, and modality; compare BEGIN; COME FROM; COME TO; DO; FINISH; GET > POSSIBILITY; GO TO; KEEP; LEAVE; PUT. See also ABILITY.

**GET** (‘to get’, ‘to receive’, ‘to obtain’) > (6) PERMISSIVE

Old Chinese *de* ‘to obtain’, verb > Middle Chinese *de* ‘have’.²⁸

**Old Chinese** (300 B.C.; Shijing Guansui; quoted from Sun 1996: 112)

(a) qiu zhi bu de.

want her NEG obtain

‘(The lord) wished (for) her, (but) did not get (her).’

(b) yi ren de wo rou.

one person obtain I flesh

‘One (of them) has my flesh.’

In many French-based creoles, the French verb *gagner* ‘to gain’, ‘to win’ has acquired uses like ‘to obtain’, ‘to get’, and this verb has been grammaticalized to a marker of predicative possession, for example, Haitian CF *gé*(gné) ‘to have’.

**Ex.**

**Haitian CF** (Hall 1953: 31)

\[
mwé pa- gé plis.
\]

\[
(1:SG NEG-have more)
\]

‘I have no more.’

See also Anderson 1975. More research is required on the exact nature and the genetic and areal distribution of this process. This is an instance of a pathway whereby process verbs, on account of some salient semantic property (in this case, implied possession), give rise to grammatical markers.

**GET** (‘to get’, ‘to receive’, ‘to obtain’) > (7) H-POSSESSIVE

**Old Chinese** (300 B.C.; Shijing Guansui; quoted from Sun 1996: 112)

(a) qiu zhi bu de.

want her NEG obtain

‘(The lord) wished (for) her, (but) did not get (her).’

**Tenth century Chinese** (Zutangji 1/74; quoted from Sun 1996: 122)

(b) yi ren de wo rou.

one person obtain I flesh

‘One (of them) has my flesh.’

In many French-based creoles, the French verb *gagner* ‘to gain’, ‘to win’ has acquired uses like ‘to obtain’, ‘to get’, and this verb has been grammaticalized to a marker of predicative possession, for example, Haitian CF *gé*(gné) ‘to have’.

**Ex.**

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‘I have no more.’

See also Anderson 1975. More research is required on the exact nature and the genetic and areal distribution of this process. This is an instance of a pathway whereby process verbs, on account of some salient semantic property (in this case, implied possession), give rise to grammatical markers.

**GET** (‘to get’, ‘to receive’, ‘to obtain’) > (8) POSSIBILITY

Since ABILITY markers may give rise to PERMISSIVE and POSSIBILITY uses (see ABILITY), GET-verbs can also acquire these meanings (see Bybee et al. 1994 for details). Archaic Chinese (tenth–second centuries B.C.) *de* ‘to obtain’, verb > Early Medieval Chinese (second–sixth centuries A.D.) *de*, marker of ability or possibility (Peyraube 1996: 194, 1999; Sun 1996: 112–14). Early Archaic Chinese *huo* ‘to obtain (something after making an effort)’, verb > Late Archaic Chinese *huo*, auxiliary verb expressing possibility (Peyraube 1999).

This is an instance of a more general pathway whereby process verbs give rise to markers of tense, aspect, and modality; compare BEGIN; COME FROM;

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²⁸ Among the various grammaticalization processes that the verb *de* underwent in the history of Chinese (see Sun 1996: 108–62), the present one constitutes only a minor, less common pattern.
COME TO; DO; FINISH; GET > OBSESSION; GET > PERMISSIVE; GO TO; KEEP; LEAVE; PUT. See also ABILITY.

GET (‘to get’, ‘to receive’, ‘to obtain’) > (9) SUCCEED
German *kriegen* ‘to get’ > ‘manage to do’. Ex.

German
(a) Er kriegt einen neuen Computer.
he gets a new computer
‘He gets a new computer.’
(b) Er kriegt das nicht geregelt.
he gets that not settled
‘He doesn’t get that settled.’

Mauritius CF *gañ* ‘get’ > ‘succeed doing’. Ex.

Mauritius CF (Papen 1978: 480)

A-fors reflesi, muê la gañ fer.
(by:dint try 1:SG PAST get do)
‘By dint of trying I succeeded in doing it.’

More research on the nature and genetic and areal distribution of this process is required.

GIVE > (1) BENEFACTIVE
Cahuilla *-máx*- ‘to give’, verb root > *-max-*, benefactive affix (Seiler 1977: 151).


Thai (Bisang 1998b: 771)

Dang teach arithmetic give Suda give
friend
‘Dang taught arithmetic to Suda for his friend.’


Efik (Welmers 1968: 68–9)

yét ûsan nò èyè!
wash dish give him
‘Wash the dishes for him!’

Ijo (Kolokuma dialect) *-pir* ‘give’, verb > benefactive postposition (Williamson 1965: 35). Zande *fu* ‘give’, verb > *fu*, benefactive preposition (Canon and Gore

**Tagbana (Carlson 1991: 214)**

\[
\begin{align*}
\text{Ki} & \quad \text{yo} & \quad \text{kûdi} & \quad \text{kâ!} \\
\text{it} & \quad \text{say} & \quad \text{chief} & \quad \text{give}
\end{align*}
\]

‘Say it for the chief!’

Lahu *pi* 'give' > benefactive marker (indicating that the verbal action impinges on a third person). Ex.

**Lahu (Matisoff 1991: 396)**

\[
\begin{align*}
\text{cho} & \quad \text{pi}.
\end{align*}
\]

‘Chop for him/her/them.’


**Yao Samsao (Matisoff 1991: 428)**

(a) \[
\begin{align*}
\text{nîn} & \quad \text{pun} & \quad \text{pèw} & \quad \text{yiə}.
\end{align*}
\]

3:SG give axe 1:SG

‘He gave me an axe.’

(b) \[
\begin{align*}
\text{maa} & \quad \text{cáp} & \quad \text{bûdò?-gwây} & \quad \text{pun} & \quad \text{fû?-cûy}.
\end{align*}
\]

mother cut fingernails give child

‘The mother cut the child’s nails for him.’


**Vietnamese (Kuhn 1990: 5–6)**

(a) \[
\begin{align*}
\text{bà} & \quad \text{Ba} & \quad \text{cho} & \quad \text{Lan} & \quad \text{mọ:t} & \quad \text{cái} & \quad \text{ví}.
\end{align*}
\]

Mrs. Ba give Lan one CLASS bag

‘Mrs. Ba has given Lan a bag.’

(b) \[
\begin{align*}
\text{tø:i} & \quad \text{mua} & \quad \text{cho} & \quad \text{bà} & \quad \text{Hai} & \quad \text{cái} & \quad \text{d’ò:ng hò:}
\end{align*}
\]

1:SG buy BEN Mrs. Hai CLASS watch dò.

‘I bought this watch for Mrs. Hai.’


**Tenth century Chinese (Zutangji; quoted from Sun 1996: 22)**

\[
\begin{align*}
yu & \quad \text{lao} & \quad \text{seng} & \quad \text{guo} & \quad \text{jìng} & \quad \text{shuí- ping}.
\end{align*}
\]

for old monk pass clean water-bottle

‘(Someone) rinsed the bottle clean for the old monk.’

**Kxoe (Köhler 1981a: 503)**

\[
djåo- \quad rō- \quad ma- \quad à- \quad tè \quad tí \quad ‘à.
\]

work- II- BEN- I- ASP 1:SG OBJ

(He) works for me.’

Tamil koṭu ‘give’, verb of action > auxiliary marking the benefactive case. Ex.

**Tamil (T. Lehmann 1989: 227)**

\[
\text{raajaa} \quad \text{kumaar-ukku-k} \quad \text{katav-ai-t} \quad \text{tira-} \quad \text{ntu}
\]

Raja Kumar- DAT door- ACC open- PARTCP

koṭu- tt- ān. give- PAST- 3:M:SG

‘Raja opened the door for Kumar.’

This is a common grammaticalization process in Atlantic pidgins and creoles; for further examples see Holm 1988: 184–5 and Muysken and Veenstra 1995: 290ff. Negerhollands CD gi (Dutch geven) ‘give’, action verb > benefactive preposition. Ex.

**Negerhollands CD (Stolz 1986: 185, 216)**

(a) \[
\text{astör} \quad \text{mi} \quad \text{ga:} \quad \text{gi} \quad \text{si}
\]

(after 1:SG CPL give POSS:3:SG)

\[
\text{kabái} \quad \text{watōr}
\]

horse water

‘after I had given his horse water’

(b) \[
\text{as} \quad \text{ju} \quad \text{kan} \quad \text{fang} \quad \text{som} \quad \text{fligi}
\]

(CONJ 2:SG can catch some flies)

\[
\text{gi} \quad \text{mi}
\]

1:SG BEN

‘when you can catch some flies for me’

Fa d’Ambu CP da ‘give’ > benefactive marker. Ex.

**Fa d’Ambu CP (Post 1992: 158)**

\[
\text{amu} \quad \text{ske} \quad \text{fé} \quad \text{taba} \quad \text{da-} \quad \text{bó.}
\]

1:SG PART make work give-you

‘I’ll do the work for you.’

See also Newman 1996, 1997 for more details. In Old Chinese, the verb yu ‘to give’ has been grammaticalized to a benefactive marker, but it has also given rise to a comitative pre-verbal preposition (Sun 1996: 44). More research is required on the latter line of grammaticalization. This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GO TO; LEAVE; SEE; TAKE.
**GIVE > (2) CAUSATIVE**

Thai ʰǎj ‘give’ > causative complementizer. Ex.

**Thai (Matisoff 1991: 437)**

\[
\begin{array}{cccccc}
\text{mèe-} & \text{khrua} & \text{hàj} & \text{dèk} & \text{tàt} & \text{nyà} & \text{pen} \\
\text{cook} & \text{give} & \text{child} & \text{cut} & \text{meat} & \text{be} \\
\end{array}
\]

\[
\begin{array}{cccc}
\text{chín} & \text{lèk-} & \text{lèk.} \\
\text{slice} & \text{small-small} \\
\end{array}
\]

‘The cook had the child cut the meat into tiny slices.’

Vietnamese ḍh ‘give’ > (benefactive adposition >) permissive/causative complementizer. Ex.

**Vietnamese (Matisoff 1991: 429)**

\[
\begin{array}{cccccc}
\text{ông} & \text{ây} & \text{không} & \text{cho} & \text{tòi} & \text{thói.} \\
\text{hon} & \text{3:SG} & \text{NEG} & \text{give} & \text{1:SG} & \text{resign} \\
\end{array}
\]

‘He wouldn’t let me resign.’

Khmer qaoy ‘give’ > causative complementizer (with sentential object). Ex.


(a) \[
\begin{array}{cccc}
\text{mənuh} & \text{prəh} & \text{baan} & \text{qaoy} & \text{siəwpəəw} \\
person & male & PAST & give & book \\
\end{array}
\]

\[
\begin{array}{cccc}
\text{təw} & \text{mənuh} & \text{srəy.} \\
to & person & female \\
\end{array}
\]

‘The man gave the book to the woman.’

(b) \[
\begin{array}{cccc}
\text{kənom} & \text{qaoy} & \text{kət} & \text{ruət.} \\
1:SG & give & 3:SG & run \\
\end{array}
\]

‘I had him run (intentionally).’

\[
\begin{array}{cccc}
\text{kənom} & \text{twəə} & \text{qaoy} & \text{kət} & \text{ruət.} \\
1:SG & do & give & 3:SG & run \\
\end{array}
\]

‘I made him run (maybe by scaring him inadvertently).’

Luo miyo ‘give’, verb > causative auxiliary. Ex.

**Luo (Stafford 1967: 72)**

\[
\begin{array}{cccccccc}
\text{Koth} & \text{no-miyo} & \text{wa-} & \text{bedo} & \text{e} & \text{tiend} & \text{yath.} \\
\text{rain} & 3- & \text{give} & 1:PL-stay & at & \text{foot} & \text{tree} \\
\end{array}
\]

‘The rain made us stay at the foot of the tree.’


The development GIVE > CAUSATIVE tends to involve a stage where in the addition to CAUSATIVE there is also a PERMISSIVE function, referred to by Matisoff (1991: 427–31) as a “permissive-causative function.” See also Newman 1996, 1997 for more details.
GIVE > (3) CONCERN

Zande fu ‘give’, verb > fu, fo, marker of concern. Ex.

Zande (Canon and Gore 1926: 37)

Mi nazinga fo ko.
‘I am angry with him.’

Fa d’Ambu CP da ‘give’ > concern marker. Ex.

Fa d’Ambu CP (Post 1992: 158)

dantu television xa fa xa
in television PART speak PART

montyi da kuz.
much give thing

‘On television they speak often about the affair.’

This is an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GO TO; LEAVE; SEE; TAKE.

GIVE > (4) DATIVE

Archaic Chinese yu ‘to give’ > Medieval Chinese (around the eighth century A.D.) yu ‘to’, dative preposition, arising in a serial verb construction (Peyraube 1988: 633–40; see also Peyraube 1996: 178–82, 1999: 204; Sun 1996). In Early Mandarin Chinese, yu was replaced by the verb gei ‘give’, which also developed into a benefactive and dative preposition. These stages of development are illustrated here with examples from Modern Mandarin Chinese.

Modern Mandarin Chinese (Sun 1996: 44)

(a) ta gei le wo wu-kuai qian.
3:SG give ASP 1:SG five CLASS
‘He gave me five dollars.’

(b) wo xie le yi- feng xin gei ta.
1:SG write ASP ONE-CLASS letter to him
‘I wrote him a letter.’


Ewe (Heine et al. 1991: Chapter 1)

(a) me- ná ga kofí.
1:SG- give money Kofi
‘I gave Kofi money.’

(b) é gblo e ná m.
3:SG say it give me
‘He told it to me.’

**São Tomense CP** (Romaine 1988: 56)

\[ e \ f a \ d a \ i n e. \]

He talked give them

‘He talked to them.’

Saramaccan CE dá (⟨ Portuguese dar ‘give’) ‘give’ > dative marker. Ex.

**Saramaccan CE** (Veenstra 1996: 101, 102)

\[ (a) \ m i \ d a \ d ì \ mì ì \ m ì ì î . \]

1:SG give DET:SG child money

‘It is me that gave money to the child.’

\[ (b) \ d e \ b i \ t ã k ì \ d ì \ h e n \ t ã ã \ldots \]

3:PL TNS talk give 3:SG say

‘They told him that...’

As these examples from Saramaccan CE show, BENEFATIVE markers may give rise to DATIVE markers, for example, when the main verb is an utterance verb, such as ‘say’ or ‘tell’, or a transaction verb, such as ‘sell’. In a number of these examples, we are dealing with intermediate stages of evolution where the relevant marker is still used for BENEFATIVE senses but has acquired DATIVE senses in specific contexts where a BENEFATIVE interpretation no longer makes sense. Not infrequently, this process is part of a more general chain of grammaticalization: GIVE > BENEFATIVE > DATIVE; see also Newman 1996, 1997 for more details. This is another instance of a pathway whereby process verbs give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GO TO; LEAVE; SEE; TAKE.

**GIVE > (5) PURPOSE**

Acholi o-miyo ‘give’ (third person past form) > ‘to cause’, ‘because of’, ‘so that’, result conjunction. Ex.

**Acholi** (Malandra 1955: 115)

\[ En \ o - \ y e l - a \ m ã d a a, \ o m i y o \ a - g o y - e. \]

(he 3:SG-annoy-1:SG much give 1:SG-beat-3:SG)

‘He vexed me so much so that I beat him.’

Thai hây ‘give’ > purposive marker. Ex.

**Thai** (Song 1997: 327)

\[ (a) \ p h õ c \ h ã y \ ë æ n \ P ū k. \]

father give money Pook

‘Father gave Pook (some) money.’
He wrote a letter so that you would answer.'

For a detailed discussion of purpose extensions of ‘give’, see Newman 1996: 171–81. The Acholi example appears to suggest that it is RESULT-clauses, rather than PURPOSE-clauses, that are the primary target of GIVE-verbs. One common source of PURPOSE markers consists of BENEFACTIVE grams. Conceivably, we are dealing here with a more extended chain: GIVE > BENEFACTIVE > PURPOSE; see BENEFACTIVE. See also Newman 1996, 1997 for more details. This is another instance of a pathway whereby process verbs give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GO TO; LEAVE; SEE; TAKE.


**Gurenne** (Rapp 1966: 69f.)

\[
\text{Gulese leta ta bo fo so.}
\]

‘Write a letter to your father.’


**Mandarin Chinese**

\[
\text{Tā ná- qù- le liàng- běn shū.}
\]

‘S/He took (away from the speaker) two books.’

A number of instances of this grammaticalization have been reported from pidgin and creole languages. Haitian CF *ale ‘go’ > andative marker. Ex.
Haitian CF (Boretzky 1983: 174)

vøyê  mseyê  a  ale.
(send  man-  DEF  go)

‘Send the man away.’

Grand Ronde Chinook Jargon ūtáwa ‘go’ > ūtu ‘action away from the speaker’ (preceding main verbs); for example, ūtu īskam (lit.: ‘go take’) ‘take away from’ (Grant 1996: 236). Negerhollands CD loop, lo(o) (< Dutch lopen) ‘go’, ‘run’ > ‘away’, directional (andative) adverb. Ex.

Negerhollands CD (Stolz 1986: 216, 234)

(a)  ju  lo:  afo  fa  mi.
(2:SG  go  in front of  1:SG)

‘You go in front of me.’

(b)  Am  a  flig  lo  mi  di  flut.
(3:SG  PERF  fly  away  PREP  DEF  flute)

‘He flew away with the flute.’

For more examples from pidgins and creoles, see Arends, Muysken, and Smith 1995. This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare cross; descend; pass.

GO > (2) CHANGE-OF-STATE

English go > change-of-state marker of limited productivity. Ex.

(a)  He went home.
(b)  He went mad.

Tamil poo ‘go’, verb of motion > auxiliary marking a change-of-state. Ex.

Tamil (T. Lehmann 1989: 224)

paṉai  uṭai-  ntu  pooy-ir-  ru.
(pot  break-  PARTCP  go-  PAST-3:NEUT:SG)

‘The pot got broken.’

French (il) va ‘(he) goes’ > Haitian CF a-, ava-, va-, future marker, conceivably change-of-state marker in examples such as the following:

Haitian CF (Hall 1953: 33)

madām-  là  va-  rich.
(lady-  DEF  ?-  rich)

‘The lady will be rich.’

GO > (3) CONSECUTIVE

‘watch out, now something new is going to happen that is relevant to what follows’), see Heine 2000a. Ex.

**Kxoe (Heine 1997: 33, 36)**

(a) //é cii nù //’àè okà //ge-ê-khoe-dji
reach when home LOC woman- 3:F:PL
reach-I-TERM-II-PAST home LOC
‘And when we reached our home, the women had already arrived there.’

(b) taátenu córò- hè táá-kho(e)-mà ci
then monitor-3:F:SG old-man- 3:M:SG proceed
wó- ò-tè. . . .
find-I-PRES
‘Then an old man found a monitor lizard. . . .’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to markers used to structure narrative discourse; compare **COME; FINISH.**

**GO > (4) CONTINUOUS**


**Wichita (Rood 1976: 65)**

wit- i:ya:
boil- go:randomly
‘be boiling’

Maricopa *yaa-k ‘go’ > progressive auxiliary. Ex.

**Maricopa (Gordon 1986: 219)**

nyaa vesh- k vny- yaa- m- i.
I run- SS DEM- go- DIR- VINC
‘I am running.’

Koasati *aì:i:yan ‘go’ > continuous marker. Ex.

**Koasati (Kimball 1991: 90–1)**

isko- t aì:i:ya- k im-
drink- CONN go- SS 3:STATS-

cokfolôhli- t . . .
be:dizzy- CONN
‘He kept on drinking, became dizzy, and. . . .’

Spanish *andar, ir* + present participle > progressive marker (Bybee and Dahl 1989: 58, 79). The Turkish continuous marker *-yor* appears to derive from the Old Turkish verb *yorimak* ‘go’, ‘walk’. Ex.
Lahu *qay ‘go’ > “versatile” verb having a continuative, inchoative function. Ex.

**Lahu (Matisoff 1991: 407)**

\[ \text{νο? put:on/wear} \]
\[ \text{νο? qay (wear go)} \]
\[ \text{‘put on’, ‘wear’ ‘goes on wearing’} \]


**Aranda (Wilkins 1989: 244)**

\[ \text{angke-rre- ‘speak to each other’} \]
\[ \text{angke-rre-pe-rre- ‘to be continually speaking to each other’} \]


**Negerhollands CD (Stolz 1986: 153, 179)**

(a) Dat  e:nte:n  man  nə  kan  lo:  (that nobody man NEG can go)
apé:  am  be:  (where 3:SG be)
\[ \text{‘so that nobody could go to where she was’} \]

(b) Am  a  ki  e:n  puši  bo  (3:SG PERF see a cat on)
\[ \text{di  hus  lo  was  ši  geséː:} \]
\[ \text{DEF house DUR wash POSS face} \]
\[ \text{‘He saw a cat that was cleaning its face on the house.’} \]

Tok Pisin PE *igo (cf. English go) ‘go’ > continuous aspect marker, emphasizing duration (postverbal). Ex.

**Tok Pisin PE (Sankoff 1979: 44–5)**

(a)  *ol igo wok finis. . . .
\[ \text{‘They had gone to work. . . .’} \]

(b)  *Em  isave pilei long das tasol igo igo. . . .
\[ \text{‘He would keep playing in the dust . . .’} \]

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare **BEGIN; COME FROM; COME TO; DO; FINISH; KEEP; LEAVE; PUT.**
GO > (5) DISTAL DEMONSTRATIVE

**South !Xun (Köhler 1973b: 48)**

\[
\text{dzháú- s- à tòàh} \\
\text{woman-PL-R DISTAL}
\]

‘the women there’ / ‘those women’

South !Xun ’úú ‘go’ + tò’a ‘go’ > ‘úú-tòàh, remote demonstrative. Ex.

**South !Xun (Köhler 1973b: 48)**

\[
\text{dzháú- à ’úú-tòàh} \\
\text{woman-R go- DISTAL}
\]

‘the woman over there (far away)’

Note that Archaic Chinese ZHI ‘to go’ has given rise to a proximal demonstrative (‘this’; Yue-Hashimoto 1995; Alain Peyraube, personal communication). See further Frajzyngier 1987b, 1995. This pathway is suggestive of a process whereby physical motion is used as a structural template to express location. Note, however, that there is an alternative view according to which demonstratives are diachronically, so to speak, “semantic primitives”; that is, they may give rise to various kinds of grammatical markers, while they themselves cannot be historically derived from other entities like lexical items (see Plank 1979; Diessel 1999b: 150ff.). See, however, HERE; THERE.

GO > (6) HABITUAL
CONTINUOUS aspect markers may further develop into habitual aspect markers; hence, GO-verbs may acquire habitual uses. In Djinang, the verb giri- ‘go’ appears to have given rise to an habitual auxiliary (Waters 1989: 131–3), and so has the Diyari verb wapayi ‘go’ (Austin 1998: 30). Negerhollands CD loop, lo(o) (< Dutch lopen) ‘go’, ‘run’, motion verb > durative, progressive, habitual auxiliary. Compare CONTINUOUS; SIT.

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; KEEP; LEAVE; PUT.

GO > (7) HORTATIVE

---

29 There is a possible counterexample to this grammaticalization: the Chinese verb zhi ‘to go’ has been claimed to be derived from the demonstrative pronoun zhi ‘this’ (see Peyraube 1996: 191).
Baka (Christian Kilian-Hatz, personal communication)

(a) gɔ-ɛ na ja ndɔ!
go-IMP INF take banana
‘Go and fetch bananas!’

(b) gɔ ja ndɔ!
go take banana
‘Fetch bananas!’

English go is frequently used in colloquial imperatives, sometimes reinforced by a following and. Ex.

English (anonymous reader)

Go and finish your essay.

French allons ‘we go’, ‘let us go’ has become a first person plural imperative marker, anô, anu, ân, or ânu, in various French-based creoles (see Goodman 1964: 89). This appears to be a process whereby certain verbs assume an interpersonal function in specific contexts involving commands and related interpersonal functions; compare come > hortative; leave > hortative; leave > permissive.

‘Go down’ see descend

GO TO > (1) ALLATIVE


Ewe

(a) é -yi apé.
3:SG-go home
‘She went home.’

(b) me- kpb e yi apé.
1:SG-accompany 3:SG:OBJ go home
‘I escorted him home.’


[Xam (Bleek 1956: 512–13)

(a) ŋ //a ha to:i.
1:SG go DEM ostrich)
‘I go to that ostrich.’

(b) ha !nerri:ja //a: olifantsklu:f.
(3:SG drive go Oliphantskloof)
‘He drives away to Oliphantskloof.’

Mandarin Chinese (Hagège 1975: 97)

woˇmen fe ¯iy ı ¯ba¯n de cháozhe shíyànsuo 
we fly like ADV going:toward lab
pào qù.
r
‘We rushed (lit.: ‘ran as if flying’) toward the lab.’

Fa d’Ambu CP (Post 1992: 157)

wan namín zugá wan budu ba zinál.
ART child throw ART stone go window
‘The child threw a stone at the window.’

Compare Aristar 1991, 1999. This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GIVE; LEAVE; SEE; TAKE.

GO TO > (2) FUTURE


Bari (Spagnolo 1933: 105)

Nan tu kàn.
(I go do)
‘I am going to do.’ (determinative future)

Sotho -ěa ‘go (to)’, verb > -ea-, immediate future tense prefix. Ex.

Sotho (Doke and Mofokeng [1957] 1985: 205)

kē- ęa-rèka
(1:sg-go-buy)
‘I am about to buy.’ / ‘I am going to buy.’ / ‘I shall buy.’


Zulu (Mkhatshwa 1991: 97)

(a) Ba- ya e- Goli.
(3:pl- go loc- Johannesburg)
‘They are going to Johannesburg (eGoli).’

(b) Ba- ya- ku- fika.
(3:pl- fut- inf- arrive)
‘They will arrive.’


Margi (Hoffmann 1963: 212)

ni àrá wi.
(1:sg go run)
‘I shall run.’

**Klao (Marchese 1986: 74)**

(a) 55  
   mū  
   nī  
   tó.  
   he:IMPERF go LOC store  
   ‘He is going to the store.’

(b) 55  
   mū  
   nī  
   kpa.  
   he:IMPERF AUX water hit  
   ‘He will swim.’


**Igbo (Marchese 1986: 110)**

<table>
<thead>
<tr>
<th>ó</th>
<th>gà</th>
<th>àbyá.</th>
</tr>
</thead>
<tbody>
<tr>
<td>he</td>
<td>go</td>
<td>come: NOMIN</td>
</tr>
</tbody>
</table>

‘He’s going to come.’

Teso *a-losit* (INF-‘go’) ‘to go’, verb > future marker. Ex.

**Teso (Hilders and Lawrance 1956: 11f.)**

<table>
<thead>
<tr>
<th>ki-</th>
<th>losi</th>
<th>a-</th>
<th>ilip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:PL</td>
<td>go:PRES</td>
<td>INF-pray</td>
<td></td>
</tr>
</tbody>
</table>

‘We shall pray.’

Ecuadorian Quechua *ri-* ‘go’ > future tense marker. Ex.

**Ecuadorian Quechua (Marchese 1986: 111)**

<table>
<thead>
<tr>
<th>puñu-k</th>
<th>ri-</th>
<th>ni.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sleep-NOMIN</td>
<td>go-</td>
<td>1:SG</td>
</tr>
</tbody>
</table>

‘I am going to sleep.’

Tzotzil *ba(t)* ‘go’, verb (when used in the incompletive aspect) > future tense marker. Ex.

**Tzotzil (Haviland 1991: 13)**

<table>
<thead>
<tr>
<th>j-</th>
<th>tak</th>
<th>ta</th>
<th>k’anele,</th>
<th>yu ’un</th>
</tr>
</thead>
<tbody>
<tr>
<td>l:ERG-send</td>
<td>PREP</td>
<td>wanting</td>
<td>because</td>
<td></td>
</tr>
<tr>
<td>ch-</td>
<td>ba</td>
<td>tal-</td>
<td>uk.</td>
<td></td>
</tr>
<tr>
<td>INCPL-go</td>
<td>come-SUBJUNCT(3:ABS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘However much [liquor] I send for, it’s going to come.’

Tamil *poo* ‘go’, verb of motion > auxiliary marking future tense. Ex.

**Tamil (T. Lehmann 1989: 217)**

<table>
<thead>
<tr>
<th>kumaar</th>
<th>oru</th>
<th>viitū</th>
<th>katt-</th>
<th>a-p</th>
<th>poo-kir-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumar</td>
<td>a</td>
<td>house</td>
<td>build-</td>
<td>INF</td>
<td>go-</td>
</tr>
</tbody>
</table>
‘Kumar is going to build a house.’

In Basque, joan ‘go’ combines with the allative case marker (in -ra) of the gerund (in -tze or -te) of a verb to express future tense. Ex.

**Basque (anonymous reader)**

Kantatzera noa.

kanta- tze- ra n- a- oa.

sing- GER- ALL 1:SG:ABS-PRES-GO

‘I’m going to sing.’

Instances of this grammaticalization can be found some way or other in perhaps more than half of all pidgins and creoles (see Goodman 1964: 86; Boretzky 1983: 121; Mufwene 1996 for some examples). Ex.

**Krio CE (Marchese 1986: 111)**

wi go tray fo puš di trak.

(we FUT try to push the truck)

‘We will try to push the truck.’


**Negerhollands CD (Stolz 1986: 164, 166)**

(a) Astu Aná:nši a lo a hus. . .

(after spider PERF go to house)

‘After the spider had gone home. . .’

(b) Wel, am lo: ma: e:n gunggu ba:l.

(INTJ 3:SG FUT make a big ball)

‘Well, he’s (soon) going to give a big ball.’

Haitian CF va ‘go’ > future tense marker. Ex.

**Haitian CF (Marchese 1986: 111)**

li va vini.

he go come

‘He will come.’

See Ultan 1978a; Fleischman 1982a, 1982b, 1983; Heine and Reh 1984; Bybee et al. 1991 for more details on this process. For a cognitive interpretation of the process, see Emanatian 1992. This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to markers for tense or aspect functions; compare **COME TO; DO; FINISH; KEEP; LEAVE.**

**GO TO > (3) PURPOSE**

Tepo *mu ‘go’, verb > mú, purpose clause marker. Ex.
**Tepo (Marchese 1986: 143)**

```
cé le mú ó yé.
```

‘He came in order to see him.’

**Cedepo** (*mu* ‘go (imperf)’, verb > *mu*, purpose clause marker. Ex.

**Cedepo (Marchese 1986: 143)**

```
ó nú.
```

**Bakwé** (*mu* ‘go’, verb > *mu*, purpose clause marker. Ex.

**Bakwé (Marchese 1986: 143)**

```
nye Dali monii ó mu na
```

‘I gave Dali money so he would buy my cloth.’

**Shona (Hannan 1987: 158; O’Neil 1935: 170)**

(a) `va- enda ku- tsi-me`

‘She has gone to the well.’

(b) `aka- enda ku- ndo- tsvaga`

‘He went to look for some food.’

**Rama (Craig 1991: 457)**

```
tiiskama ni- sung-bang taak-i.
```

‘I am going in order to see/look at the baby.’

**Ngbaka Ma’Bo (Thomas 1970: 179)**

```
ó nô-lí, nô-sê ngó gbô. . . .
```

‘They go in order to draw water. . . .’
Fa d’Ambu CP ba ‘go’ (> allative preposition) > ‘(in order) to’, purpose marker. Ex.

_Fa d’Ambu CP (Post 1992: 153)_

\[
e \quad \text{sé ku naví ba piska.}
\]

3:SG go:out with boat go fish

‘He has left by boat to fish.’

Krio CE gó ‘go’, verb > purpose complementizer. Ex.

_Krio CE (Rettler 1991: 144)_

\[
le \quad wi \quad gó \quad gó \quad si \quad am.
\]

(let us go PURP see her/him)

‘Let’s go see her/him.’

In creole languages, GO-verbs constitute a common source for PURPOSE markers. Such markers are said to express “realized intention” or “speaker determination”; see Bickerton 1981 and Rettler 1991 for contrasting views on the function of these markers. This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GIVE; LEAVE; SEE; TAKE.

‘Ground’ see EARTH

H

**HAND (body part) > (1) AGENT**

Coptic hit’n- ‘on the hand’ > ‘through’, marker of agents in passive constructions. Ex.

_Coptic (Stolz 1992a: 31)_

\[
\text{au- sōbe} \quad ^5\text{m-mo- f}
\]

3:PL-deceive in-place-3:M:SG

\[
ebol \quad \text{hit’n-} \quad ^5\text{m- magos.}
\]

through through-DEF:PL-magician

‘He was deceived by the magicians.’


_Zande (Canon and Gore [1931] 1952: 16–17)_

(a) _Si be ko._

‘He has it.’

(b) _Si ye be da?_

‘Through whom has it come?’
More research is required on the exact nature and the genetic and areal distribution of this process, which might be the result of a metonymic transfer, whereby the human hand is used to refer to the person as a whole.

**HAND (body part) > (2) FIVE**


Nouns for ‘hand’ probably provide the most widespread source for numerals for ‘five’ in the languages of the world (see Heine 1997b). This appears to be an instance of a process whereby a noun, on account of some salient semantic property (in this case, the presence of five fingers), gives rise to a more grammatical word (a numeral) highlighting that property.

**HAND (body part) > (3) LOCATIVE**


<table>
<thead>
<tr>
<th>päike-</th>
<th>se</th>
<th>kä-</th>
<th>tte</th>
<th>pane-</th>
<th>ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>sun-</td>
<td>GEN</td>
<td>hand-</td>
<td>ILL</td>
<td>put-</td>
<td>INF</td>
</tr>
</tbody>
</table>

‘to place into the sun’

Coptic *toot* ‘hand’, *n-toot-* ‘in the hand of’ > ‘away from’; *ha-toot* ‘under the hand of’ > ‘at’; *hi-toot-* ‘on the hand of’ > ‘through’ (Stolz 1992a: 23). Mano *kël* ‘hand’, noun > ‘in’, postposition (Becker-Donner 1965: 23). This grammaticalization may be an instance of a more general process whereby certain body parts, on account of their relative location or their function, are used as structural templates to express location; see also BACK; BELLY; BUTTOCKS; EYE; FACE; FLANK; HEAD; NECK.

**HAND (body part) > (4) H-POSSESSIVE**

Kono *bóó* ‘hand’, ‘arm’, noun > postposition, possessive marker. Ex.

**Kono (Donald A. Lessau, personal communication)**

<table>
<thead>
<tr>
<th>mòto</th>
<th>ni</th>
<th>wán</th>
<th>kólmbá</th>
<th>bóó.</th>
</tr>
</thead>
<tbody>
<tr>
<td>car:DET</td>
<td>COP:PAST</td>
<td>EMPH</td>
<td>Komba (hand)</td>
<td></td>
</tr>
</tbody>
</table>

‘Komba had in fact a car.’

---

30 **H-POSSESSIVE** stands for a marker of predicative possession expressed, for example, in English by *have*. 
Bambara bólo ‘hand’, noun > marker of have-possession. Ex.

**Bambara (Kastenholz 1989: 58)**

\[
\begin{align*}
dūmunif & 3 \text{SG} & ò & dēnw & bólo. \\
\text{(food) cop:NEG children hand)}
\end{align*}
\]

‘His children have nothing to eat/have no food.’

Ewe le ame así me ‘be in one’s hand’ > le ame así ‘have’, ‘own’, ‘possess’. Ex.

**Ewe**

(a) \( ga \) \( le \) así- \( nye \) me.  

money be hand- my in  

‘Money is in my hand.’

(b) \( ga \) \( le \) así- \( nye. \)  

money be hand- my  

‘I have money.’

Zande bé ‘arm’, ‘hand’ > be, possessive marker. Ex.

**Zande (Canon and Gore [1931] 1952: 17)**

(a) \( be \) kumba  

(hand man)  

‘the man’s hand’

(b) Wene bambu (du) be re.  

‘I have a good house.’

Egyptian \( m^{-}\).’i (‘in my hand’) ‘in the hand’ > ‘in the possession’, ‘in charge of’, preposition (Gardiner 1957: 132). So far, only examples from African languages have been found and, conceivably, this is an areally induced process. It would seem that we are dealing with a metaphorical process whereby the phrase *in X’s hand* serves as a vehicle to express the notion ‘in X’s possession’ (see Heine 1997a); compare home.

‘Have’ see h-POSSESSIVE

**HEAD (body part) > (1) FRONT**

Maasai en-dukūya ‘head’, noun > dukūya ‘in front’, ‘ahead’, adverb (Tucker and Mpaayei 1955: 248). Alamblak mêfha ‘head’ > ‘front’, positional word used uniquely for canoes (Bruce 1984: 85). Compare English ahead and French à la tête ‘in front’. Nouns for ‘head’ provide worldwide the most common source for UP terms (see HEAD > UP). But there are also a number of languages where ‘head’ has given rise to FRONT markers: according to Heine 1997b: 126, out of forty-six African languages that have grammaticalized a noun for ‘head’ to a spatial gram, six have developed a FRONT term. This appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also back; belly; buttocks; eye; face; flank; heart; neck.
HEAD (body part) > (2) INTENSIVE-REFL

Fulfulde hōre, pl. ko’e ‘head’, (bē) hōre ‘(with) one’s head’ > reflexive pronoun, used to strengthen or emphasize the identity of the concept concerned. Ex.

Fulfulde (Klingenheben 1963: 141–2)

min bē hōre ‘am
I (with) head

kambe bē ko’e maɓe
(they with) heads

I myself
‘they themselves’

Hausa kai ‘head’ + possessive suffix, preceded by an independent personal pronoun > ‘self’, intensive reflexive pronoun. Ex.

Hausa (Newman 2000: 527)

ita kântà tā尿rùwâ cè.
(she head:her star is:F)

‘She herself is a star.’

Margi kōr ‘head’ > emphatic reflexive pronoun.

Margi (Hoffmann 1963: 105)

ni dɔ kōr- dà
I (with) head- my

‘I myself’

In addition, Moravcsik (1972: 272) mentions Amharic, Tigrinya, Kanuri, and Haitian CF as languages showing this grammaticalization. See also Heine 2000b and Schladt 2000 for more details. Compare body; owner.

HEAD (body part) > (3) MIDDLE31


Nouns for ‘head’ constitute one of the main sources for reflexive markers, and the latter tend to give rise to middle markers; hence, the present case appears to be part of a more general grammaticalization chain: HEAD > REFLEXIVE > MIDDLE; see Kemmer 1993, Heine 2000b, and Schladt 2000 for more details; see also body; head > reflexive.

HEAD (body part) > (4) REFLEXIVE

Fulfulde hōre ‘head’, noun > reflexive marker. Ex.

Fulfulde (Klingenheben 1963: 141)

‘o bāri hōre māko.
he killed head his

‘He killed himself.’

31 The notion “middle” is semantically complex, and it remains unclear whether we are really dealing with a distinct grammatical function.
Hausa *kài* ‘head’ > reflexive marker. Ex.

**Hausa (Kraft and Kirk-Greene 1973: 225, 231)**

\[ \text{Sun } \text{kashè } \text{kànsìu}. \]

(they kill head:their)

‘They have committed suicide.’ (‘They have killed themselves’; lit.: ‘They killed their head’)


**Basque (anonymous reader; Saltarelli 1988: 104ff.)**

\[ \text{Jon- } \text{ek } \text{bere } \text{buru- } \text{a } \text{hil} \]

John-erg his:own head-det kill

z- ue- n.

PAST-AUX-PAST

‘John killed himself.’

In a survey of roughly 150 languages, Schladt (2000: 112) found that nouns for ‘head’ form one of the major sources for reflexive markers. This grammaticalization is discussed in Heine 2000b and Schladt 2000. See also INTENSIVE-REFL; compare BODY; OWNER.

**HEAD (body part) > (5) UP**


**Shona (O’Neil 1935)**

(a) \[ \text{ha- } \text{a- } \text{na } \text{musoro.} \]

NEG-3:SG-COM head

‘He is not clever.’ (lit.: ‘He has no head’)

(b) \[ \text{pa- } \text{ne } \text{gondo } \text{pa- } \text{msoro } \text{pe- } \text{gomo} \]

(aDE-COM eagle ADE-head ADE-C5:hill

irero.
g5:DEM)

‘There is an eagle above that hill.’

Kono (Donald A. Lessau, personal communication)

(a)  í kūnë kàmà?
    2:SG head:DET how
    ‘How is your head?’

(b) éé sì-sò kùmà.
    3:SG:ATT sit-TAM horse on:top
    ‘He is sitting on a horse.’


Baka (Brisson and Boursier 1979: 363)

(a) njò- lè bà kè.
    head-my ASP ache
    ‘I have headache.’

(b) ma à dòto à de- ngo,
    1:SG ASP remain LOC side-river ?o
    ngamò mo à
    2:SG:EMPH 2:SG NAR ascend ?o
    a njònjò ná.
    LOC head ART
    ‘I remain near the river; you go up.’


Moré (Alexandre 1953b: 501)

a bê tèg zugu.
    (he be tree on)
    ‘He is on the tree.’


Egyptian (Gardiner 1957: 130)

<table>
<thead>
<tr>
<th>tp</th>
<th>t3</th>
</tr>
</thead>
<tbody>
<tr>
<td>head</td>
<td>earth</td>
</tr>
</tbody>
</table>

‘on earth’ (= ‘living’)

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also BACK; BELLY; BUTTOCKS; EYE; FACE; FLANK; HEART; NECK.
HEART (body part) > IN\textsuperscript{32} (SPATIAL)


\textit{Aztec (Stolz 1991a: 44)}

\begin{tabular}{l}
\textit{hueī} \textit{āltepē- tl} \textit{i- yōlō-co} \\
(big town- ABS 3:SG:POSS-heart-LOC)
\end{tabular}

‘in the big city’

Accadian \textit{libbu(m)} ‘heart’ > ‘interior’. Ex.

\textit{Accadian (Stolz 1991a: 44)}

\begin{tabular}{l}
\textit{ana} \textit{libbu} \textit{mā- tim} \\
PREP heart country- GEN:SG
\end{tabular}

‘into the country’


\textit{Imonda (Seiler 1985: 39)}

\begin{tabular}{l}
\textit{kebl \textit{ād-l- ia uai- hapu}.} \\
village heart-NOMIN-LOC ACC-come:up
\end{tabular}

‘He comes up to the middle of the village.’

In Oceanic languages, ‘heart’ appears to be a common source for the locative notion IN; Bowden (1992: 36) found six Oceanic languages where ‘heart’ appears to have given rise to IN markers. This grammaticalization is an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also \textit{BACK}; \textit{BELLY}; \textit{BUTTOCKS}; \textit{EYE}; \textit{FACE}; \textit{FLANK}; \textit{HEAD}; \textit{NECK}.

HERE > (1) CAUSE


\textit{Lingala (van Everbroeck 1958: 83)}

\begin{tabular}{l}
\textit{āwa oyō olingi tē, tokotinda mwāna mosūsu.} \\
‘Since you don’t come, we’ll look for another boy.’
\end{tabular}

Albanian \textit{ke} ‘here’, adverb > conjunction marking a causal clause. Ex.

\textit{Albanian (Buchholz et al. 1993: 221)}

(a) \textit{ja ke erdhi!} \\
(INFJ here arrive:AOR)

‘Here he is!’

\textsuperscript{32} An anonymous reader of an earlier version of this work noted that the directionality in this case could easily go both ways, giving Russian \textit{serdtse} ‘heart’ as an example, which s/he says is a clear derivative of \textit{sered-} ‘middle’.
This grammaticalization appears to be an instance of a more general process whereby spatial concepts are used to also express causal relations; see Radden 1985 and Heine et al. 1991 concerning an account of this process in terms of metaphorical transfer. Compare **back; locative; place.**

**HERE > (2) DEMONSTRATIVE**

French *ici* ‘here’, adverb > -*ci* ‘this’, part of the proximal demonstrative. Ex.

**French**

(a) *Il* est *ici.*

he is here

‘He is here.’

(b) *cet homme-ci*

this man-* PROXIM

‘this man’

Hausa *nân* ‘here’, adverb > ‘this’, proximal demonstrative. Ex.

**Hausa (Cowan and Schuh 1976: 70, 165)**

(a) *yanâ* *nân.*

he:is here

‘He’s here.’

(b) *dâwâr* *nân*

guinea:*COM this

‘this guinea corn’

Lingala *wânâ* or *wânâ* ‘there (nearby)’ and *kûnâ* or *kûnâ* ‘(over) there’ > demonstratives *wânâ* or *kûnâ* ‘that’. Ex.

**Lingala (Heine et al. 1993: 10)**

(a) *yangó wânâ.*

azalî *kûnâ.*

‘It is there (near you).’

‘He is there.’

(b) *moto wânâ*

*moto* *kûnâ*

person there person there

‘that man (we’re talking about)’

‘that man (we’re talking about)’

---

33 Note that there is a seeming counterexample to this process: in some languages demonstrative modifiers, when their head noun is omitted, may assume the function of adverbs, and this may mean that a proximal demonstrative (‘this’) functions as a kind of adverb (‘here’). It would seem, however, that we are not dealing with a violation of the unidirectionality principle since in all cases where we met such a situation, complex demonstratives consisting of a locative plus a demonstrative element were involved. Thus, instead of a development from demonstrative to locative adverb, we appear to be dealing with a “bleaching” process [locative + demonstrative] > locative.
Ngbaka ke ‘there’, locative adverb > ‘that’, demonstrative. Ex.

**Ngbaka (Heine et al. 1993: 206)**

(a) zùlà ke... 
   ‘There is a rat...’

(b) mɔ bá kpánà ke!
   ‘Take that pot!’

Buang ken ‘here’, place adverbial > postposed demonstrative. Ex.

**Buang (Sankoff 1979: 35)**

(a) Ke mdo ken.
   ‘I live here.’

(b) Ke mdo byaŋ ken.
   (‘I live in this house.’)

In some pidgins and creoles, adverbs for ‘here’ have given rise to demonstratives, usually in conjunction with other referential markers; for example, Papiamentu CS e... aki ‘the... here’ > ‘this’ proximal demonstrative (see Boretzky 1983: 99). Ex.

**Papiamentu CS (Kouwenberg and Muysken 1995: 210–1)**

E pòrtrèt aki a wordu saká... 
   ‘This picture was taken...’

English here > Belizean CE ya demonstrative particle (Hellinger 1979: 324).

While the directionality of this grammaticalization appears to be well established, there are also examples that can be interpreted as being suggestive of an opposite directionality; more research is required on this issue. Note, however, that there is an alternative view according to which demonstratives are diachronically, so to speak, “semantic primitives”, that is, they may give rise to various kinds of grammatical markers, while they themselves cannot be historically derived from other entities such as lexical items (Plank 1979; Diessel 1999b: 150ff.). See also THERE.

**HERE > (3) PERS-PRON**

Chinese, dialect of Huojia ZHER ‘here’ > ‘we’, ‘us’ (Alain Peyraube, personal communication). Hagège characterizes this evolution: there are “languages which use spatial adverbs with the meaning of personal pronouns: Japanese kotira ‘here’ often refers to the speaker, Vietnamese difficoltà ‘here’ and différence (or difficoltà ‘there’) are used with the meanings ‘I’ and ‘you’ respectively when one wants
to avoid the hierarchical or affective connotations linked to the use of personal pronouns. . . .” (Hagège 1993: 216–17). More research is required on the significance and the exact nature of this process.

HERE > (4) RELATIVE
Tok Pisin PE ia (< English here) ‘here’ > relativizer (Sankoff and Brown 1976; Traugott 1986b: 541). In Tondano, the particle wia, wia’i ‘here’ has a number of uses that appear to include that of a relative clause marker, referred to as the ‘relator’ (RM) by Sneddon (1975). Ex.

Tondano (Sneddon 1975: 88, 124)
(a) si tuama maana? wia’i.
   CM:SG man live here
   ‘The man lives here.’
(b) se tow rai? wia mbale
   CM:PL person NEG RM CM:house
   ‘the people who aren’t in the house’

This grammaticalization appears to proceed via the following more general process: HERE > DEMONSTRATIVE > RELATIVE (see Sankoff and Brown 1976: 663). The following example, involving Buang ken, illustrates this process, where (a) exhibits the locative adverb, (b) the demonstrative, and (c) the relative clause marker.

Buang (Sankoff 1979: 35–6)
(a) Ke mdo ken.
   I live here
   ‘I live here.’
(b) Ke mdo byaŋ ken.
   I live house this
   ‘I live in this house.’
(c) Ke mdo byaŋ ken gu le vkev.
   I live house that you saw yesterday
   ‘I live in the house that you saw yesterday.’

The examples available are far from satisfactory to substantiate this process, but see HERE > DEMONSTRATIVE; DEMONSTRATIVE > RELATIVE for the two constituent parts of this process.

‘Hold’ see KEEP

HOME (‘home’, ‘homestead’) > (1) LOCATIVE
**Susu (Friedländer 1974: 40)**

<table>
<thead>
<tr>
<th>A</th>
<th>buki</th>
<th>khanima</th>
<th>Abu</th>
<th>khön(ma).</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:SG</td>
<td>book</td>
<td>bring</td>
<td>Abu</td>
<td>to</td>
</tr>
</tbody>
</table>

‘He takes the book to Abu.’


While the evidence for this pathway includes languages that can be assumed to be genetically and areally unrelated, only African examples have been found so far. Nevertheless, we seem to be dealing with another instance of a more general process whereby relational nouns give rise to relational (typically spatial or temporal) grammatical markers; see, for example, **BOTTOM; BOUNDARY; EDGE; SIDE; TOP.**

**HOME (‘home’, ‘homestead’) > (2) A-POSSESSIVE**


**Kabiye (Claudi and Heine 1989: 4–5)**

(a) *pe- tê we cféu.*

‘Their home is beautiful.’

(b) *kólú tê piya*

‘the blacksmith’s children’ (e.g., those living in his compound but not his own)

**Acholi paàco ‘homestead’ > pà, possessive marker (Claudi and Heine 1989).**


**Ngiti (Kutsch Lojenga 1994: 154)**

<table>
<thead>
<tr>
<th>kamà</th>
<th>bhà</th>
<th>dza</th>
</tr>
</thead>
<tbody>
<tr>
<td>chief</td>
<td>poss</td>
<td>house</td>
</tr>
</tbody>
</table>

‘the chief’s house(s)’

Note also that the attributive possessive marker *ka*- of Zulu and Xhosa can possibly be traced back to the Proto-Bantu noun *kááya* or *kaya* ‘home (village)’, whereby the construction ‘at the home of X’ was grammaticalized to ‘(property) of X’ (Güldemann 1999a). So far there is evidence only from African languages; we may, therefore, be dealing with an areal phenomenon. It would seem that the present process is the result of a metaphorical process whereby the phrase *in X’s home* serves as a vehicle to express the notion ‘in X’s possession’ (see Heine 1997a); compare **HAND.**
**HOUR > TEMPORAL**


*Lingala* *(van Everbroeck 1958: 73, 152)*

```
( o ntángo ya )
```

*bakolálaka* *o biéma.*

‘During the war, the soldiers sleep in tents.’

Italian *ora* ‘hour’, noun > *ora* ‘now’, temporal adverb. Basque *ordu* ‘hour’ is the base of *orduan* ‘then’, which contains the locative case ending -an (anonymous reader).

In a number of languages, nouns for ‘hour’ serve in some way or other in constructions expressing a temporal notion. Still, more data are required to assess the general distribution of this grammaticalization. This would seem to be another instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; compare **BACK; EARTH; SKY**.

**HOUSE > LOCATIVE**

Old Swedish *hus* ‘house’, noun > Swedish *hos* ‘at’, ‘next to’. Ex.

*Swedish* *(Stolz 1991b: 18)*

```
om sommar-en bo- dde vi hos
PREP summer-DEF live-PARTCP PRON PREP
vår tant.
our aunt
```

‘Over the summer we stayed/lived with our aunt.’


*Accadian* *(Stolz 1991b: 18)*

```
bit immitti šarri
at right:hand:side king
```

‘at the right side of the king’

*Cagaba* *hu* ‘hut’, *hú-vala* ‘in front of the hut’ > *húvala* ‘in front of’. Ex.

*Cagaba* *(Stolz 1991b: 18)*

```
nuñhuá-ñ hú-vala
```

‘in front of/outside the temple’

Haitian CF *kay* ‘house’, noun > *ka* ‘at (the house of)’. Ex.
Haitian CF (Hall 1953: 30–1)

(a) lò m- té- fèk- abité kay Maglwa
(when 1:SG-PAST-CPL-live house Magloire)
‘when I had just gone to live at Magloire’s house’

(b) ou rét ka moun?
(2:SG remain at:house person)
‘Are you staying at someone’s house [i.e., not with relatives]?’

It would seem that we are dealing with a metaphorical process whereby a phrase like in X’s house serves as a vehicle to express the notion ‘in X’s place’; compare home.

HOW? (W-QUESTION) > (1) COMPARATIVE

Hungarian mint ‘how?’, interrogative adverb > conjunction marking the standard of comparative constructions. Ex.

Hungarian (Halász 1988: 542)
nagy-obb, mint a fia.
(tall- COMP than his son)
‘He is taller than his son.’

Colloquial German wie? ‘how’, question word > marker of standard in comparative constructions. Ex.

German

(a) Wie groß ist er?
how big is he
‘How big is he?’

Colloquial German

(b) Er ist größer wie sein Sohn.
he is tall:er than his son
‘He is taller than his son.’

Conceivably this process has an intermediate SIMILE stage in German; hence HOW? > SIMILE > COMPARATIVE (see the next entry). This process appears to be part of a more general evolution whereby interrogative words are grammaticalized to affirmative markers, or parts thereof; see, for example, w-question. Still, more data are required to substantiate this process.

HOW? (W-QUESTION) > (2) SIMILE

German wie ‘how?’, question word > wie ‘like’, preposition. Ex.

German

(a) Wie hast du das gemacht?
how have you that done
‘How did you do that?’
Sie sieht aus wie eine Schauspielerin.
She looks out like a actress
‘She looks like an actress.’

(French comment ‘how?’ >) Seychelles CF koma ‘how?’ > ‘like’, preposition. Ex.

Seychelles CF (Corne 1977: 34)

(a) koma u dir sa à kreol?
(how you say that in creole)
‘How does one say that in creole?’

(b) ban koma u
(people like you)
‘people like you’

More research is required on the exact nature and the genetic and areal distribution of this process. See also manner; resemble; say.

IN (SPATIAL) > (1) CONTINUOUS


Lamang (Wolff 1983: 165–6)
ý- kəl- i
(PROG- take- 1:sg)
‘I am taking’


Vai (Koelle [1854] 1968: 90)
këre bë kí- ro.
(deer cop sleep-in)
‘The deer was sleeping.’
á wë fen dön-do (< -ro).
(3:sg cop thing eat-in)
‘He was eating something.’


Vai (Koelle [1854] 1968: 88–9)
i ná- ro!
(2:sg come-dur)
‘Come again!’
nä kàie ma ndíà- ro
(1:sg:poss husband neg 1:sg:obj:love-dur)
‘My husband likes me no more.’
Lezgian -a/-e inessive case marker ‘in’, ‘into’, nominal suffix > marker of duration (Haspelmath 1993: 103).

This grammaticalization appears to be an instance of a more general process whereby grammatical aspect functions are conceptualized and expressed in terms of locative concepts; compare locative.

**IN (SPATIAL) > (2) TEMPORAL**


**Vai (Koelle [1854] 1968: 88–9)**

(a) ánu bê sândšâ- ro.
   (3:PL COP town-in)
   ‘They were in the town.’

(b) an’ sâma súyê-ro.
   (3:SG lie;3:SG:on night-in)
   ‘He may lie on it in the night.’


**Lezgian (Haspelmath 1993: 102ff.)**

(a) Daxdi wiči- n žibind- a
dad(ERG) self-gen pocket-IN
muk’rat’ tu- na.
scissors put-AOR
‘Dad put a pair of scissors into his pocket.’

(b) Zun šaz- ni sentjabrdi- n exird-a
1:ABS last.year-too September-gen end-IN
Xivd- a xâ- na.
Xiv- INE be-AOR
‘Last year, too, I was in Xiv at the end of September.’

The Basque locative case suffix -n ‘in’, ‘at’, ‘on’ is also routinely used with a temporal sense. Ex.

**Basque (anonymous reader)**

(a) Bilbo- n
   Bilbao- LOC
   ‘in Bilbao’

(b) negu- a- n
   winter- DET- LOC
   ‘in the winter’

The evolution from locative to temporal IN is so widespread that these examples are merely meant to illustrate the process concerned. It is an instance of a more general process whereby spatial concepts, including motion in space, are
used as structural templates to express temporal concepts; see also ablative; allative; behind; front; interior; locative.

**INDEFINITE > COMMON**
Nama ˈi indefinite article > marker of common gender (genus commune; Heine and Reh 1984: 227). Greenberg (1978: 79), who discusses this process, also mentions Chnook and Khasi as further examples.

We are listing this case only tentatively; more information is required on the exact nature and cross-linguistic significance of the process concerned.

**INSTRUMENT > (1) ERGATIVE**
Markers for ergative case roles do not infrequently encode other case functions as well, in particular instrumental, locative, and genitival functions (cf. Blake 1994: 122), and in some languages there is evidence to suggest that the former are historically derived from the latter. This is perhaps most obvious in the case of ergative/instrumental polysemies. The Hittite ergative suffix -anza (pl. -antes), used with nouns of the neuter gender, is presumably derived from the ablative/instrumental inflection -anza (Garrett 1990; Dixon 1994: 187–8). Similarly, in Sanskrit and other ancient languages of the Indic branch, an erstwhile instrumental inflection, which had also been used to mark the agent in a passive construction, took an ergative function in the perfect (see Dixon 1994: 190 for references). Note further that in Avar, the instrumental case marker also denotes the ergative (Blake 1994: 122). More data are required to substantiate that we are dealing with a unidirectional grammaticalization process.

**INSTRUMENT > (2) MANNER**
German mit ‘with’, comitative and instrument preposition > manner preposition. Ex.

**German**

(a) Sie schlug ihn mit dem Schirm.


‘She hit him with her umbrella.’

---

34 There is a possible source of confusion here. It appears to be well established that languages showing accusative properties may replace these by an ergative profile, and vice versa; hence, there is no directionality involved in such evolutions (Dixon 1994: 185). This observation is in no way at variance with the present hypothesis, which is related to the evolution of ergative case markers rather than to that of ergative constructions. While the former seems to conform to common principles of grammaticalization, since it concerns form-meaning units rather than syntactic structures, the evolution of constructions does not exhibit any significant correlation with unidirectionality, as has been shown convincingly by Harris and Campbell (1995).
(b) Sie schlug ihn mit Absicht.
‘She hit him on purpose.’

The Basque instrumental marker -z also serves to express manner. Ex.

**Basque (anonymous reader)**

(a) Luma- z idatzi d- u.
pen- INSTR write[P_FV] PRES-AUX
‘He wrote it with a pen.’

(b) Barre- z egin d- u.
laughter- INSTR do[P_FV] PRES-AUX
‘He did it laughingly.’


**Ewe (Claudi and Heine 1986: 321)**

é- wọ dọ kplé dzidzọ.
3:SG-do work with happiness
‘She worked happily.’


**Yoruba (Lord 1989: 122–3)**

(a) ó gé erà kpélú òbe.
he cut meat with knife
‘He cut the meat with a knife.’

(b) ó gé erà kpélú èsò.
he cut meat with care
‘He cut the meat with care.’

This appears to be a process whereby the use of grammatical markers associated with visible, tangible complements (instruments) is extended to abstract complements, thereby giving rise to a new grammatical function. See Heine et al. 1991. Not uncommonly, INSTRUMENT markers appear to be derived from comitative markers; hence, there is a more extended pathway: COMITATIVE > INSTRUMENT > MANNER (see Heine et al. 1991); see also COMITATIVE.

**INTENSIVE-REFL > (1) EVEN**

French même ‘oneself’, intensive reflexive marker > scalar focus particle ‘even’. Dutch zelfs, Norwegian selv, German selbst intensive reflexive or reflexive pronoun ‘oneself’ > ‘even’. Ex.
German

(a) *Er selbst kommt.*

he himself comes

‘He himself will come.’

(b) *Selbst wenn er kommt...*

even if he comes

‘Even if he comes...’

While we have so far found only examples from Indo-European languages, we have nevertheless decided to include this case since it appears to be conceptually plausible. More research is required on the exact nature and the genetic and areal distribution of this process, and on the question of whether ‘even’ really is a grammaticalized use or else a constituent part of the meaning of intensive reflexives (cf. König and Siemund 2000; Emkow 2001).

**INTENSIVE-REFL > (2) REFLEXIVE**

Ibibio *idém* (‘body’) emphatic reflexive > reflexive marker. Ex.

**Ibibio (Essien 1982: 103, 107)**

(a) *ìmé ké ídém ámɔ*

(Ime ? body his)

‘Ime himself’

(b) *ìmé ámb átígha idem (ámɔ).*

(Ime ? shot body his)

‘Ime shot himself’

See Faltz [1977] 1985; Kemmer 1993; Heine 2000b; König and Siemund (2000) for more details. Intensive reflexive markers appear to be one of the main sources for reflexives; see also BODY; HEAD.

**INTERIOR > (1) IN (SPATIAL)**

Basque *barru, barne* ‘interior’ is used to express ‘inside’ when used with a locative case suffix. Ex.

**Basque (anonymous reader)**

(a) *etxe- a- (r)en barru- a*

house- DET-GEN interior- DET

‘the interior of the house’

(b) *Etxe- a- (r)en barru- ra korritu*

house- DET-GEN interior- ALL run[PFV]

d- u.

PRES-AUX

‘He ran inside the house.’

**ITERATIVE > (1) HABITUAL**

In the worldwide sample of Bybee et al. 1994: 158–9 there are six languages having a marker to indicate both iterative action and habitual. In the case of the iterative the action is repeated on the same occasion, while habitual means that the different occurrences are on separate occasions. These languages are Atchin, Halia, Inuit, Krongo, Rukai, and Yessan-Mayo. These authors argue that iterative is the earlier meaning, while habitual results from an extension of the iterative, especially for the following reasons. Two languages of their sample, Trukese and Rukai, express the iterative/habitual polysemy by means
of partial reduplication, and the authors observe that iterative is the earliest aspectual meaning of reduplication; hence, iterative is more likely to be the earlier form. Furthermore, they note: “Such a generalization is conceptually well motivated. Iterative means that an action is repeated on a single occasion. In order to include habitual, the only change necessary is the loss of restriction that the repetition be on a single occasion” (see Bybee et al. 1994: 159 for more details).

**ITERATIVE > (2) STILL**


*Tayo CF (Kihm 1995: 239)*

(a) *Ta fini vja jer, ta vja*

thou CPL come yesterday thou come
akor dema.
again tomorrow
‘You came yesterday; you’ll come again tomorrow.’

(b) *Tle fler- la, le fini puse e*

PL flower-DEF TAM CPL grow and
pi sa atra-de puse akor.
then they PROG grow still
‘The flowers have been growing, and they are still growing.’

It would seem that the STILL-meaning arises when, instead of a repetition, the situation implies a duration that is longer than expected.

**K**

**KEEP (‘to keep (on), ‘to hold’) > (1) CONTINUOUS**


**Swedish (Lena Ekberg, personal communication)**

*Jag håller på att läsa en*

I hold:pres on to read an
spännande bok.
exciting book
‘I am reading an exciting book.’

Imonda *ula* ‘to hold’ > durative/intensity marker with durative verbs. Ex.
Imonda (Seiler 1985: 106)

(a) ablō ka- fa ne- i- ula- fna.
crab 1- TOP CLASS- LNK- hold-

PROG

‘I was holding a crab.’

(b) na sne- ula- n- b ōkōba-na pe- m
sago pound-hold-PAST-DUR sun- POSS fear-CAU
ha- pia.
mo-come

‘I was pounding sago and then came back because of the scorching sun.’

Imonda ula ‘to hold’ > iterative marker with punctual verbs. Ex.

Imonda (Seiler 1985: 106)

(a) ablō ka-fa ne- i- ula- fna.
crab 1- TOP CLASS-LNK-hold-PROG

‘I was holding a crab.’

(b) abof-m anuō-l- m ka bō- uöl fe- ula- fna.
fly- GL often-NOMIN-GL 1 kill-PL do-hold-PROG

‘I was killing lots of flies.’

Waata, dialect of Oromo, (harka) k’awa ‘hold (in one’s hand)’, verb > continuous aspect marker, auxiliary. Ex.

Waata, dialect of Oromo (Stroomer 1987: 149)

utaal-ca harka k’aw- a.
runt- NOMIN hand hold/have-3:M:SG:PRES

‘He is running.’

English keep + -ing > durative marker; for example, He keeps (on) signaling to me (Hopper 1991: 23). Somali *hayn ‘keep’ > auxiliary of durative aspect. Ex.

Muduug, dialect of Somali (Heine and Reh 1984: 124)

kari- n hay- s- ay.
cook-INF keep-YOU-PAST

‘You kept cooking.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; LEAVE; PUT.

KEEP (‘to keep (on)’, ‘to hold’) > (2) H-POSSESSIVE

Catalan tener ‘hold’, ‘keep’ (< Old Catalan tenir) > ‘have’, ‘own’ (Steinkrüger 1997). Basque eduki formerly meant ‘hold’, ‘hold in one’s hand’, ‘grasp’, and it still does in the east. In the west, it has become the ordinary verb ‘have’. Ex.
Eastern Basque (anonymous reader; King 1994: 407)

(a) Eduk- ak eure athe- a hertsi- (r)ik.
    keep IMP your door DET closed ADVL
    ‘Keep your door closed.’

Western Basque (anonymous reader; King 1994: 407)

(b) Zenbat anai- arreba d- au- how:many brother- sister pres-have[DISC]-
    z- ka- zu?
    PL-2:SG-ERG
    ‘How many brothers and sisters do you have?’

This process is presumably part of the (> TAKE > H-POSSESSIVE grammaticalization; until it has been established that this is so, we list this as a separate process. For more details, see Heine 1997a.

**KNOW > (1) ABILITY**

As Bybee et al. (1994) have shown, markers for mental ability may further develop into markers expressing also physical ability; for example, English *I know how to shoot a crossbow*. Motu *diba* ‘know’ > ‘can’, ‘be able’, marker of physical and mental ability (Bybee et al. 1994: 190). English *know* > *know how to*, marker of mental ability; for example, *I know how to speak French* (Bybee et al. 1994: 190). Baluchi *zn* ‘to know how to’ (auxiliary + infinitive) > marker of mental ability (Bybee et al. 1994: 190). Danish *kunne* ‘know’ > mental ability (Bybee et al. 1994: 190). Nung *sha* ‘know’, auxiliary > mental ability (Bybee et al. 1994: 190). Sango *hînga* ‘know’, verb > ‘can’, ability marker (Thornell 1997: 122). Tok Pisin PE *save* ‘know’ > ‘be skilled at’. Ex.

**Tok Pisin PE** (Aitchison 1996: 141)

mi save kukim kaukau.

I know to:cook sweet:potato

‘I know how to cook sweet potato’ / ‘I am skilled at cooking sweet potato’.

French *connaitre* ‘know’ > *Tayo CF kone* ‘be able’, marker of physical ability. Ex.

**Tayo CF** (Kihm 1995: 239)

La fini kone parle kom nu.
s/he CPL know speak like we

‘S/He can speak like us now.’

Markers for physical ability may further develop into PERMISSIVE and POSSIBILITY markers; see ABILITY.

**KNOW > (2) HABITUAL**

Moré *mi* ‘know’, verb > auxiliary marking habitual actions. Ex.
Moré (Alexandre 1953b: 251)
(a) f ka mi fwi.
   ‘You know nothing.’
(b) a mi n lôda ka.
   ‘He usually passes here.’

See Hagège 1993: 221 for more details. In pidgin and creole languages there appears to be a fairly common grammaticalization: KNOW > ABILITY > HABITUAL. French connaître ‘know’ > Haitian CF kônê ‘know’ > kôn ‘be in the habit of’. Ex.

Haitian CF (Hall 1953: 30, 33)
(a) m- pa- t- kônê.
   (1:SG-NEG-PAST-know)
   ‘I didn’t know.’
(b) li kôn bat mwê.
   (s/he HAB beat me)
   ‘S/He used to beat me.’

Dutch kunnen ‘be able’ > Negerhollands CD kan, habitual auxiliary. Ex.

Negerhollands CD (Stolz 1987b: 175)

<table>
<thead>
<tr>
<th>En</th>
<th>am</th>
<th>a</th>
<th>kan</th>
<th>dif</th>
<th>ð</th>
</tr>
</thead>
<tbody>
<tr>
<td>and</td>
<td>he</td>
<td>PAST</td>
<td>HAB</td>
<td>steal</td>
<td>the</td>
</tr>
<tr>
<td>blangku</td>
<td>şi</td>
<td>skun.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘And he used to steal the white people’s turkeys.’

One lexical source, though not the only one, can be traced back to Portuguese saber, which not only means ‘know’ but also ‘be able to do’ (Holm 1988: 160): Papiamentu CS sa ‘know’ (< Portuguese or Spanish saber ‘know’) > ‘to do habitually’. Ex.

Papiamentu CS (Holm 1988: 160)

<table>
<thead>
<tr>
<th>Maria</th>
<th>sa</th>
<th>bende</th>
<th>piská.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maria HAB sell fish)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Mary sells fish.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sranan CE sabi, sa ‘know how’, ‘be able’ > habitual uses; Cameroonian PE sabi ‘know how to do’ > habitual marker (Holm 1988: 160–1); Tok Pisin PE save ‘know’ > save, sa ‘be accustomed to’. Ex.

Tok Pisin PE (Aitchison 1996: 141–2)
(a) mi no save tumas long kukim.
   I not know much about to:cook
   ‘I don’t know much about cooking.’
(b) *mi sa* kukim long *paia.*

I am:accustomed to:cook on fire

‘I customarily cook it on the fire.’

---

**LACK** (*‘to lack’, ‘to lose’*) > **NEGATION**


**Bemba** (*Givón 1973: 917*)

à-ba-bulaa-bomba. . . .

‘Had they not worked. . . .’

Futa Toro, dialect of Fulfulde, *waas* ‘lack’, ‘lose’ > negation marker in focus constructions. Ex.

**Fulfulde** (*Marchese 1986: 181*)

(a) *o waas-ii debbo makko.*

he lose- TNS woman his

‘He has lost his wife.’

(b) *ko miin waas-i am- de.*

FOC me NEG- TNS dance-INF

‘It’s me who did not dance.’

See Givón 1979a: 222 and Marchese (1986: 189–91). More research is required on the exact nature and the genetic and areal distribution of this process. Nevertheless, this appears to be an instance of a more general process whereby a verb, on account of some salient semantic property (“implied absence”), gives rise to a grammatical marker highlighting that property (negation).

‘Land’ see *EARTH*

**LEAVE** (*‘to leave’, ‘to abandon’, ‘to let’*) > (1) **ABLATIVE**

Big Nambas *da-* continuative prefix + *-an* ‘leave’ > ‘from’, continuant relator. Ex.

**Big Nambas** (*Fox 1979: 87*)

*nə- ma d- an a* *Ləv’iep*.

I:REAL- come CONT- leave at Levicamp

‘I have come from Levicamp.’

Nama (Krönlein 1889: 52)

(a) Tā xu bi...
(proh leave 3:M:SG)
‘Do not let him go. . .’

(b) Ñūiasa xu ta gye ti-ta
(+Kūias from 1:SG TOP 1:SG
ra hā.
IMPFV come)
‘I am coming from Windhoek.’

Tamil viṭu ‘leave’, verb of motion > viṭ.tu (participle), postposition marking the ablative case. Ex.

Tamil (T. Lehmann 1989: 131)

kumaar viṭ-t- ai viṭṭu oot- in- aan.
Kumar house-ACC from run- PAST- 3:M:SG
‘Kumar ran away from home.’

This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare come from, follow, give, go to, see, take. Since ABLATIVE markers are a common source for COMPARATIVE markers (see ABLATIVE), LEAVE verbs may also develop further into COMPARATIVE particles or affixes: Tamil viṭu ‘leave’, verb of motion > viṭa (infinitive), postposition marking the standard in comparative constructions. Ex.

Tamil (T. Lehmann 1989: 131)

kumaar raajaa-v-ai viṭa uyaram-aaka
Kumar Raja- ACC COMPAR height- ADVR
iru-kkir- aan.
be- PRES-3:M:SG
‘Kumar is taller than Raja.’

LEAVE (‘to leave’, ‘to abandon’, ‘to let’) > (2) COMPLETIVE


Kxoe (Köhler 1981a: 503)

kx’ó- ró-xu ’è!
eat:meat-II-TERM IMP
‘Finish eating!’

The following example probably also belongs here: Nama lārī ‘to leave someone’, action verb > -lārī ‘totally’, ‘entirely’, ‘completely’, verbal suffix. Ex.
Nama (Krönlein 1889: 31)

!gäuñ-!arl- ts ta?
(go- leave- 2:SG PROG)
‘Are you going away completely?’

Tamil viṭu ‘leave’, verb of motion > auxiliary marking the perfective. Ex.

Tamil (T. Lehmann 1989: 209)

kumaar inta naaval-ai p paṭi- ttu
Kumar this novel- ACC read- PARTCP
viṭ-t- aan.
leave:PAST-3:M:SG

‘Kumar has read this novel.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; KEEP; PUT.

**LEAVE** (‘to leave’, ‘to abandon’, ‘to exit’) > (3) **EGRESSIVE**


Portuguese (Schemann and Schemann-Dias 1983: 13–15)

porque é que agora deixaste de
why is that now left:2:SG to
o ajudar?
him help:INF

‘Why did you stop helping him now?’


Lingala (Mufwene and Bokamba 1979: 244–6)

(a) Kázi a- tık- í kalási na yé.
Kazi he-abandon-PERF school COM him
‘Kazi has left/quit school.’

(b) Kázi a- tık- í ko- koma.
Kazi he-abandon -PERF INF- write
‘Kazi has (just) stopped writing.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; KEEP; PUT.

**LEAVE** (‘to leave’, ‘to abandon’, ‘to exit’) > (4) **HORTATIVE**

Lingala -tíka ‘leave’, ‘let’, verb > imperative, hortative auxiliary, where the main verb follows in the subjunctive/optative mood. Ex.
Lingala (van Everbroeck 1969: 141)
tíká tó- k
(leave 1:PL-go)
(leave 1:SG-write)
‘Let us go!’  ‘Let me write!’

Hausa bari ‘leave’, verb > ‘how about’, hortative marker (the following verb being in the subjunctive). Ex.

Hausa (Cowan and Schuh 1976: 148)

bàri mì shiga zaurè.
(let 1:PL go:into entrance:hut)
‘Let’s go into the entrance hut.’


Albanian (Buchholz et al. 1993: 273)
lë të shkojë!
‘Let him go!’


Kenya PS

(a) yeye kwisha wacha kazi.
3:SG PfV leave work
‘He has left work.’

(b) wacha yeye na- let- ia sisi biya!
HORT 3:SG IMPFV-bring-APPL 1:PL beer
‘Let him bring us beer!’

Negerhollands CD laastan, lista ‘leave’ (< Dutch laat staan (‘let + stand’) ‘leave it!’), prohibitive auxiliary > ta(a), hortative particle. Ex.

Negerhollands CD (Stolz 1986: 157, 177)

(a) Sinu a flig, lista di stibu.
(3:PL PERF flee leave DEF money)
‘They fled and left the money (behind).’

(b) Ta: ons lo: api de le be:.
(HORT 1:PL go where DEF light be:LOC)
‘Let us go where there is light.’

French quitter ‘to leave’, verb > Haitian CF kité ‘let’, ‘allow’, verb > té, permissive, hortative particle when followed by another verb or verbal phrase as complement. Ex.

Haitian CF (Hall 1953: 30, 55)
té nou bwè.
(let we drink)
‘Let us drink.’

(4) hortative

té- l- vini.
(let-s/he-come)
‘Let her/him come.’
Occasionally LEAVE verbs give also rise to grammatical concepts having obligation as their focal sense; for example, Nama !ari ‘to leave someone’, action verb > !ari(-!ari) ‘must’, necessity marker. Ex.

Nama (Rust 1969: 29)

/nôu-/nam-!ari- ts geh nî:. (hear-love- leave-2:SG TOP FUT)
‘You must obey.’ (lit.: ‘You must love to hear’)

While this case is found commonly in pidgin and creole languages, the evidence available suggests that it nonetheless appears to be a more general process whereby certain verbs assume an interpersonal function in specific contexts involving commands and related interpersonal functions; compare COME > HORTATIVE; GO > HORTATIVE; LEAVE > PERMISSIVE.

LEAVE (‘to leave’, ‘to abandon’, ‘to let’) > (5) NEGATION

Dewoin se ‘leave’, transitive verb > negative auxiliary. Ex.

Dewoin (Marchese 1986: 182)

he sêe sayê pi.
NEG:PERF meat cook
‘He has not cooked meat.’


Kagbo (Marchese 1986: 183)

(a) tâ nô yî.
leave him eyes
‘Let him alone!’ / ‘Leave him alone!’ (lit.: ‘Leave his eyes’)
(b) o tâ yi.
he NEG come
‘He didn’t come.’


Bété (Marchese 1986: 184)

(a) o tî- o mà.
he leave-him there
‘He left him there.’
(b) o tî- u sîbâ.
he NEG-it build
‘He should not build it.’

See Marchese 1986: 182ff. for more details. This appears to be a case of grammaticalization that is limited in occurrence; more research is required on the genetic and areal distribution of this process, whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see, for example, DESCEND; FOLLOW; LACK; LIVE; SIT; STAND.
LEAVE verbs may also give rise to markers for negative ABILITY; for example, Shona -règà ‘leave off’, ‘omit to act’, action verb > -règò- ‘be not able to’, verbal prefix (Brauner 1993: 114). For an unusually large series of grammaticalizations involving the Tamil vitu ‘leave’, see T. Lehmann 1989: 209ff.

LEAVE (‘to leave’, ‘to abandon’, ‘to let’) > (6) PERMISSIVE

German lassen ‘leave’, ‘let’, action verb > permissive auxiliary. Ex.

**German**

(a) Lass mich allein!

leave me alone

‘Leave me alone!’

(b) Lass ihn kommen.

let him come

‘Let him come, allow him to come.’

French quitter ‘to leave’, action verb > Haitian CF kité ‘let’, ‘allow’, verb > té, permissive, hortative particle when followed by another verb or verbal phrase as complement. Ex.

**Haitian CF (Hall 1953: 30)**

té l- vini.

(let him-come)

‘Let him come.’

Bulgarian ostavix ‘leave’ > permissive marker. Ex.

**Bulgarian**

(a) Az ostavix bagaža na garata.

leave:1:SG:AOR luggage:DEF at station:DEF

‘I left the luggage at the station.’

(b) Ostavix te da napraviš kakto ti iskaše.


‘I let you do it the way you wanted. Why are you unsatisfied now?’

More research is required on the exact nature and the genetic and areal distribution of this process. This appears to be a process whereby certain verbs assume an interpersonal function in specific contexts involving imperatives and related interpersonal functions; compare come > HORTATIVE; go > HORTATIVE.

‘Let’ see LEAVE

LIE (‘to lie (down)’) > CONTINUOUS


**Tamil (T. Lehmann 1989: 223)**

```
anta arai puutt- i-k kiṭa- kkir- atu.
```

‘The room is kept locked.’ (In addition it indicates the speaker’s negative attitude toward the state.)

Korean **cappaci**- ‘lie’ (vulgar),39 verb > progressive auxiliary. Ex.

**Korean (Song 2000: 7, 21)**

(a) `ku salam- i pang- ey cappaci
the man- loc room- lie(vulgar)

(-e)- iss- ta.
(f)- is- IND

‘The man is lying in the room.’

(b) `ku salam- un pwulpyeng ha- ko
the man- top complaint do- conj

cappaci- e- iss- ta.
lie(vulgar)- f- is- IND

‘The man is complaining.’

This pathway is part of a more general process whereby postural verbs (‘sit’, ‘stand’, ‘lie’) are grammaticalized to continuous and other aspectual markers (see Bybee et al. 1994: 153–5; Austin 1998: 32); compare **sitt**; **stand**; see also **sitt** > **habitual**. Kuteva (1999, forthc.b) proposes a four-stage grammaticalization development of the bodily posture verbs **sitt**, **stand**, and **lie** into **continuous** markers: human bodily posture verbs > canonical encoding of spatial position of objects > **continuous** (with inanimate subjects) > **continuous** (with both inanimate and animate subjects). For an alternative proposal, see Song 2000.

‘Like’ see **love**; want

**limit** (‘limit’, ‘boundary’) > **until**

Swahili **m-paka** ‘border’, ‘boundary’, noun > (m)paka ‘until’, locative, temporal preposition, temporal clause subordinator. Ex.

---

39 Song (2000: 6, 32) gives two verbs for ‘lie’ in Korean: nwup- ‘lie’ (plain) and cappaci- ‘lie’ (vulgar). The plain form expresses a higher degree of control than does the vulgar form. This may be related to the original meaning of the vulgar form cappaci-, ‘to fall backward (and to sprawl out on one’s back)’. Of the two forms, only the latter has been grammaticalized into an aspectual marker.
Swahili

(a) m- paka wa Kenya
   c3- border of Kenya
   ‘the border of Kenya’

(b) mpaka Mombasa mpaka kesho
    up to Mombasa until tomorrow
    ‘up to/until Mombasa’ ‘until tomorrow’

Tamil *varai* ‘limit’, ‘end’, relational noun > *varai-kk-um* ‘as long as’, head noun of an adjectival clause in the form inflected for dative case and followed by the clitic -um. Ex.

Tamil (T. Lehmann 1989: 343)

\[
\begin{array}{l}
kumaar veelai cey-t- a varai- kk- um
\end{array}
\]

Kumar work do-PAST-ADJ V end- DAT-INCL

naan
1:SG

\[
\begin{array}{l}
kaattru-nt- een.
\end{array}
\]

wait- PAST-1:SG

‘As long as Kumar worked, I was waiting.’


Tamil (T. Lehmann 1989: 121)

\[
\begin{array}{l}
kumaar aintu mana ti tuuk- in- aunn.
\end{array}
\]

Kumar five hour until sleep- PAST- 3:M:SG

‘Kumar slept until five o’clock.’

This is an instance of a more general process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also *earth; field; footprint; sky.*

LIP (body part) > LOCATIVE


Colonial Quiché (Dürr 1988: 52)

\[
\begin{array}{l}
\text{ta } x- e- \text{ pet- ic } \text{ chi } \text{ tulan.}
\end{array}
\]

COMP CPL-3:PL:ABS- COME-1S LOC Tulan

‘They came from Tulan.’

Compare also Colonial Quiché *chi* ‘lip’, ‘edge’ > ‘at the edge of’, locative adposition. Ex.

Colonial Quiché (Dürr 1988: 55)

\[
\begin{array}{l}
amin x- e- \text{ be- c,}
\end{array}
\]

quick CPL-3:PL:ABS-GO-1S
They left quickly and arrived at the edge of the oven.


**Albanian (Buchholz et al. 1993: 73)**

*bužës së det- it*  
(along ART ocean-def:abl)

‘along the seaside’

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also back; belly; buttocks; eye; face; flank; head; neck.

**LIVE** (‘to live’, ‘to be alive’, ‘to stay’) > (1) CONTINUOUS


**Kisi (Childs 1995: 233, 244)**

a)  
\[ ò wá náá kòèlì. \]
\[ he was us behind \]

‘He was behind us.’

b)  
\[ ò wá waŋndá kùindikùndiò. \]
\[ he AUX people hit \]

‘He was striking the people.’


**Kikuyu (Barlow 1960: 268)**

\[ i- ti- ngĩ- tūra i- nor- ete ū- guo. \]
\[ (c10-NEG-FUT- live c10- be:fat-perf c14-pron) \]

‘They (the cattle) will not remain fat like that.’

Aztec *nemi* ‘to live’ > *nemi* ‘to do incessantly’, (excessive) continuous auxiliary. Ex.

**Aztec (Launey 1979: 256).**

\[ Tlein ti- c- chįuh-ti- nemi? \]
\[ (INTER 2:SG-OBJ-do- LIG-CONT) \]

‘What are you doing there all the time?’


**West African PE (nineteenth and early twentieth centuries; Huber 1996)**

(a) him live.

3:SG COP

‘He is here.’

(b) me live for take.

1:SG PROG take

‘I am taking.’

The (a) sentence appears to represent an intermediate stage where *live* served as a locative/existential copula. Tok Pisin PE *stap* (&lt; Engl. *stop*) ‘stay’ > continuous or durative actions. Ex.

**Tok Pisin PE (Sankoff 1979: 44–5)**

(a) na em wanpela istap long haus

(and he alone stay at home

ah, . . .

uh)

‘and he alone stayed home uh, . . .’

(b) Ol kaikai istap nau, disfela

(they eat stay ? this

meri go insait.

woman go inside)

‘While they were eating, this woman went inside.’

Compare *remain*.

**LIVE** (‘to live’, ‘to be alive’, ‘to stay’) > (2) HABITUAL

LIVE-verbs give rise to CONTINUOUS markers that can acquire an HABITUAL function, as may have happened in Ewe: *no* ‘be’, ‘stay’, ‘remain’ > *-na* (after intransitive, *-a* after transitive verbs) > habitual aspect marker. Ewe of Benin *no* ‘be’, ‘stay’, ‘remain’ > *no*-, habitual aspect marker (Westermann 1907: 65). Ex.

**Ewe of Benin**

m- no- sa.

1:SG-stay-sell

‘I sell (habitually).’

English *live* (+ for), verb > West African PE (nineteenth and early twentieth centuries) *live for* progressive/habitual (“nonpunctual”) marker (Huber 1996). Bybee et al. (1994: 154) observe that verbs meaning ‘to live’ may serve as sources for habitual auxiliaries, but more research is required on this pathway. Compare *go*; *remain*; *sit*; *use*. 
LIVE (‘to live’, ‘to be alive’, ‘to stay’) > (3) LOCATIVE COPULA
Basque *egon means historically ‘wait’, ‘stay’. Otherwise, especially in the western varieties, it has become a locative copula ‘be (in a place or a state)’. Ex.

Basque (anonymous reader; King 1994: 396–7)

<table>
<thead>
<tr>
<th>Bilbo</th>
<th>Bizkaia-n</th>
<th>da-go</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilbao</td>
<td>Vizcaya-loc</td>
<td>pres-be</td>
</tr>
</tbody>
</table>

‘Bilbao is in Vizcaya.’

Compare also Proto-Germanic *wes- ‘live’ > English *was, German war ‘was, were’ (Lehmann 1982: 27). Tunica ḥūhki ‘he lives’ > ‘he is’ (Haas 1941: 41ff.; quoted from Lehmann 1982: 27). Note also that according to Matisoff 1991, verbs meaning ‘dwell’, ‘be in/at a place’ can sometimes function as locative prepositions in languages of Southeast Asia (Lord 1993: 17).

More examples are required to substantiate this pathway, which appears to be an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property, in this case a copular function; compare, for example, CROSS; EXCEED; FINISH; PASS; SIT; STAND.

LIVE (‘to live’, ‘to be alive’, ‘to stay’) > (4) EXIST
English live, verb > West African PE (nineteenth and early twentieth centuries) live, locative/existential copula. Ex.

West African PE (nineteenth and early twentieth centuries; Huber 1996)

no live
‘is not’ / ‘there is not’ / ‘he is not there’

While so far only few examples have been found, this appears to be an instance of a more widespread process whereby a verb, on account of some salient semantic property (‘be alive’), gives rise to a grammatical marker highlighting that property (‘exist’). Compare LOCATIVE; COPULA; LOCATIVE > H-POSSESSIVE.

LIVER (body part) > LOCATIVE
Ngbandi *bé ‘liver’, noun > ‘(in the) middle’, (spatial) relational noun. Ex.

Ngbandi (Lekens 1958: 47; Helma Pasch, personal communication)

<table>
<thead>
<tr>
<th>ndó</th>
<th>bé</th>
<th>da</th>
</tr>
</thead>
<tbody>
<tr>
<td>place</td>
<td>liver</td>
<td>house</td>
</tr>
</tbody>
</table>

‘in the middle of the house’

Mixe-Zoque *paʔ-t ‘liver’ > Lowland Mixe -paʔ-t ‘underneath’, nominal suffix (Wichmann 1993: 53–54). Eastern Basque *gibel ‘liver’ is commonly used to construct postpositions meaning ‘behind’ (lit.: ‘at my liver’, etc.). Ex.

Eastern Basque (anonymous reader)

<table>
<thead>
<tr>
<th>mendi-</th>
<th>a-</th>
<th>(r)en</th>
<th>gibel-</th>
<th>(e)an</th>
</tr>
</thead>
<tbody>
<tr>
<td>mountain-</td>
<td>det-</td>
<td>gen</td>
<td>liver-</td>
<td>loc</td>
</tr>
</tbody>
</table>

‘behind the mountain’
The Proto-Bantu noun *-\textit{ini} ‘liver’ appears to have given rise to an inessive marker *-\textit{ini} ‘in(side)’, and eventually to a general locative suffix in many eastern and southern Bantu languages, such as Swahili, Pokomo, Lomwe, or Tswana (Samson and Schadeberg 1994; Güldemann 1999b: 51–3). This grammaticalization appears to be part of a more general process whereby body parts, on account of their relative location, serve as conceptual templates for spatial orientation; see, for example, \textit{back; belly; eye; face; flank; foot; head; heart; neck}. What is remarkable about this particular source concept is that, unlike other body parts, it appears to have given rise to a number of different spatial notions. The primary target, however, is the locative notion in’; Bowden (1992: 36), for example, found five Oceanic languages where terms for ‘liver’ have given rise to IN-markers.

**LOCATIVE > (1) AGENT**

Old Chinese \textit{yu} ‘at’, locative adposition	extsuperscript{36} > agent marker in passive constructions. Ex.

**Old Chinese (Mencius; adopted from Alain Peyraube, personal communication)**

(a) \textit{Xue yu zhong guo.}
learn at central state
‘(He) learned (it) in the Central States.’

**Old Chinese (Liji; quoted from Sun 1996: 25)**

(b) \textit{xizhe wu jiu si yu hu.}
yesterday my father:in:law die by tiger
‘Yesterday my father-in-law was killed by a tiger.’

Albanian \textit{prej} ‘at’, locative preposition > preposition marking the agent of an action. Ex.

**Albanian (Buchholz et al. 1993: 441)**

\textbf{shkruar} | \textbf{prej} | \textbf{meje}  
(PARTCP:write | by | 1SG:ABL)  
‘written by me’

Jeri \textit{munu} adessive or possessive postposition (used with animate nouns only) > agent marker in passive constructions. Ex.


(a) \textit{dio do da nbe Awa munu . . .}
child INDEF TOP:COP TAM Awa POST
‘There was a small child with Awa . . .’

\textsuperscript{36} The meaning of \textit{yu} includes incorporated location, source, and goal in Old Chinese; that is, \textit{yu} appears to have been a more general multipurpose locative marker (see Sun 1996: 25).
(b) *dio wa kéli do munu.*

child CRS call INDEF POST

‘The child was called by somebody.’

Luba *kù-di* ‘there (where) is’ > agent marker in passive constructions. Ex.

**Luba** (Heine and Reh 1984: 99)

\[ \text{bà- sim- ine mu-àna kù- di nyòka.} \]

they-bite- PERF c1-child there:where-is snake

‘The child has been bitten by a snake.’

Perhaps related to this process is Turkish *taraf* ‘side’, which, when having the possessed marker *-in* and the ablative marker *-dan* on it – *taraf* *dan* – is a common agent marker in passive sentences. Ex.

**Turkish** (anonymous reader; Lewis [1967] 1985: 93)

\[ \text{kardes- i taraf- in- dan uzaklas-} \]

brother-his side- POSS-ABL go:away-

\[ \text{tir- il- di.} \]

CAUS- PASS-PAST

‘He was sent away by his brother.’

This appears to be an instance of a more general process whereby locative markers assume the function of marking clause participants; compare **LOCATIVE > CAUSE; LOCATIVE > COMPARATIVE; LOCATIVE > CONCERN; LOCATIVE > TEMPORAL.**

**LOCATIVE > (2) CAUSE**

Imonda *-ia* locative marker > cause marker ‘because’. Ex.

**Imonda** (Seiler 1985: 71f)

(a) *ièf- ia*

house-LOC

‘at the house’

(b) *Bob-na- ia adeia sè e- fe- i- me.*

Bob-poss-because work NEG DU-do-PAST-NEG

‘We did not do any work because of Bob.’

Albanian *prej* ‘at’ (locative preposition) > preposition marking reason. Ex.

**Albanian** (Buchholz et al. 1993: 441)

\[ \text{dridhet prej sè ftohti.} \]

(shiver.3:SG:PRES from ART cold)

‘He shivers from cold.’

This appears to be an extremely widespread process whereby locative markers are grammaticalized to markers of cause; concerning English examples, see Radden 1985.
LOCATIVE > (3) COMPARATIVE

Old Chinese *yu* ‘at’, locative adposition\(^{37}\) > marker of standard of comparison.

**Ex.**

*Archaic Chinese* (Peyraube 1989b)

\[ Ji shì fu yu Zhou gòng. \]

Ji family rich more:than Zhou Duke

‘The Ji family was richer than the Duke of Zhou.’

See also Peyraube 1990. Naga *ki* ‘on’ > comparative marker.\(^{38}\) Ex.

*Naga, Sino-Tibetan* (Stassen 1985: 147)

\[ Themna hau lu ki vi- we. \]

man this that on good-is

‘This man is better than that man.’

*Hungarian* (Heine 1997b: 114)

\[ János nagyobb József- nál. \]

John bigger Joseph-at

‘John is bigger than Joseph.’

See Stassen 1985 and Heine 1997b: 114–15 for this common process, whereby locative markers are grammaticalized to introduce the standard of comparison. This appears to be a more general process according to which grammatical markers having a spatial base serve as conceptual templates for comparative markers; see ablative; up. This pathway also appears to be suggestive of a process whereby locative markers assume the function of marking clause participants; compare locative > agent, locative > concern, locative > temporal.

LOCATIVE > (4) CONCERN

Markers used to express concern have (> up markers as one of their primary sources. It would seem, however, that in addition to this locative concept, other kinds of locative markers may be grammaticalized to CONCERN markers. Thus, in Silacayoapan, the noun *sàả* or *sàʔâ* ‘foot’ has given rise to a locative marker ‘bottom of’, whose use appears to have been extended to also express concern. Ex.

*Silacayoapan* (Shields 1988: 318; quoted from Hollenbach 1995: 180)

\[ ndítuʔin ndè sàʔâ niuu ndè. \]

discuss we:excl foot town out:excl

‘We are talking about our town.’

\(^{37}\) The meaning of *yu* includes incorporated location, source, and goal in Old Chinese; that is, *yu* appears to have been a more general multipurpose locative marker (cf. Sun 1996: 25).

\(^{38}\) Alain Peyraube (personal communication) suggests on the basis of the linguistic history of Chinese that there is a more extended chain: DATIVE > LOCATIVE > COMPARATIVE.
Similarly, in Alacatlatzala, the etymologically related noun šà'à ‘foot’ seems to have given rise to a marker of concern in specific contexts (see Hollenbach 1995: 181). See also GIVE; UP. More research is required on the conceptual nature and areal distribution of this grammaticalization, which appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adverstive, causal, concern, concessive, and conditional relations; see, for example, ALLATIVE; SINCE; TEMPORAL; UP.

**LOCATIVE > (5) CONTINUOUS**

Imonda -ia, locative marker > progressive marker; (a) nominal suffix with nouns denoting activity, (b) verbal suffix. Ex.

**Imonda (Seiler 1985: 72)**

tõbtõ soh- ia ale- f.

fish search-LOC stay-PRES

‘He is looking for fish.’

Diola Fogy verbal noun + copula -ɛm + locative preposition di > progressive construction. Ex.

**Diola Fogy (Blansitt 1975: 17)**

burɛk nɛn di bɔ (nɛn di < nɛmdi)

work I:am in it

‘I am working.’

Irish ag ‘at’ + verbal noun > continuous marker. Ex.

**Irish (Blansitt 1975: 19)**

Tá sé ag dúnađh an dorais.

be he at shutting the of:door

‘He is shutting the door.’

In Chinese, the marker zhe, which in Old Chinese was a verb whose meanings included ‘to attach’, appears to have developed into a prepositional locative marker in Middle Chinese and, after stative verbs like zuo ‘sit’, may have been a source for durative uses (Sun 1998: 163). In some French-based creoles, it is the locative notion ‘behind’, that is, terms derived from French après, which appears to have given rise to CONTINUOUS markers; for example, Seychelles CF (a)pe, which serves to denote progressive and inchoative events. Ex.

**Seychelles CF (Corne 1977: 65)**

mëti ape sâte. i pe malad.

(1:SG PAST APE sing) (3:SG APE be:sick)

‘I was singing.’ ‘He is getting sick.’

This grammaticalization appears to be an instance of a more general process whereby grammatical aspect functions are conceptualized and expressed in
terms of locative concepts; compare near > proximative. The description of this grammaticalization is, however, somewhat misleading since, more often than not, locative markers constitute but one constituent in the relevant source construction, which typically also involves a copular predicate. There are a number of different locative concepts that give rise to continuous constructions; for more details, see Heine 1993: 32–3. That locative constructions constitute the primary source for progressives in Atlantic creoles has been shown by Boretzky (1983) and Holm (1988: 154–7), and since progressives may acquire continuous and eventually habitual meanings (see Bybee et al. 1994: 151–3), this very schema can also be held responsible for the fact that instances of the Location Schema (see Heine 1997a) may also (but need not) express habitual functions (cf. Holm 1988: 157ff.).

**LOCATIVE > (6) EXIST**

Limbu ya.kma? ‘to be somewhere’, locative copula > existential copula with locative implications. Ex.

**Limbu (van Driem 1987: 63–4)**

(a) khune? yo. ya.k.  
he below be  
‘He is below.’

(b) yum me- ya.k- nen.  
salt neg- be- neg  
‘There is no salt [in it].’

**English**

(a) Thére is my beer. (spatial)  
(b) There is beer at home. (existential)

Swahili -ko locative copula > existential copula when used without a locative argument. Ex.

**Swahili**

(a) Pombe yangu iko nyumba-ni.  
beer my be:at home- LOC  
‘My beer is at home.’

(b) Pombe iko.  
beer be:at  
‘There is beer’ / ‘beer exists’

English there, adverb > Sranan CE de(e) ‘be (somewhere)’, ‘exist’. Ex.

**Sranan CE (Boretzky 1983: 158)**

\[ \text{taig } \text{mi, } \text{pe } \text{den } \text{de.} \]

(tell me where they exist)  
‘Tell me where they are.’
In many languages this appears to be a context-induced reinterpretation of a locative copula that assumes the function of an existential marker when there is no locative argument. More research is required on the exact nature and the genetic and areal distribution of this process.

**LOCATIVE > (7) PERS-PRON**

Hagège characterizes the relevant conceptual transfer in the following way: there are “languages which use spatial adverbs with the meaning of personal pronouns: Japanese kotira ‘here’ often refers to the speaker, Vietnamese dây ‘here’ and dây (or dô) ‘there’ are used with the meanings ‘I’ and ‘you’ respectively when one wants to avoid the hierarchical or affective connotations linked to the use of personal pronouns. . .” (Hagège 1993: 216–17). We have so far found no clear instances of grammaticalized categories arising in this way, but see here > pers-pron.

**LOCATIVE > (8) A-POSSESSIVE**

Albanian prej ‘at’, locative preposition > preposition marking the genitive. Ex.

*Albanian (Buchholz et al. 1993: 441)*

```
shuall  prej    gome
sole     gen     rubber
```

‘rubber sole’

Faroese hjá ‘at’ > marker of attributive possession. Ex.

*Faroese (Lockwood 1955: 104–5, quoted from Koptjevskaja-Tamm forthc.)*

```
hestur-in  hjá    Jógvani
horse:DEF:SG:NOM at    John:SG:DAT
```

‘John’s horse’

Scottish Gaelic aig ‘at’ > marker of attributive possession. Ex.

*Scottish Gaelic (Koptjevskaja-Tamm forthc.)*

```
an    taigh    aig    a'
them:SG:NOM    house:NOM:SG at    them:SG:DAT
mhinistear
minister:SG:SG:NOM
‘the minister’s house’
```

Irish ag ‘at’ > marker of attributive possession. Ex.

*Irish (Koptjevskaja-Tamm forthc.)*

```
an    chathaoir    seo    ag    Peadar
```

‘this chair of Peter’

This pattern of grammaticalization is described as an instance of the Location Schema in Heine 1997a: 114–15.

39 A-POSSESSIVE refers to markers of attributive possession (cf. English of; see Heine 1997a).
LOCATIVE > (9) H-POSSESSIVE

Russian

\[ U \text{ menja kniga.} \]

‘I have a book.’

So -o, -a, locative case suffix > marker of predicative possession. Ex.

\[ So (\text{Carlin 1993: 68}) \]

\[ mek Auca eo- a kus- in. \]

\[ \text{NEG:be Auca home-LOC skin-PL} \]

‘Auca has no clothes.’

This fairly common case of grammaticalization is described as an instance of the Location Schema in Heine 1997a: 114–15.

LOCATIVE > (10) SUBORDINATOR

Kxoe ‘at’, locative postposition > subordinator of temporal, causal, and modal clauses. Ex.

\[ \text{Kxoe (cf. Köhler 1981a: 550; Yvonne Treis, personal communication)} \]

\[ títú pòo yaá xàm ún- á-xu- a- ta \]

‘Then the jackal came, when the lion had left for hunting.’

Saramaccan CE ká ‘where’, ‘at that place’ (< Portuguese acá ‘here’, ‘this way’) > marker of adverbial locative clauses (Byrne 1988).

Locative markers appear to be one of the most common sources for clause subordinators (cf. Radden 1985). See also HERE > CAUSE.

LOCATIVE > (11) TEMPORAL


\[ \text{Tamil (T. Lehmann 1989: 39)} \]

\[ (a) \text{ kurivi mara-tt- il uṭkaar- kir - atu.} \]

‘The bird is sitting on the tree.’

\[ (b) \text{ kumaar oru vaara-tt- il inta-p pustaka-} \]

‘Kumar read this book in one week.’

This is perhaps one of the most frequently employed conceptual metaphors; see, for example, Givón 1979a: 217; Lord 1989; Heine et al. 1991; Haspelmath.
1997b. It is hard to find languages where some expressions for locative concepts are not extended to also refer to temporal concepts. See also ABLATIVE; ALLATIVE; BEHIND; FRONT; IN; INTERIOR.

**LOVE** (‘to love’, ‘to like’) > (1) AVERTIVE

Cahuilla -ʔáyaw- ‘to love’, transitive verb > avertive marker, “indicating that the process portrayed by the nucleus was intended, and ‘almost’, but not wholly, realized” (Seiler 1977: 221). Ex.

*Cahuilla* (Seiler 1977: 221)

\[
\begin{array}{cccc}
\text{hem-} & \text{pičalaw-} & \text{ʔáyaw-} & \text{ʔi.} \\
3:\text{PL-} & \text{get:there-} & \text{love-} & \text{ABS}
\end{array}
\]

‘They almost got there.’

A detailed reconstruction of this process in Tok Pisin PE can be found in Romaine 1999. This instance is probably a special case of the (>) WANT > PROXIMATIVE grammaticalization.

**LOVE** (‘to love’, ‘to like’) > (2) FUTURE


*Albanian* (Buchholz et al. 1993: 693)

\[
\begin{array}{cccc}
\text{Do} & \text{tē} & \text{çilen} & \text{tē} \\
& \text{art} & \text{open:3:PL:pres} & \text{part}
\end{array}
\]

‘More galleries will be opened.’

English *like*, verb > Tok Pisin PE *laik*, future marker. Ex.

*Tok Pisin PE* (Bybee et al. 1994: 255)

\[
\text{mi laik wokabaut.}
\]

‘I shall walk.’

This is probably a special case of the (>) WANT > FUTURE grammaticalization.

**LOVE** (‘to love’, ‘to like’) > (3) INTENTION


*Lingala* (van Everbroeck 1969: 140)

\[
\begin{array}{cccc}
\text{na-} & \text{ling-} & \text{i} & \text{ko-} \\
1:\text{SG-} & \text{love-} & \text{past} & \text{kende.}
\end{array}
\]

‘I intend to go.’

As the cross-linguistic analysis by Bybee et al. (1991) suggests, the evolution LOVE/WANT > INTENTION is a common intermediate step in the development leading to new FUTURE markers (see also WANT). The conceptual distinction between LOVE and WANT is fuzzy in many languages. No attempt is made here to make a rigid separation of the two. Accordingly, both share similar patterns of conceptual shift (see WANT).

40 Very likely, the *past* marker -i has a function other than past tense in this example.
**LOVE (‘to love’, ‘to like’) > (4) PROXIMATIVE**


*Lingala (van Everbroeck 1969: 140)*

```
(2:SG-love-PAST know Lingala)
‘You almost know Lingala.’
```

English *like*, verb > Tok Pisin PE *laik*, proximative marker. Ex.

*Tok Pisin PE (Bybee et al. 1994: 255)*

```
em i laik wokabout.
‘He is about to walk.’
```

A detailed reconstruction of this process can be found in Romaine 1999. This instance is probably a special case of the (>) WANT > PROXIMATIVE grammaticalization.

---

**M**

‘Make, to’ see *DO*

**MAN (‘man’, ‘male’, ‘person’) > (1) CLASSIFIER**

Kilivila tau ‘man’ > *to/to*te, classificatory particle for persons of male sex and for human beings (Senft 1996: 20, 22, 353). Ex.

*Kilivila (Senft 1996: 22)*

```
(2:INCL village PL 3:live PL)
tommota to- paisewa vivila na-
people human:beings work woman female-
salau tauwau to- bugubagula tommota gala
busy men male work:in:the:garden people not
to- dubakasala kena kumwedona e-
human:beings rude but all 3-
nukwali- si bubune- si bwena
know- PL manners their good
```

‘In our village live people taking pleasure in their work. The women are busy, the men are good gardeners. The people are not rude, but all have good manners.’


*Thai (Bisang 1999: 168)*

```
(a) khon- khây sáam khon
CN:man- sick three CLASS:man
‘three patients’
```
(b) phûu-khón-khwáa sìi khon
researcher four CLASS
‘four researchers’


Akatek (Zavala 2000: 136)

\[
\begin{array}{lll}
\text{naj} & \text{me’} \\
\text{CLASS} & \text{sheep} \\
\text{‘the sheep’}
\end{array}
\]

Concerning the rise and development of classifiers in Chinese, see Peyraube 1998. This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also BRANCH; CHILD; PIECE; SONG; TREE; WOMAN. More research is required on the genetic and areal distribution of this process.

MAN (‘man’, ‘male’, ‘person’) > (2) EXCLAMATION


Swahili

\[
\begin{array}{llllll}
\text{u-} & \text{si-} & \text{ni-} & \text{sumbu-} & \text{e,} & \text{bwana!}
\end{array}
\]

2:SG- NEG- 1:SG:OBJ- disturb- SUBJUNCT man

‘Don’t disturb me!’ (can be used in some dialects even if a female person is addressed)

Compare English man; for example, in Man, was I scared!’ (anonymous reader). More research is required on the exact nature and the genetic and areal distribution of this process.

MAN (‘man’, ‘male’, ‘person’) > (3) INDEFINITE PRONOUN


Icelandic (Stolz 1991b: 13)

\[
\begin{array}{llllllllll}
\text{maður} & \text{leita-} & \text{r} & \text{til} & \text{hin-} & \text{s}
\end{array}
\]

PRON:NOM draw- 3:SG PREP to other- NEUT:SG:GEN
kyn-s- in- s.

‘One is inclined toward the other sex.’

See also Lehmann (1982: 51–2). This appears to be an instance of a process whereby generic nouns like ‘person’ and ‘thing’, either on their own or as part of some noun phrase, are grammaticalized to pronouns; compare person; thing.

**MAN (‘man’, ‘male’, ‘person’) > (4) MALE**

Nouns for ‘man (vir)’ have been grammaticalized in some languages to closed-class categories denoting male participants, typically as adjectival modifiers or derivative affixes. !Xun, northern dialect /ỳòq, pl. nìqì ‘man’, ‘male’, noun > -nìqì, pl. -nìqì ‘male’, derivative suffix mostly on animal names. Ex.

### !Xun, northern dialect (Bernd Heine, field notes)

!òq-|ìqì | pl. !òqì-|ìqì | !hm-|ìqì | pl. !hmìqì-|ìqì

‘male elephant(s)’ ‘male leopard(s)’

Ewe ñòtsì ‘man’, noun > -ñòtsì ‘male’, derivative suffix of limited productivity. Ex.

### Ewe (cf. Westermann 1907: 48–9)

nyì- | ñòtsì | sò-rì | ñòtsì

sibling- man | spouse- man | ‘brother’ | ‘husband’

Ewe aòtsì ‘husband’, noun > -tsì ‘male’, derivative suffix mostly on animal and plant names. Ex.

### Ewe (cf. Westermann 1907: 48)

nyì | nyì-tsì

‘cattle’ | ‘bull’

This is an instance of a process whereby human nouns, on account of some salient semantic characteristic, give rise to grammatical markers highlighting that characteristic; see also child; father; mother; woman.

**MAN (‘man’, ‘male’, ‘person’) > (5) THIRD PERS-PRON**

||Ani khò(e)-m̀a ‘male person’, ‘man’, noun > khò(e)-m̀a, khò-̀m ‘he’, third person masculine singular pronoun. Ex.

||Ani (Heine 1999a: 28)

[. . .] kà̀nà | khò- | m̀ | hin-|ìdè | khì-|éì | hè.

because person-m:sg | do- hab | manner-f:sg

‘[The crocodile catches her] because this is the way he (= the crocodile) does it.’
Lendu ke ‘man’, ndrú or kpà ‘people’ > ke, third person singular pronoun, ndrú or kpà, third person plural pronoun. Ex.

_Lendu_ (Tucker 1940: 392)

\[
\begin{array}{ccc}
\text{ma- } & \text{zhi } & \text{ndru.} \\
\text{1:SG-love} & \text{3:PL} & \\
\text{ke } & \text{zhi } & \text{kpa.} \\
\text{3:SG love} & \text{3:PL} & \\
\end{array}
\]

‘I love them.’
‘He loves them.’


While there are examples of this grammaticalization from three different language phyla, all are confined to Africa; conceivably, we are dealing with an areal phenomenon. See also Heine and Reh 1984: 223–4, 272. This appears to be another instance of a process whereby generic nouns like ‘person’ and ‘thing’ are grammaticalized to pronouns; compare _person_; _thing_.

**MANNER > SIMILE**


_Kenya PS_

\[
\begin{array}{ll}
\text{fanya namna (ile) wewe na-taka.} & \\
\text{do manner (DEM) you pres-want} & \\
\end{array}
\]

‘Do it as you like.’

More cross-linguistic data is required to substantiate this process, including its directionality.

**MATTER > (1) CAUSE**


||Ani

\[
\begin{array}{llll}
\text{tí } & \text{fiàà- } & \text{tè } & \text{tsá } & \text{dì } & \text{mìqqá-sì } & \text{kà.} \\
\text{1:SG come-pres} & \text{2:M:SG poss} & \text{reason-F:SG} & \text{LOC} & \\
\end{array}
\]

‘I came because of you.’


_Baka_ (Christa Kilian-Hatz, personal communication)

\[
\begin{array}{llll}
\text{ʔá } & \text{jàè } & \text{peè } & \text{mòni } & \text{kòpe.} \\
\text{3:SG take:PAST} & \text{BEN:1:SG} & \text{money} & \text{all} & \\
\text{ʔèè nà kè } & \text{ma } & \text{gbóè } & \text{lé } & \text{nè.} \\
\text{therefore 1:SG beat:PAST him} & \text{REL} & \\
\end{array}
\]

‘He has stolen all my money; therefore I have beaten him.’

Vai (Koelle [1854] 1968: 190)

(a)  
\begin{align*}
\text{mbé} & \text{ kò } \text{ bé } \text{ nìe}? \\
(\text{what} \quad \text{news} \quad \text{COP} \quad \text{here})
\end{align*}

‘What is the news here?’

(b)  
\begin{align*}
\text{iːfára:} & \text{ sá } \text{ naː dijéːkòːa.} \\
(2:SG:be:glad \quad 1:SG:POSS \quad \text{see:REAS})
\end{align*}

‘Thou art glad on account of seeing me.’


\textbf{Kikuyu}

(a)  
\begin{align*}
\text{gu-} & \text{ ti-} \text{ ri-} \text{ úndu} \\
\text{C15-} & \text{NEG-} \text{be} \text{matter}
\end{align*}

‘no matter’

(b)  
\begin{align*}
\text{nì-} & \text{ n-} \text{ gū-} \text{ igua} \text{ üūru} \text{ nì} \text{ úndu} \\
\text{PART-} & \text{1:SG-} \text{FUT-} \text{feel} \text{bad} \text{COP} \text{matter}
\end{align*}

\begin{align*}
\text{wa} & \text{ ü-} \text{ horo} \text{ ü-} \text{ cio.} \\
\text{of} & \text{C14-} \text{affair} \text{C14-} \text{that}
\end{align*}

‘I feel unhappy because of that affair.’


\textbf{Basque (anonymous reader)}

\begin{align*}
\text{zer-} & \text{ ga(i)-} \text{ tik?} \\
\text{what-} & \text{material-} \text{ ABL}
\end{align*}

‘Why?’

This grammaticalization appears to be an instance of a more general process whereby certain generic nouns are pressed into service as markers of clause combining; compare PLACE.

\textbf{MATTER > (2) COMPLEMENTIZER}


\textbf{Nama (Krönlein 1889: 206; Hagman 1977: 138)}

\begin{align*}
ti\textit{ita} & \text{ ke} \text{ kè} \text{ /’úú} \text{ ’i} \text{ !’úú-} \\
1:SG & \text{TOP} \text{ PAST } \text{not:know} \text{ PAST \text{go-}}
ts & \text{ta} \text{ !\textit{xá}-} \text{ sà.} \\
2:SG:M & \text{IMPFV} \text{ COMP-} \text{3:SG:M}
\end{align*}

‘I didn’t know that you were going.’
Ik *men*‘matter, problem’, noun > *men* (ni) (‘matter (which)’, ‘that’\(^{41}\), complementizer. Ex.

*Ik (König 1999)*

(a) \( \tilde{t}irr-a \ men\tilde{a} \ k^a. \)

\[
\begin{array}{llll}
\text{have} & \text{a} & \text{problem} & \text{ACC}
\end{array}
\]

‘He has a problem.’

(b) \( \tilde{n}i\tilde{t}a \ iye- \ i \ men\tilde{a} \ t\tilde{o}d-\tilde{at}^a. \)

\[
\begin{array}{llllll}
\text{NEG} & \text{know-NEG} & \text{what} & \text{ACC} & \text{say-3:PL}
\end{array}
\]

‘He does not know what they say.’

This grammaticalization appears to be an instance of a more general process whereby certain generic nouns serving as nominal complements are pressed into service as markers of clause subordination. In many languages, this process has not proceeded beyond an incipient stage where it remains controversial whether, or to what extent, the relevant noun constitutes a noun or a clause subordinator; see König 1999 for a discussion. See also PLACE; THING.

**MATTER > (3) PURPOSE**


*Nama (Krönlein 1889: 206)*

\[
\begin{array}{llllll}
\text{Nesa} & \text{ta} & \text{ra} & \text{mîba} & \text{tsi}
\end{array}
\]

\[
\begin{array}{llllll}
\text{this:F} & \text{1:SG} & \text{PROG} & \text{say:APPL} & \text{2:SG}
\end{array}
\]

!gùnts \( \text{nî} \) !kèïï.

go:2:M:SG \text{FUT} \text{COMP}

‘I tell you this so that you go.’


*Susu (Friedländer 1974: 50)*

\[
\begin{array}{llllll}
a & \text{nakha} & \text{si} & \text{sukhu} & \text{a} & \text{fakha-fera.}
\end{array}
\]

\[
\begin{array}{llllll}
3:SG & \text{TAM} & \text{goat} & \text{catch} & 3:SG & \text{kill- PURP}
\end{array}
\]

‘She seized the goat in order to kill it.’

This grammaticalization appears to be another instance of a process whereby certain generic nouns are pressed into service as markers of nominal or clausal participants; compare MATTER > CAUSE.

‘Middle’ see CENTER

\(^{41}\) Since Ik nouns retain their case inflections even when grammaticalized to complementizers, the result is that this language has several case-inflected clause subordinators (see König 1999).
MIRATIVE > EVIDENTIAL, INFERENTIAL

Korean -kun, mirative suffix > inferential evidential (DeLancey 1997: 45).
Sunwar /'baak-/, mirative existential copula > inferential/hearsay perfect. Ex.

Sunwar

(a) Tangka Kathmandu- m 'baâ- tə
   Tangka Kathmandu- loc exist- 3:SG:PAST
   ‘Tangka is in Kathmandu.’ (said by someone who had seen Tangka in Kathmandu, not having known previously that he was there)

(b) kyarśa 'sad- a 'baâ- tə.
   goat kill- 3:SG exist- 3:SG:PAST
   ‘He killed a goat (I hear or infer).’

In some languages the mirative is encoded as a distinction in the copular system and enters the verbal system through finite constructions built on copulas; other languages, however, manifest this distinction in marking it in verb inflection but not in the copula (for details, see DeLancey 1997: 46). It seems that the grammaticalization development MIRATIVE > INFERENTIAL EVIDENTIAL has also taken place in Khowar, Kalasha, Washo, Akha, Chinese Pidgin Russian, and other languages (DeLancey 1997: 47).

MOTHER > FEMALE

Nouns for ‘mother’ have been grammaticalized in some languages to closed-class markers denoting female participants, typically as adjectival modifiers or derivative affixes. !Xoõ qáe ‘mother’, noun > ‘female’, modifier. Ex.

!Xöö (Traill 1994: 154, 174; Güldemann 1999b: 69)
   tâa qáe gúmi qáe
   person mother cattle mother
   ‘woman’ ‘cow’


!Xun, northern dialect (Bernd Heine, field notes)
   !xó-dé !hm-dé
   ‘female elephant’ ‘female leopard’

Ewe nɔ ‘mother’, noun > -nɔ ‘female’, derivative suffix used especially with nouns for animals and some plants. Ex.

Ewe (cf. Westermann 1907: 48)
   nyi nyi-nɔ
   ‘cattle’ ‘cow’

This is an instance of a process whereby human nouns, on account of some salient semantic characteristic, give rise to grammatical markers highlighting that characteristic; see also CHILD; FATHER; MAN; WOMAN.
**MOUTH (body part) > FRONT**


*Susu* (Friedländer 1974: 40)

\[
\begin{array}{cccccc}
M & ma & bankhi & na & baa & dèra. \\
(1:SG & GEN & house & be & sea & in:front:of) \\
\end{array}
\]

‘My house is located at the sea.’


*Mursi* (Turton and Bender 1976: 543)

\[
\begin{array}{ccc}
dori- & tutuo & \\
house- & mouth:of & \\
\end{array}
\]

‘in front of the house’

This grammaticalization appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; see also **BACK; BELLY; BUTTOCKS; EYE; FACE; FLANK; HEAD; NECK**.

**NEAR (‘near’, ‘close to’) > (1) AFTER**


This grammaticalization appears to be an instance of a more general process whereby spatial concepts are used to also express temporal concepts. More data, especially data from non-European languages, are required to determine the exact nature of this process.

**NEAR (‘near’, ‘close to’) > (2) AVERTIVE, PROXIMATIVE**

Swahili *karibu* + subjunctive main verb > avertive marker. Ex.

\[\text{Basque} \text{ ondo has been borrowed from Romance; its original and still-current meaning is ‘bottom’. From this there are two formations for ‘after’: ondoan (ondo-an, bottom-LOC) and ondoren (ondo-(r)en; bottom-GEN). Ex. Basque (anonymous reader)}\]

\[
\begin{array}{ccc}
\text{jan} & \text{ondo-} & \text{an} \text{ OR} \\
\text{eat[PVF] side-} & \text{LOC} & \text{eat[PVF]} \text{side-} & \text{GEN} \\
\text{‘after eating’} & \text{‘after eating’} & \\
\end{array}
\]
Swahili (Heine 1997d: 11)

(a) A-li-kuwa karibu.

3:SG-PAST-be near

‘He was nearby.’

(b) Karibu ni-f-e maji

near 1:SG-die-SUBJUNCT water

‘I nearly drowned.’


Seychelles CF (Corne 1977: 149)

zot pros pur (zot) ale

(they near for they go)

‘They are on the point of leaving.’

For more details, see Heine 1997d: 11–2 and Kuteva 1998, forthc.a, forthc.b. A detailed reconstruction of this process can be found in Romaine 1999. This grammaticalization appears to be an instance of a more general process whereby grammatical aspect functions are conceptualized and expressed in terms of locative concepts; compare locative > continuous.

NECK (body part) > LOCATIVE


Vai (Koelle [1854] 1968: 39)

Súbahánalai ábe tére- kando.

(3:SG:COP sun- above)

‘Subahanalai was above the sun.’

Susu könnyi ‘neck’ + -ra, multipurpose particle, -na after dental nasals > könna ‘along’, ‘in’, ‘at a prolonged object’; wuri könna ‘along the tree’ (Friedländer 1974: 40).

So far, only examples from the Mande branch of Niger-Congo family have been found, and it might, therefore, be a case of areal or genetically defined grammaticalization. Nevertheless, this case appears to be an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare, for example, back; eye; face; foot; head; heart; neck.

NEED > OBLIGATION

English need (to) + infinitive > marker of medium obligation (Denning 1987: 46). Basque behar is the ordinary noun for ‘need’, ‘necessity’. Combined with a transitive auxiliary, its meanings include that of marking deontic modality (‘have to’, ‘must’). Ex.
Basque (anonymous reader)

(a) Diru- a behar d- u- t.
    money- DET need PRES-AUX-1:SG:ERG
    ‘I need money.’

(b) Etxe- ra joan behar d- u- t.
    house- ALL go[PFV] need PRES-AUX-1:SG:ERG
    ‘I have to go home.’


Hausa (Herms 1987: 87; Ma Newman 1990: 178)

ya kamātā mu tafi.
(3:M:SG need 1:PL go)
‘We must go.’


Acholi (Bavin 1995: 121–2)

(a) Ci omyero en o- cwal jami- ni weng
    and must he 3:SG-take thing-DEM all
    loca kulu.
    across river
    ‘And he needed to take all these things across the river.’

(b) In omyero i- cam mot.
    you must 2:SG-eat slowly
‘You should eat slowly.’

See Denning 1987: 46ff. and also owe. For a treatment of modality as a semantic map, see van der Auwera and Plungian 1998. This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see, for example, DESCEND; FOLLOW; GET; GO.

NEGATION > S-QUESTION

Harris and Campbell (1995: 294–5) describe the structure illustrated below as the “A-not-A structure” which may be a source for S-QUESTION markers. In many Tibeto-Burman languages the negative marker *ma was grammaticalized to a marker of yes-no questions.

Cantonese (Harris and Campbell 1995: 79)\(^43\)

nee zek- mu- zek in ah?
you smoke- not- smoke in ah
‘Do you smoke?’

\(^43\) Alain Peyraube (personal communication) doubts whether this is a suitable example to substantiate the present process.
Mandarin Chinese *bu*, negation marker (see also Peyraube 1996: 197). Ex.

**Mandarin Chinese (Li and Thompson 1984: 52ff.; Harris and Campbell 1995: 295)**

(a) *tā* bu zài jiā.

3:SG NEG at home

‘S/he is not at home.’

(b) *tā* zài jiā bu zài jiā?

3:SG at home NEG at home

‘Is s/he at home?’

Turkish (Harris and Campbell 1995: 295; the A-not-A structure with a question particle)

*kadın* tarla-ya git-ti- mi git-me- di- mi?

woman field-DAT go-PAST-Q go-NEG-PAST-Q

‘Did the woman go to the field (or didn’t she go)?’

Conceivably, tag questions (e.g., English *He has left, hasn’t he?*) may also be linked to the present grammaticalization process. Harris and Campbell (1995: 295) observe: “The expression *or not* functions in a way similar to tags in many languages, though its structure suggests that it may be derived from an A-not-A structure.” However, more research is required on the exact nature and the genetic and areal distribution of this process. See also > **S-question**.

**NEGLIGENCE, EXIST (‘there is not’) > NO, NEGATION**

Wari ‘*om* ’not exist’ > ’*om*, negation marker. Ex.

**Wari’ (Everett and Kern 1997: 82)**

*‘Om* ca camain’

not:exist INFLECTION:NEUT:REAL:PRES/PAST bitter

*ne* ca tomi’ wa.

3:NEUT INFLECTION:NEUT:REAL:PRES/PAST speak INF

‘Speaking is not bitter.’

Turkish *yok* ‘there is not’, negative existence marker > ‘no!’, interjection for negation. Ex.

**Turkish (Lewis [1967] 1985: 142; Ergun Cehreli, personal communication)**

(a) *köside* bir kahve yok.

‘There is no cafe on the corner.’

(b) *onu seviyormusun? yok!*

‘Do you love him? No!’

Swahili *ha-pa-na* ‘there is none’ > *hapana* ‘no’. Ex.
Swahili

(a) Ha- pa- na su- kar- i.
   NEG-C16-have sugar
   ‘There is no sugar.’

(b) U- na su- kar- i? Ha- pan- a.
   2:SG-have sugar no
   ‘Do you have sugar? No.’

Turku PA mafi (ma NEG + fi ‘exist’) > mafi, sentence-final negation marker (Tosco and Owens 1993: 198, 202). This appears to be another classical instance of desemanticization (“semantic bleaching”), whereby a more complex meaning is reduced to its nucleus, viz. negation; see, for example, COPULA, LOCATIVE > LOCATIVE.

NOW (TEMPORAL) > STILL


‘Numeral’ see ONE; THREE; TWO.

OBLIGATION > (1) FUTURE

This process appears to be well documented across languages; see Bybee et al. 1991 and Bybee et al. 1994 for details. Not uncommonly, the process is triggered by specific contexts relating to personal deixis: while the OBLIGATION meaning may be retained in contexts where second person subject referents are involved, the FUTURE meaning tends to arise in contexts where third person subjects are involved. (See Schäfer-Prieß 1999: 102–4 for observations on Romance languages.)

OBLIGATION > (2) PROBABILITY

English must, obligation auxiliary > marker of the epistemic modality of probability. Ex.

**English (anonymous reader)**

(a) I must go home.

(b) That must be the postman. (on hearing the doorbell)

German müssen ‘must’, auxiliary expressing strong obligation > strong probability, inferred certainty. Ex.
German
(a)  Er muss sofort kommen.
    he must instantly come
    ‘He has to come immediately.’
(b)  Er muss gestern gekommen sein.
    he must yesterday come be
    ‘He must have come yesterday.’

Seychelles CF bezuê ‘have to’, marker of obligation > marker of probability. Ex.

Seychelles CF (Corne 1977: 136)
(a)  nu it bezuê desan à-vil.
    (1:PL PAST have:to go to:town)
    ‘We had to go to town.’
(b)  i bezuê pe ale.
    (3:SG have:to PROG leave)
    ‘He is probably leaving.’

This grammaticalization has been well described by Bybee et al. (1994: 224ff.); it is an instance of a more general process whereby markers for deontic modality develop into markers of epistemic modality. There are various hypotheses on how this process is to be explained. According to the one perhaps most frequently voiced, the development from deontic to epistemic meanings is suggestive of metaphorical transfer (see, e.g., Sweetser 1982; Bybee and Pagliuca 1985: 73; Heine 1991: 175–8). Sweetser (1990: 52) argues that this development can be accounted for in terms of “sociophysical concepts of forces and barriers,” and Traugott (1989) suggests that we are dealing with an instance of subjectification in semantic change (see also Hopper and Traugott 1993: 86). Compare ABILITY > POSSIBILITY; DEONTIC MODALITY > EPISTEMIC MODALITY.

‘On’ see up

ONE (NUMERAL) > (1) ALONE
Ewe ñéká ‘one’, cardinal numeral > ‘alone’ in certain contexts. Ex.

Ewe

   ñéyá  ñéká
   3:SG   one
   ‘he alone’


Tondano (Sneddon 1975: 131)

   si piŋkan nu ñsa
   CM:SG Pingkan PM one
   ‘Pingkan herself’ / ‘Pingkan alone’
More research is required on this process. Not uncommonly, it is not the cardinal numeral ‘one’ on its own that assumes the alone-function; rather, it tends to be modified by some other marker. Compare alone > only; one > only.

**ONE (NUMERAL) > (2) INDEFINITE**

English one > a(n) (indefinite article). Albanian një ‘one’, numeral > ‘a(n)’, indefinite article. Ex.

**Albanian (Buchholz et al. 1993: 367)**

(a) një e një bëjnë dy.

(one and one 3:pl:pres:make two)

‘One plus one is two.’

(b) një djalë një grua

‘a boy’ ‘a woman’

Basque bat ‘one’ > indefinite article; for example, etxe bat ‘one house’ or ‘a house’ (anonymous reader). Turkish bir ‘one’, numeral > indefinite article. Ex.

**Turkish (anonymous reader; Lewis [1967] 1985: 54)**

(a) bir büyük tarla

(one big field)

‘one large field’

(b) büyük bir tarla

(big one field)

‘a large field’

German ein ‘one’ > indefinite article. French un ‘one’ (m) > indefinite article. Ewe dëká ‘one’ > de, indefinite article. Moré a yémré ‘one’ (numeral) > ‘some’, ‘a’ (indefinite article); for example, dår a yémré ‘a/some day’ (Alexandre 1953b: 469). Hungarian egy ‘one’ (numeral) > ‘a(n)’, indefinite article. Ex.

**Hungarian (Szent-Iványi 1964: 73)**

Keres- ek egy tanítót.

search-1:sg:pres one teacher

‘I am looking for a teacher.’

Lezgian sa numeral ‘one’ > indefinite article. Ex.

**Lezgian (Haspelmath 1993: 230)**

(a) sa tar

one tree

‘one tree’

(b) Žiraf- di qib sa q’aq’an tarci- n
giraffe- erg frog one high tree- gen

xile- l ecig- na.
twig- sress put- aor

‘The giraffe put the frog on a twig of a tall tree.’
Easter Island *etahi* ‘one’ > indefinite article. Ex.

**Easter Island** (Chapin 1978: 148, 158)

(a) *Etahi o matou i ta’e haga mo*

_one_ **gen** we **perf** neg want **inf**

*hoki mai mai Tahiti.*

return here from Tahiti

‘One of us didn’t want to come back from Tahiti.’

(b) *i tu’u mai ai etahi miro o*

**perf** arrive here **part** one boat **gen**

*te harani mai Tahiti.*

the France from Tahiti

‘A French boat arrives here from Tahiti.’

Tamil *oru* ‘one’, numeral > indefinite article. Ex.

**Tamil** (T. Lehmann 1989: 112)

_oru nalla paṭam_

one/a good movie

‘one/a good movie’

See Givón 1981, 1984: 432–5; Hopper and Martin 1987; Heine 1997b: 66–82 for further information on this grammaticalization. The present grammaticalization is confined to the numeral ‘one’ used as a nominal determiner rather than as a pronoun; for details on the development of ‘one’ into an indefinite pronoun, see **one > indefinite pronoun**.

**ONE (NUMERAL) > (3) INDEFINITE PRONOUN**

This process involves the use of the numeral ‘one’ as a pronoun rather than as a nominal attribute (cf. **one > indefinite**). Lehmann (1982: 51–2) cites German *einer* ‘one’ (*m:sG*), Italian and Spanish *uno* ‘one’ (*m:sG*), and Abkhaz *a-k’(ɔ)* as examples. Ex.

**German**

(a) *Nur einer ist gekommen.*

only one is come

‘Only one has come.’

(b) *Kann einer mir sagen, wo mein Glas ist?*

can one to:me tell where my glass is

‘Can someone tell me where my glass is?’

In many cases, it is not the numeral on its own that undergoes this process; rather the numeral tends to be accompanied by some modifying or specifying element; compare English *someone, anyone*. Vulgar Latin *aliqui-unu* ‘any-one’ > Italian *alcuno* ‘someone’. French *quelque* ‘some’ + *un* ‘one’ > *quelqu’un* ‘someone’ (cf. Lehmann 1982: 52). For a discussion of this grammaticalization, see Haspelmath 1997a: 183–4; see also Lehmann 1982: 51–2.
ONE (NUMERAL) > (4) ONLY

English *only* derives historically from ‘one’, similarly, German *einzig* ‘only’. Nama /gui ‘one’, numeral > ‘only’. Ex.

Nama (Dempwolff 1934–5: 114f.)

\[
\begin{array}{c|c|c}
\text{guı} & \text{Elo-} & \text{hã.} \\
\hline
\text{(one God-3M:SG)} & \text{one-3M:SG exist) }
\end{array}
\]

‘There is one God only.’


Baka (Christa Kilian-Hatz, personal communication)

\[
\begin{array}{c|c|c}
\text{kò} & \text{kpóde} & \text{kò} \\
\hline
\text{only body-1SG:POSS one only body-2SG:POSS one} \\
\end{array}
\]

‘me alone’ ‘you alone’

Lezgian sa ‘one’, numeral > ‘only’, restrictive marker. Ex.

Lezgian (Haspelmath 1993: 230, 238)

(a) sa tar

one tree

‘one tree’

(b) Sa za-z wa? či wiri xührü-

only I-DAT not we:GEN all village-

n- buru- z či- da.

GEN- SBST:PL- DAT know- FUT

‘Not only I, everyone in our village knows (it).’


Bulgarian

\[
\begin{array}{c}
\text{Tja iskašе edinstvenо da go vpečatli.} \\
\hline
\text{she want:3SG:IMPERF only to him impress} \\
\end{array}
\]

‘She only wanted to impress him.’

Krio CE *wan* ‘one’, numeral > ‘only’. Ex.

Krio CE (Boretzky 1983: 221)

\[
\begin{array}{c|c|c|c|c}
\text{na} & \text{God} & \text{wan} & \text{no} & \text{wetinmek wi} \\
\hline
\text{(it:is God one know why our} \\
\text{fingа den difren.} \\
\text{finger are different)} \\
\end{array}
\]

‘It is God only who knows why our fingers are different.’

While this appears to be a fairly widespread process, more research is required on the exact contextual frame leading to this grammaticalization. See also ALONE.
**ONE (NUMERAL) > (5) OTHER**

Bulu *fok* ‘one’, numeral, when counting > -vok ‘another’, ‘other’, indefinite modifier. Ex.

*Bulu* (Hagen 1914: 50, 243)

\[
\begin{align*}
\text{kelek! miŋga mbok a za’ak!} \\
\text{(go woman ci:other tam come)}
\end{align*}
\]

‘Go! The other woman should come!’

Yagaria *bogo* ‘one’, numeral > ‘another’, modifier. Ex.

*Yagaria* (Renck 1975: 73)

\[
\begin{align*}
yo’ bogo-vi’ bei- d- i- e. \\
\text{house one- ine live-past-3:sg-ind}
\end{align*}
\]

‘He lives in another house.’

More research is required on the contextual conditions leading to this grammaticalization.

**ONE (NUMERAL) > (6) SAME**

Albanian *një* ‘one’, numeral > ‘(the) same’, adverb. Ex.

*Albanian* (Buchholz et al. 1993: 367)

(a) \[
\begin{align*}
\text{një e një bëjnë dy.} \\
\text{(one and one 3:pl:pres:make two)}
\end{align*}
\]

‘One plus one is two.’

(b) \[
\begin{align*}
për mua është një. \\
\text{(for 1:sg:acc 3:sg:pres:be one)}
\end{align*}
\]

‘For me it is the same.’

Swahili *moja* ‘one’, numeral > ‘the same’. Ex.

*Swahili*

(a) \[
\begin{align*}
m- \text{lango m-moja} \\
c3- \text{door c3-one}
\end{align*}
\]

‘one door’

(b) \[
\begin{align*}
Yote ni moja tu. \\
\text{all cop one only}
\end{align*}
\]

‘It is all the same.’

**ONE (NUMERAL) > (7) SINGULATIVE**

East Cushitic *tokko* ‘one’, numeral > Saho -tə, singulative marker (Heine and Reh 1984: 273; Marcello Lamberti, personal communication). In Akatek, the numeral *jun* functions as a singulative, that is, a marker that restricts the reference to a single entity. Ex.

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44 An anonymous reader of an earlier version of this work suggested that there may be an alternative directionality involved since Russian *odin* ‘one’ yields the derived form *odinakov*– ‘same’.
Akatek (Zavala 2000: 118–19)

(a)  
tol  
chinchí  
Jun  
a-  
wakax  
ti’  
an.  
that  
I:bite  
one  
A  
cow  
proxim  
1:sg

‘I am going to eat your bull.’

(b)  
jaton  
b’ey  
Jun  
yaax  
k’ultaj  
tu’  
oxin.  
there  
at  
one  
green  
forest  
distal  
then

‘[So the boy went] through the mountain.’ (lit.: ‘green forest’)

More research on the areal and genetic distribution of this process is required. This is an instance of a more general process whereby lower numerals are pressed into service as number markers, typically on nouns; compare THREE; TWO.

ONE (NUMERAL) > (8) SOME

Basque bat ‘one’ means ‘about’ when attached to another number. Ex.

Basque (anonymous reader)

hогei-  
(ren  
bat  
or  
hогei  
bat  
twenty-  
gen  
one  
twenty  
one

‘about twenty’


Lezgian (Haspelmath 1993: 236)

sa  
wad  
deq’iq’adi-  
laj  
one  
five  
minute-  
srel

‘about five minutes later’

Compare also Lezgian sa ‘one’, numeral > sa šumud (‘one’ + interrogative pronoun ‘how many’) ‘some’, ‘several’, scalar quantifier. Ex.

Lezgian (Haspelmath 1993: 254)

sa  
šumud  
ktab  
one  
how:many  
book

‘some books’

Ada  
sa  
šumud  
seferd-  
a  
Nurbaladi-q̣  
she(:ERG)  
one  
how:many  
time-  
?  
Nurbala-  
POESS

galaz  
q’üler-  
na.  
with  
dance-  
AOR

‘She danced with Nurbala several times.’

Tamil oru ‘one’, numeral > ‘some’, modifying adjective. Ex.

---

45 An anonymous reader of an earlier version of this work suggested that in Hua there is an alternative directionality: the numeral ‘one’ is analyzable as consisting of a root meaning ‘some’, ‘some more’ plus a suffix meaning ‘plain, unmarked’.
Tamil (T. Lehmann 1989: 113)
oru ampatu peer
some fifty people
‘some fifty people’

Yagaria bogo numeral ‘one’ > indefinite pronoun ‘some’. Ex.

Yagaria (Renck 1975: 73)
(a) yo’ bogo-ko’ hano-d- i- e.
  house one- res exist- past-1:sg-ind
‘There is only one house.’
(b) yale bogo
  people one
‘some people’


||Ani (Heine 1999a)
(a) ≠’úrú-è xórò tì à’à /úí
dove-imp give 1:sg obj one
≠’uru /oan- m kà!
dove child- m:sg loc
‘Dove, give me one of your eggs!’
(b) /ú /’è
  some day
‘some days’ / ‘another day’

Seychelles CF (Seselwa) ê ‘one’, ‘a’, numeral, indefinite article > indicator of approximate quantities (when used before cardinal numerals). Ex.

Seychelles CF (Corne 1977: 12–13)
(a) ê pom-d-amur
  (a tomato)
‘a tomato’
(b) ê sâ rupi
  (a hundred rupee)
‘about a hundred rupees’
Cf. sâ rupi ‘100 rupees’.

This grammaticalization appears to arise when the numeral ‘one’ can be used as a modifier on noun phrases denoting quantities.

**ONE (NUMERAL) > (9) TOGETHER**

Swahili pa-moja (locative noun class 16 + ‘one’) > ‘together’. Ex.

**Swahili**
(a) Wa- li- kaa mahali pa- moja.
  3:pl- past- stay place c:16- one
‘They stayed at one and the same place.’
(b) Wa-li- kaa pamoja.

stay together

‘They stayed together.’


Bulgarian

(a) V tazi staja ima samo edno ogledalo.

in this room there is only one mirror

‘There is only one mirror in this room.’

(b) Xajde da otidem zaedno v Kjoln!

let’s go together in Cologne

‘Let’s go to Cologne together!’

More research on the areal and genetic distribution of this process is required.

OR > S-QUESTION

Moré bi ‘or’, listing connective > question particle. Ex.

Moré (Alexandre 1953b: 39)

(a) ya f kyēma bi f yao:

‘Is this your big brother or your little brother?’

(b) a wā mé bi?

‘Did he come?’

Hausa kō ‘or’, ‘either (... or)’ > question particle. Ex.

Hausa (Cowan and Schuh 1976: 216)

(a) kō nī kī kai

(either 2:sg or I)

‘either you or I’

(b) kō kā sāmi gyàdā mài yawà?

(q you get peanuts many)

‘Did you get a lot of peanuts?’

Kxoe re ‘or’, alternative conjunction between noun phrases and verb phrases > marker of polar questions (Yvonne Treis, Christa Kilian-Hatz, personal communications). Latvian vai ‘or’ > interrogative marker (Stolz 1991b: 66–8). Basque ala ‘or’ has a limited interrogative function. Ex.

Basque (anonymous reader)

(a) beltz- a ala zuri- a?

black- DET or white- DET

‘red or white (wine)?’

(b) Nun ibili z- ara?

were move[PFV] 2:SG:ABS- AUX
"lapur(r)-eta- n ala?"  
"thief-pl loc or"  
‘Where have you been? Among thieves?’

Turku PA (Arabic-based pidgin) *wala ‘or’ > marker of yes-no questions. Ex.

Turku PA (Tosco and Owens 1993: 200, 202)

```
laam da shuf anína wála?  
animal def saw us Q
```

‘Did the animal see us?’

Further examples can be found, for example, in Hua and Khmer (anonymous reader). See also NEGATION > S-QUESTION. Apart from alternative conjunctions (‘or’), negation markers figure prominently in the genesis of polar question markers, and the two are often combined. Harris and Campbell (1995: 295) observe: “The expression or not functions in a way similar to tags in many languages. . . . We refer to this as an alternative tag.” Ex.

Modern Georgian (Harris and Campbell 1995: 295)

```
mova vano, tu ara?  
s/he:come Vano or not
```

‘Will Vano come, or not?’

Further investigation is required to study the exact nature of this process and the interaction of conjunctions and negation markers.

**owe > obligation**


See Denning 1987 for further information. Note that the examples available so far are all from European languages. More research is required on the exact nature and the genetic and areal distribution of this process. See also NEED.

**Owner > intensive-refl**

Swahili *mw-enye ‘owner (of)’, *mw-enye-we (‘his/her owner’) > mw-enyewe ‘oneself’. Ex.

Swahili

```
Mimi mw-enyewe  
I c1- self

‘I myself’
```

Baka *mòmòló ‘owner’, ‘possessor’, noun > *momôló or mòló ‘oneself’ (preceded by an emphatic personal pronoun). Ex.

Baka (Brisson and Boursier 1979: 260)

```
(a) ma à mue ngbala, ma nyi  
1:sg:asp see:past machete 1:sg know
```
mòmóló ná ode.

owner ART NEG

‘I’ve found a machete; the owner I don’t know.’

(b) ?á buûle lo ngé mòmóló/móló!

3:SG cut:PAST tree 3:SG:EMPH self

‘He cut the tree himself!’


Kxoe (Köhler 1973a: 31a, 59)

xà-má dixàmà

he owner

‘he himself’

||Ani dixà- (+ person-gender-number marker) ‘owner’ > intensive reflexive marker. Ex.

||Ani (Heine 1999a: 43)

tsá dixà- tsi tamaxa xá- tsí- ka-xà


mûn!

see

‘Even you yourself will see [them]!’

Martin Haspelmath (personal communication), giving examples from Russian (sam) and Latin (ipse), observes that this process is not necessarily unidirectional, that is, that INTENSIVE-REFL markers may also be reversed. For more details, see Heine 2000b and Schladt 2000. We seem to be dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational grammatical markers; compare BOTTOM; SIDE; TOP.

P

PASS (‘to pass (by), ‘to pass through’) > (1) AFTER


French (Haspelmath 1997b: 65)

passé une heure du matin

(passed one hour of morning)

‘after one o’clock in the morning’

English pass > past ‘after’; for example, five minutes past twelve (Haspelmath 1997b: 65).
Although there are only examples from European languages that have been found so far, we have included this case considering its conceptual plausibility. It appears to be an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to locative and temporal markers; see, for example, \textsc{arrive}; \textsc{cross}; \textsc{descend}; \textsc{exceed}; \textsc{follow}; \textsc{resemble}.

\textbf{PASS (‘to pass (by), ‘to pass through’) \textgreater\ (2) COMPARATIVE}

\textit{Twi} \textsc{set}] ‘pass on’, ‘surpass’, ‘pass by’, ‘pass away’, verb \textgreater\ comparative marker. Ex.

\textbf{Twi} (\textsc{Lord 1989: 245–6})

(a) \textsc{asu bi set] ne da\textsc{y akyi}.}
\begin{itemize}
\item river
\item a
\item pass
\item his
\item house
\item behind
\end{itemize}
‘A river flows behind his house.’

(b) \textsc{me- set] wo ad\textsc{y ow}.}
\begin{itemize}
\item 1:sg-
\item surpass
\item you
\item tilling
\end{itemize}
‘I till more than you do.’

\textit{Baka} \textsc{wot} ‘pass’, ‘go on’, ‘overtake’, verb \textgreater\ comparative marker. Ex.

\textbf{Baka} (\textsc{Brisson and Boursier 1979: 486f.})

(a) \textsc{bit\textsc{i à wot-ngi bat\textsc{à}}.}
\begin{itemize}
\item night
\item asp
\item pass-
\item past
\item three
\end{itemize}
‘Three days have passed.’

(b) \textsc{b\textsc{ño-ko k\textsc{è b\textsc{ù-th à wot yékè}}.}
\begin{itemize}
\item dress
\item dem
\item white
\item asp
\item pass
\item dem
\end{itemize}
‘This dress is brighter than that.’

\textit{Kisi} \textsc{hiòù} ‘pass’, verb \textgreater\ comparative marker. Ex.

\textbf{Kisi} (\textsc{Childs 1995: 20})

\textsc{ò hiòù yá nà\textsc{à\textsc{ù}}.}
\begin{itemize}
\item she
\item pass
\item me
\item goodness
\end{itemize}
‘She’s more handsome than I.’

\textit{Turku PA} \textsc{fu} ‘pass’, verb \textgreater\ ‘more than’, comparative marker of inequality. Ex.

\textbf{Turku PA} (\textsc{Tosco and Owens 1993: 210–1})

\textsc{inte aw\textsc{án fu} ked\textsc{abgel}.}
\begin{itemize}
\item you
\item bad
\item pass
\item Kedabgel
\end{itemize}
‘You are worse than Kedabgel.’

\textit{Ndjuka CE} \textsc{pasa} ‘pass’ (< \textsc{English pass}) \textgreater\ ‘more than’, comparative marker of inequality. Ex.

\textbf{Ndjuka CE} (\textsc{Huttar and Koanting 1993: 165})

\begin{verbatim}
A dog this:sg here big pass the:pl one other:one
\end{verbatim}
PASS (‘to pass (by), ‘to pass through’) > (2) COMPARATIVE

or

\[
\begin{array}{cccccc}
A & \text{dagu} & ya & \text{pasa} & \text{den} & \text{taawan} \\
\text{the:sg} & \text{dog} & \text{here} & \text{pass} & \text{the:pl} & \text{other:one} \\
\text{anga} & \text{bigi.} \\
\text{with} & \text{big} \\
\end{array}
\]

‘This dog is bigger than the others.’

For more details, see Stassen 1985 and Heine 1997b. This appears to be a grammaticalization that is common in African languages but less common elsewhere. Furthermore, this is a common channel of grammaticalization in Atlantic creoles, see, for example, Holm 1988: 188–90. It is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see for example, **ARRIVE; CROSS; DESCEND; EXCEED; FOLLOW; RESEMBLE.**

**PASS (‘to pass (by), ‘to pass through’) > (3) PAST**

Swahili *ku-pita* ‘to pass’ is used to refer to past events and time spans. Ex.

**Swahili**

\[
\begin{array}{ll}
\text{mw-} & \text{u-} \\
\text{ezi} & \text{li-} \\
\text{c3} & \text{o-} \\
\text{pita} & \text{c3-PAST-REL-pass} \\
\end{array}
\]

‘last month’

Compare English *past*, which is etymologically related to *pass*. French *passé*, perfect participle of *pass-er* ‘to pass’ > ‘past time’. Note that these examples do not involve verbal tense and, in fact, no language has been found so far where a PASS-verb has given rise to a past tense marker. More research is required on the exact nature and the genetic and areal distribution of the present process.

**PASS (‘to pass (by), ‘to pass through’) > (4) PATH**

Turkish *geç* ‘to pass’, verb > *geç-e* ‘past’ (Svorou 1994: 112). Ewe *tó* ‘pass’, ‘go through’, action verb > ‘through’, preposition (Lord 1989: 252; Heine et al. 1991: Chapter 7). More examples are required to document this pathway of grammaticalization. Nevertheless, it appears to be an instance of a more general process whereby verbs denoting location or motion serve as structural templates to express relational (adpositional) concepts; compare **ARRIVE; COME FROM; COME TO; GO TO; LEAVE.**

**PEOPLE > PLURAL**

!Xóõ *tûu* ‘people’ > -tû, plural suffix of human nouns (noun class 4; Tom Güldemann personal communication). Seychelles CF *ban* ‘group (of people)’ (< French *bande*), noun > plural marker of definite nouns. Ex.

**Seychelles CF (Corne 1977: 13–14, 34)**

(a) *ban* *koma* *u*

(people how you)

‘people like you’
In the Sema variety of Naga Pidgin (Sreedhar 1977: 137), human plurals are marked with the item log ‘people’; for example, suali ‘girl’, suali log ‘girls’ (see Janson 1984: 318 and Romaine 1988: 137).

Conceivably, this process is related to (> CHILDREN > PLURAL, where also the plural form of a human noun is grammaticalized to a plural marker. More research is required on the exact nature and the genetic and areal distribution of this grammaticalization, which might be an instance of a more general process whereby generic nouns give rise to pronominal and eventually to inflectional categories; compare MAN; PERSON; THING.

PERFECT > (1) PAST

This grammaticalization has been discussed by several authors; see Fleischman 1983; Dik 1987; Bybee et al. 1994. The last-named authors describe this process in the following way (note that their “anterior” corresponds to our “perfect”):

The change of an anterior to a past or perfective is typical of grammaticalization changes. On the semantic level, the change is clearly a generalization of meaning, or the loss of a specific component of meaning: the anterior signals a past action that is relevant to the current moment, while the past and perfective signal only a past action. The specification of current relevance is lost. The meaning generalizes in the sense that the past or perfective gram expresses a more general meaning that is compatible with more contexts. (Bybee et al. 1994: 86)

The periphrastic resultative/perfect construction (‘have’ or ‘be’ + past participle) of Germanic and Romance languages, for example, has occasionally extended its use to marking past tense: in Modern Colloquial German, it is taking over the functions of the older past tense (Bybee et al. 1994: 85). Similarly, what Westermann (1907: 139) calls the “Dahome” dialect of Ewe appears to have experienced a shift from perfect to past marker, and in Atchin, the auxiliary ma ‘come’ merges with pronominal forms to make a past tense auxiliary (Bybee et al. 1994: 86). This is probably part of a more general process whereby verbal aspect markers may be further grammaticalized to tense markers (see Comrie 1976: 99–101; Bybee 1985a: 196; Bybee and Dahl 1989: 56–7); see also CONTINUOUS > PRESENT.

PERFECT > (2) PERFECTIVE

Perfect markers may develop into either perfective or past tense markers, a process that has been described especially by Bybee et al. (1994); see under PERFECT > PAST. For example, the periphrastic resultative/perfect construction

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46 Our term “perfect” corresponds to what Bybee et al. (1994) call the “anterior.”
(‘have’ or ‘be’ + past participle) of Germanic and Romance languages has given rise to perfective uses in some European languages. Thus, in Modern Spoken French, this construction has been generalized to a perfective, replacing the older inflectional perfective (see Bybee et al. 1994: 85–7 for more details).

**PERSON (human being) > (1) INDEFINITE PRONOUN**


**Albanian (Stolz 1991a: 12)**

\[
\begin{array}{lll}
S' & pa-shë & njeri. \\
\text{NEG} & \text{see-AOR:1:SG} & \text{someone:ACC}
\end{array}
\]

‘I haven’t seen anybody.’

Portuguese *pessoa* ‘person’, noun > ‘(some)one’, indefinite pronoun. Ex.

**Portuguese (Stolz 1991a: 13)**

\[
\begin{array}{llll}
a & pesso\text{a} & \text{não} & \text{dev-} e \\
\text{DET:F} & \text{person:F} & \text{NEG} & \text{must-3:SG:PRES}
\end{array}
\]

\[
\begin{array}{l}
\text{preocup} - \text{ar-} \\
\text{se.}
\end{array}
\]

\[
\begin{array}{l}
\text{worry} - \text{INF-REFL}
\end{array}
\]

‘One should not worry.’

Swahili *mtu* ‘person’, noun > indefinite pronominal in existential expressions. Ex.

**Swahili**

\[
\begin{array}{llll}
\text{pa-} & \text{na} & \text{m-} & \text{tu.}
\end{array}
\]

\[
\begin{array}{llll}
\text{si-} & \text{on-} & \text{i} & \text{m-tu.}
\end{array}
\]

\[
\begin{array}{l}
\text{c16-have}
\end{array}
\]

\[
\begin{array}{l}
\text{c1-person}
\end{array}
\]

\[
\begin{array}{l}
\text{1:SG:NEG-see-NEG}
\end{array}
\]

\[
\begin{array}{l}
\text{c1-person}
\end{array}
\]

‘There is somebody.’

\[
\begin{array}{l}
\text{I don’t see anybody.}
\end{array}
\]


**Baka (Christa Kilian-Hatz, personal communication)**

(a) \[
\begin{array}{llll}
\text{nga} & \text{bo,} & \text{nga} & \text{so} \\
\text{1:PL:EXCL} & \text{person} & \text{1:PL:EXCL} & \text{animal}
\end{array}
\]

‘We are people; we are not animals.’

(b) \[
\begin{array}{llll}
\text{bo} & \text{?ā} & \text{kōtē.}
\end{array}
\]

\[
\begin{array}{l}
\text{person}
\end{array}
\]

\[
\begin{array}{l}
\text{3:SG}
\end{array}
\]

\[
\begin{array}{l}
\text{come:PAST}
\end{array}
\]

‘Somebody has come.’

\[
\begin{array}{llll}
\text{ma} & \text{àn} & \text{siā} & \text{bo}
\end{array}
\]

\[
\begin{array}{llll}
\text{1:SG} & \text{ASP} & \text{see} & \text{person}
\end{array}
\]

\[
\begin{array}{llll}
\text{dā} & \text{dē} & \text{nē.}
\end{array}
\]

\[
\begin{array}{l}
\text{ASP}
\end{array}
\]

\[
\begin{array}{l}
\text{come}
\end{array}
\]

\[
\begin{array}{l}
\text{REL}
\end{array}
\]

‘I see someone come.’

Probably related to this evolution is the grammaticalization of PERSON nouns to impersonal markers; for example, Baka wó ‘person’, noun > impersonal pronoun (‘one’). Ex.

**Baka (Christa Kilian-Hatz, personal communication)**

\[
\begin{align*}
\text{wó} & \quad \text{ndé} & \quad a & \quad ye & \quad p\text{ñki} & \quad à \\
\text{man} & \quad \text{without} & \quad \text{INF} & \quad \text{love} & \quad \text{honey} & \quad \text{LOC} \\
\text{mo-} & \quad \text{nda}.
\end{align*}
\]

door-house

‘One does not like the kind of honey that sticks on the house door.’


See also Lehmann 1982: 51–2; Heine and Reh 1984; Haspelmath 1997a: 182. This grammaticalization appears to be an instance of a more general process whereby generic nouns give rise to pronominal categories; compare MAN; PEOPLE; THING.

**PERSON (human being) > (2) PERS-PRON, FIRST PLURAL**


**!Xun, northern dialect (Bernd Heine, field notes)**

\[
\begin{align*}
dju- & \quad tca & \quad \text{Dúmbà} & \quad \text{gè} \\
\text{1:PL:EXCL-DU} & \quad \text{Dumba} & \quad \text{stay}
\end{align*}
\]

‘I am staying with Dumba’ (lit.: ‘We [two] and Dumba stay’)


**Kono (Donald A. Lessau, personal communication)**

(a) m?: \ kúndá-nù

person \ short- PL

‘short people’

(b) m?: \ dè \ án \ nè.

\text{1:PL:INCL} \ mother \ EMPH \ here

‘This is our mother.’

Susu mikhi ‘man’, ‘person’; mikhi mundue? ‘which people?’ > mukhu ‘we’, ‘us’, ‘our’, first person plural exclusive pronoun (Friedländer 1974: 25); there is a common free variation in Central Mande between the high vowels i and u. Ex.

**Susu (Friedländer 1974: 28)**

\[
\text{mukhu khunyi}
\]

‘our heads’

Colloquial French on impersonal pronoun (< Latin homo ‘person’, ‘man’) > ‘we’, first person plural pronoun. More research is required on the exact nature and
the genetic and areal distribution of this process, which appears to be an instance of a more general process whereby generic nouns give rise to pronominal categories; compare man; people; thing.

PERS-PRON, PLURAL > SINGULAR (HONORIFIC)
English you, French vous ‘you’ (plural), personal pronoun > ‘you’, singular addressee. German sie ‘they’ > Sie ‘you’ (singular addressee).\(^{47}\)

This grammaticalization, where a PLURAL personal pronoun serves to refer to a singular referent, appears to be quite widespread. A more detailed cross-linguistic study would be desirable.

PERS-PRON, THIRD > (1) AGREEMENT

Third person (singular) subject pronouns may cliticize on the verb and become a largely or entirely obligatory part of the finite verbal word, no longer expressing distinctions of number or gender. Of the French personal pronouns il ‘he’ and elle ‘she’ (themselves derived from a Latin distal demonstrative; see DEMONSTRATIVE > THIRD PERS-PRON), il has become an agreement marker in non-Standard French, bound to the verb and no longer distinguishing number or gender. Ex.

French (Lambrecht 1981: 40; Hopper and Traugott 1993: 17)

**Standard French**

(a) La jeune fille est venue hier soir. Elle est danseuse.

‘The girl came yesterday evening. She is a dancer.’

**Non-Standard French**

(b) Ma femme il est venu.

‘My wife has come.’

English he has turned in Tok Pisin PE into a kind of redundant marker i, referred to as a predicate marker: “The particle i, now normally analyzed in Tok Pisin grammar as a ‘predicate marker’, had its origin in the cliticization of the old subject pronoun i (< Engl. he), later replaced as a subject pronoun by em (< Engl. him or them)” (Sankoff 1979: 28).\(^{48}\) Ex.

---

\(^{47}\) An anonymous reader of this book observed that Turkish, Basque, and (more recently) Welsh are also languages in which a second person plural pronoun has become a polite second singular pronoun.

\(^{48}\) Sankoff (1979: 28) adds that the i particle, having become redundant, is now subject to phonological deletion, so that its presence is no longer obligatory.
Tok Pisin PE (Sankoff 1979: 28)

*Man i-mekim singsing long Mbabmu, meri em i-go long em, em i-pekpek blut.* . . .

‘Men utter a spell over Mbabmu; if a woman goes near them, she will have dysentery. . .

The evidence available suggests in fact that third person singular pronouns are the most common source for verbal subject agreement markers. This grammaticalization appears to be a classical instance of desemanticization, whereby the main semantic content is bleached out, resulting in a general relational marker (see Lehmann 1982: 42f.).

**PERS-PRON, THIRD > (2) COPULA**

Concerning this grammaticalization, according to which third person pronouns develop into copulas, see Li and Thompson 1977, which provides examples from Hebrew and Palestinian Arabic; see also Diessel 1999b: 143ff. The following example from Modern Hebrew illustrates the initial stage of this process, where the item *hu* ‘he/is’ can be interpreted alternatively as a third person pronoun or a copula.

**Modern Hebrew (Glinert 1989: 188f.; quoted from Diessel 1999b: 144)**

\[
\begin{array}{ccc}
\text{ha-} & \text{sha’on} & \text{hu} \\
\text{the-} & \text{clock:M:SG} & \text{is/he:M:SG} \\
\end{array}
\]

‘The clock is a present.’

A different source for copulas can be seen in demonstratives (see **DEMONSTRATIVE > COPULA**). Now, since demonstratives may give rise to third person pronouns, it is not always easy to determine which of the two developments was involved in a given case. However, Diessel (1999b: 145ff.) emphasizes that the development from identificational demonstrative to copula differs from the one leading from personal pronoun to copula, as shown, for example, in a contrasting agreement structure.

**PERS-PRON, THIRD PLURAL > (1) IMPERSONAL**

Ewe *wó*- ‘they’, personal pronoun > impersonal marker (“agent suppression”). Modern Greek *-an* third person plural pronominal suffix > impersonal marker

**Modern Greek (Haspelmath 1990: 49)**

\[
\begin{array}{ccc}
\text{Su} & \text{tilefoni-s- an} \\
\text{you:DAT} & \text{phone-AOR-3:PL} \\
\end{array}
\]

‘Someone called you.’

49 There is a possible counterexample to this grammaticalization: the Chinese copular verb *shi* has been claimed to be derived from the pronoun *shi* (see Peyraube 1999: 191).
German *sie* (third person plural pronoun) in some of its uses serves as an impersonal pronoun. Ex.

**German**

<table>
<thead>
<tr>
<th>Sie</th>
<th>haben</th>
<th>ihn</th>
<th>gestern</th>
<th>mit</th>
<th>dem</th>
</tr>
</thead>
<tbody>
<tr>
<td>they</td>
<td>have</td>
<td>him</td>
<td>yesterday</td>
<td>with</td>
<td>the</td>
</tr>
<tr>
<td>Auto</td>
<td>angefahren.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>car</td>
<td>hit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Someone hit him yesterday with a car.’

Similarly English *they* in certain uses; for example, *A haberdashery is a place where they sell sewing equipment* (anonymous reader).

**Basque** *(anonymous reader)*

\[
\begin{array}{c}
\text{Hil} \\
\text{kill[PVF]} \\
\text{pass-AUX-} \\
\text{3:PL:ERG-} \\
\text{PAST}
\end{array}
\]

‘They killed him.’ (= ‘He was killed.’)

In a number of creole languages, this seems to be a common grammaticalization process. Ex.

**Haitian CF** *(Muysken and Veenstra 1995)*

\[
\begin{array}{c}
\text{Se} \\
\text{sou} \\
\text{chen} \\
\text{mèg} \\
\text{yo} \\
\text{wè} \\
\text{pis.}
\end{array}
\]

FOC LOC dog thin 3:PL see flee

‘It’s on a thin dog that the flees can be seen.’

This process can be observed in quite a number of languages, even if grammarians do not always take notice of it. In some languages the process has gone further and has given rise to a passive construction; see the following entry.

**PERS-PRON, THIRD PLURAL > (2) PASSIVE**


**Kimbundu** *(Givón 1979a: 188, 211)*

(a) *Nzua a- mu- mono.*

(Nzua 3:PL-3:SG:OBJ-see) John they-him- saw

‘John, they saw him.’

(b) *Nzua a- mu- mono (kwa meme).*

(Nzua PASS-3:SG:SUBJ- see (by me)) John they-him- saw

‘John was seen by me.’

Luba *ba- ‘they’, third person plural pronoun > passive marker. Ex.
Luba (Heine and Reh 1984: 99)

*bà- sùm-ìne mu- àna kù- dì nyòka.*

they-bite- PERF child there:where-is snake

‘The child has been bitten by a snake.’

Ewe wó- ‘they’, third person plural pronoun > passive marker in specific uses.\(^{50}\)

Ex.

Ewe (Heine and Reh 1984: 99)

*wó- dzi kofí.*

they-give:birth Kofi

‘Kofi was born. . .’

Nuer -kè ‘they’, personal suffix > passive marker. Ex.

Nuer (Heine and Reh 1984: 100)

*càm(-kè) nàadh è nyìidh.*

eat(-they) people by gnats

‘People are bitten (eaten) by gnats.’

Hungarian -ik third person plural, definite object > third person singular passive marker.\(^{51}\) For classical treatments of this grammaticalization path, see Greenberg 1959 and Givón 1979a.

**PERS-PRON, THIRD PLURAL > (3) PLURAL**


Baka (Christa Kilian-Hatz, personal communication)

(a) wòsè wó à go.

woman 3:PL ASP go

‘The women are going.’

(b) wòsè- o (wó) à go.

woman-PL 3:PL ASP go

‘The women are going.’

Mupun mo, third person plural subject or object pronoun > nominal plural marker (enclitic). Ex.

---

\(^{50}\) No explicit agent may be mentioned in this Ewe construction.

\(^{51}\) This example was suggested by an anonymous reader of an earlier version of this work.
Mupun (Frajzyngier 1993: 160–2)

\[
\begin{array}{lllllllllll}
\text{saar} & \text{mo} & \text{jr} & \text{ap} & \text{cf} & \text{e} & \text{wura} & \text{tj} & \text{mo} \\
\text{hand} & \text{PL} & \text{girl} & \text{REL} & \text{tall} & \text{PL} & \text{\textquoteleft \text{hands\textquoteleft} & \\textquoteleft \text{tall girls\textquoteleft}}
\end{array}
\]

Negerhollands CD *sini* ‘they’, personal pronoun > nominal plural marker (mostly on definite noun phrases). Ex.

Negerhollands CD (Stolz 1986: 122, 131)

(a) *Di kabai a sle:p sini de: bus.*

\((\text{DET horse PERF pull 3:PL through bush})\)

‘The horses pulled them through the forest.’

(b) *Frufru werá ham a jak*

\((\text{morning again 3:SG PERF hunt})\)

\((\text{poss goat PL PREP savannah})\)

‘In the morning he drove his goats again into the savannah.’

Krio CE *dem* ‘they’, personal pronoun > nominal plural enclitic. Ex.

Krio CE (Todd 1979: 288)

(a) *dem bin futam.*

\((\text{they TNS shot})\)

‘He/She/It was shot (by them).’

(b) *mi padi dem buk mi padi dem buk dem*

\((\text{my friend they book} \text{ my friend they book they})\)

‘my friends’ book’ ‘my friends’ books’

See Thiele 1991 for more examples from Portuguese-based and other creoles; see also Romaine 1988: 137.

This grammaticalization appears to be a classical instance of desemantization, whereby the main semantic content is bleached out, resulting in a number marker.

**PIECE > CLASSIFIER**


This grammaticalization is part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also **BRANCH; CHILD; MAN; SONG; TREE; WOMAN.** More research is required on the genetic and areal distribution of this process.
PLACE > (1) CAUSE
Kono kénà ‘place (of)’ > kénà mín mbè (‘place’ + relative clause marker; lit.: ‘the place where’) ‘because’. Ex.

Kono (Donald A. Lessau, personal communication)
(a) à èé cé ciá cè yén- daâ
kénà mín
place REL
‘(a place) where he cannot find the ring’
(b) àn à iyá kénà mín mbè
mànsá cè .
chief DEM
‘They welcomed him because the chief. . . .’

Bambara yòrò ‘place’, relational noun, a yòrò kama ‘for this place’ > a yòrò kama ‘therefore’, conjunction. Ex.

Bambara (Ebermann 1986: 55, 177)
(a) à yòrò ká jàn.
3:SG place COP far
‘His place is far away.’
(b) a yé n ngni, a yòrò kama. . .
3:SG TAM 1:SG insult therefore
‘He has insulted me therefore. . . .’

Note that these examples all involve one language family and, hence, are not suggestive of a cross-linguistically relevant process. The reason for nonetheless presenting this case is that nouns meaning ‘place’ commonly acquire some locative significance (see PLACE > LOCATIVE), and locative markers appear to be a fairly common source for causal markers (see LOCATIVE > CAUSE).

PLACE > (2) INSTEAD

Bulgarian
Iskam jabâlki v mesto portokali.
want:1:SG:PRES apples in:place oranges
‘I want apples instead of oranges.’
Hungarian hely ‘place’ > hely-ett ‘instead’ (anonymous reader). Seychelles CF dâ plas ‘in place’ > ‘instead’.\(^{52}\) Ex.

**Seychelles CF (Corne 1977: 144)**

\[
\begin{array}{cccccc}
\text{dâ plas} & u & \text{al} & \text{lekol,} & u & n \\
\text{(instead)} & 2:SG & \text{go} & \text{school} & 2:SG & \text{CPL} \\
\text{al} & \text{bazar,} & \text{go} & \text{market}
\end{array}
\]

‘Instead of going to school, you went to the market.’

We seem to be dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational grammatical markers; compare **BOTTOM; SIDE; TOP**.

**PLACE > (3) LOCATIVE**


**Vai (Koelle [1854] 1968: 38, 221)**

(a) mú tâ dá tina dšé!

(1:PL go:festivity-place see)

‘Let us go and see the place of festivity!’

(b) mu tâwa soé tina!

(1:PL go:EMPH hole:DEF place)

‘Let us go to the hole!’


**Vai (Koelle [1854] 1968: 38, 145)**

i ná mbara!

(2:SG come 1:SG:place)

‘Come to me!’


**Finnish (Blake 1994: 167)**

\[
\begin{array}{ll}
talo- & n \\
\text{house:GEN} & \text{place:ADE} \\
\end{array}
\]

‘at the house’

We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare **BOTTOM; SIDE; TOP**.

\(^{52}\) In addition, Seychelles CF has a second replacive marker olie ‘instead’, which appears to have been inherited from French (< *au lieu*; see Corne 1977: 144).
A-POSSESSIVE > PARTITIVE

Harris and Campbell (1995: 339–41) observe that the “development of a partitive out of the expression of a partial through a genitive or through a locative (in roughly the meaning ‘from’) . . . is a good candidate for a unidirectional change, to which we know no counterexamples.” See also Harris and Campbell 1995: 362–3 for examples from Finno-Ugric. That partitives may be historically derived from A-POSSESSIVE (genitive) markers is substantiated by these authors with the following examples: (a) In Lithuanian, a partitive use has developed out of the inherited Indo-European genitive. (b) The “partitive” article of French can be traced back to a combination of the definite article plus the genitive. Since A-POSSESSIVE markers may go back to (> ) ABLATIVE markers, we seem to be dealing with a more general grammaticalization chain ABLATIVE > A-POSSESSIVE > PARTITIVE. Still, more examples would be desirable to determine the significance of this pathway. It would seem that there is not necessarily an intermediate A-POSSESSIVE; as appears to be the case in some other grammaticalization processes, the evolution may proceed straight from the initial to the final meaning.53

H-POSSESSIVE54 > (1) EXIST

French avoir ‘to have’ > ‘exist’. Ex.

French (Heine 1997a: 95)

(a) Il a deux enfant-s.
he has two child- PL

‘He has two children.’

(b) Il y a deux enfant-s.
it there has two child- PL

‘There are two children.’

Colloquial (southern) German haben ‘to have’ > ‘exist’. Ex.

Da hat es zwei Kind-er.
there has it two child- PL

‘There are two children.’

Swahili -na ‘be with’, ‘have’ > ‘exist’ (with locative subject referents). Ex.

Swahili

(a) ni-na chakula.
I- be:with food
‘I have food.’

53 The latter is suggested by observations made by Harris and Campbell (1995: 363), who note with reference to the evolution in Mordvin, for example, “The Mordvin ablative can be used as a ‘restricting’ object case, for example where ‘to eat of/from bread’ develops the meaning ‘eat some (of the) bread’, from which the grammatical function of the partitive case developed.”

54 This term stands for predicative possession of the have-type (e.g., I have a dog); see Heine 1997a.
(b) ku-na chakula.

‘There is food.’

This is a fairly widespread grammaticalization in creole languages. Guyanese CF gê ‘have’ > ‘exist’. Ex.

**Guyanese CF (Corne 1971: 91, 95)**

(a) i fini gê trua.

(3:SG come:from have three)

‘He just had three of them.’

(b) i pa gê pies.

(3:SG NEG have piece)

‘There is none.’

According to Bickerton (1981: 66), the usual creole equivalent of existential ‘there is’ is ‘(they/it) have’. Examples are Guyanese CE get, Haitian CF gê, Papiamentu CS tin, São Tomense CP (São Tomé) te, Bahamian CE have, Negerhollands CD die hab, and Ndjuka CE a abi (Holm 1988: 178). Ex.

**Guyanese CE (Bickerton 1981: 66–7)**

dem get wan uman we get gyal-pikni.

(there is a woman who has daughter)

‘There is a woman who has a daughter.’

**Papiamentu CS (Bickerton 1981: 66–7)**

tin un muhe cu tin un

have a woman who have a

yiù- muhe.

child-woman

‘There is a woman who has a daughter.’

Note that in Chinese, the same form, **YOU** is used for ‘to have’ and ‘there exists’, but the chronology between the two is unclear (Alain Peyraube, personal communication). See Heine 1997a: 202ff. for a discussion of this process. What appears to trigger the process is that instead of a typically human possessor there is an inanimate/impersonal or a locative participant. The impression might arise that this process contradicts the unidirectionality principle since there is also a process showing the reverse directionality: EXIST > H-POSSESSIVE. However, we are not dealing with a violation of this principle since the present process concerns “nuclear” (one-participant) existence, rather than “extended” (two-participant) existence. For details, see Heine 1997a: 94–6; see also **EXIST**.

**H-POSSESSIVE > (2) FUTURE**

Latin infinitive + habère ‘to have’ > Spanish -ré future (Pinkster 1987); Latin (ego) cantare habeo ‘I have to sing’ > French je chanter-ai ‘I’ll sing’, > Portuguese

---

55 This term stands for predicative possession of the have-type (e.g., I have a dog); see Heine 1997a.
cantarei ‘I will sing’ (Fleischman 1982a: 115). Nyabo kɔ ‘have’ > future tense marker. Ex.

Nyabo (Marchese 1986: 139)

\[
\begin{align*}
5 & \quad kɔ & b- 5 & \quad mū & \quad pliibō.
\end{align*}
\]

He has that-he go Pleebo

‘He will go to Pleebo.’


Godié (Marchese 1986: 76)

(a) ɔ kà monii.

He have money

‘He has money.’

(b) ɔ kà s₃₃ pi.

he AUX down lie

‘He is going to lie down.’

Bulgarian ima ‘have’ (3:SG:PRES) + da (particle) + main verb > future (colloquial). Ex.

Bulgarian

(a) Tοj ima kniga.

He have:3:SG:PRES book

‘He has a book.’

(b) Ima da xodja.

have:3:SG:PRES part go:IMPFV:1:SG:PRES

‘I will go.’

Bulgarian njamam ‘have not’ + da (particle) > njama da, negative future marker. Ex.

Bulgarian (Kuteva 1995: 209)

njama da dadeš.

have:not part give:PFV:2:SG:PRES

‘You will not give.’

Compare Fleischman 1982a, 1982b; and Pinkster 1987; for more details on Romance languages, see Klausenburger 2000. While this grammaticalization is common in Romance languages, for example, it does not appear to be a salient pathway for the development of future tense markers cross-linguistically.

**H-POSSESSIVE > (3) OBLIGATION**

German haben ‘have’ + zu ‘to’ > auxiliary of obligation. Ex.

---

56 This term stands for predicative possession of the have-type (e.g., I have a dog); see Heine 1997a.
German

(a) Er hat ein Auto.
he has one car
‘He has a car.’
(b) Er hat zu gehorchen.
he has to obey
‘He has to obey.’

English *have* + *to*, obligation marker, as, for example, in *You have to wash your hair.* Nyabo *ble ‘have’ > ɓle, obligation marker. Ex.

Nyabo (Marchese 1986: 140)

5 ɓlé yë b- 5 tɔɔ nì.
he have ? that-he buy fish
‘He must/is supposed to buy fish.’

Latin *habère ‘have’ + infinitive, obligation marker. Ex.*

Latin

venire habes.
come:INF have:2:SG
‘You have to come.’

Koyo *ha ‘have’ > obligation marker. Ex.*

Koyo (Marchese 1986: 141)

Abi ha o ka bɔgu ciya.
Abi has he AUX book learn
‘Abi must learn to read and write.’

Kagbo *kà ‘have’ > obligation marker. Ex.*

Kagbo (Godié dialect; Marchese 1986: 140–1)

ɔ kà sáká bɔli- li.
he has rice pound-NOMIN
‘He has to pound rice.’

Yoruba *ni ‘have’ > obligation marker. Ex.*

Yoruba (Marchese 1986: 138)

(a) mo ni bátà.
1:SG have shoes
‘I have shoes.’
(b) mo ni ɓátí lọ.
1:SG have to:go
‘I have to go.’
Spanish tener ‘to hold’, ‘to have’ > obligation auxiliary tener que + INF ‘have to’, ‘must’ (Halm 1971: 117). Negerhollands CD ha ‘have’ + fo, conjunction > ‘must’, obligation marker.\(^{57}\) Ex.

\textit{Negerhollands CD (Stolz 1987b: 175)}

\begin{verbatim}
Mi  sa  ha  fo  loo.
\end{verbatim}

‘I will have to go.’

For more details on Romance languages, see Klausenburger 2000. This grammaticalization does not appear to be confined to H-POSSESSION; rather, other kinds of possession may also give rise to OBLIGATION or other kinds of deontic modality. The following example involves B-POSSESSION: German gehören ‘belong to’ > auxiliary marking deontic modality in certain cases when involving participial main verbs. Ex.

\textit{German}

(a) \textit{Das Buch gehört mir.}
\begin{verbatim}
the book belongs to:me
\end{verbatim}

‘The book belongs to me.’

(b) \textit{Er gehört eingesperrt.}
\begin{verbatim}
he belongs locked:up
\end{verbatim}

‘He should be/ought to be locked up.’

\textbf{H-POSSESSIVE}\(^{58}\) > (4) PERFECT

This is a much-discussed channel of grammaticalization, mostly confined to European languages, whereby a periphrastic construction [‘have’ + main verb in the past participle] gives rise to a resultative/perfect construction (see, e.g., Vincent 1982; Heine 1997a; Klausenburger 2000). Furthermore, in Cantonese the item YAU ‘to have’ has given rise to an aspectual marker of perfectivity (Alain Peyraube, personal communication). PERFECT may further develop into either PERFECTIVE or PAST (see Bybee et al. 1994).

‘Progressive’ see \textit{CONTINUOUS}

\textbf{PROPERTY (‘property’, ‘possession’) > A-POSSESSIVE}

Pipil -\textit{pal} ‘possession’, relational noun > \textit{pal}, preposition marking attributive possession. Ex.

\textit{Pipil (Harris and Campbell 1995: 126–7)}

(a) \textit{nu-pal}
\begin{verbatim}
(my-possession)
\end{verbatim}

\(^{57}\) In the present tense, \textit{ha} is optionally deleted, so that \textit{fo} is the only exponent of modality (Stolz 1987b: 175).

\(^{58}\) This term stands for predicative possession of the have-type (e.g., I have a dog); see Heine 1997a.
(b) *tik nu-ma:taw ohombrón plastas pal turuh*
   in my-net big cowpies of cow

wi:ts.
come
‘What came in my bag were big plasters of cow.’


**Maltese (Hauselmath 1994: 21–2)**

\[
\begin{align*}
\text{il-} & \quad \text{ktrieb} & \quad \text{ta’(< mataaš)-} & \quad \text{t-} & \quad \text{tabib} \\
\text{the-book} & \quad \text{of (< possession)-} & \quad \text{the-doctor} \\
\text{‘the doctor’s book’}
\end{align*}
\]


**Haitian CF (Sylvain 1936: 69)**

(a) *pa papa-m*
   (property father-my)
   ‘property of my father’

(b) *Lažā pa-u?*
   (money of-you)
   ‘your money?’


**Nubi CA (Heine 1982b: 31)**

\[
\begin{align*}
\text{kurá} & \quad \text{ta} & \quad \text{kalamóyo} \\
\text{leg} & \quad \text{of} & \quad \text{goat} \\
\text{‘the goat’s leg’}
\end{align*}
\]

We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts), on account of some salient semantic property, give rise to relational grammatical markers; compare **BOTTOM; PLACE; SIDE; TOP.**

**PURPOSE > (1) CAUSE**


**Twi (Lord 1989: 271, 284)**

(a) *memaa no sika sε mfa*
   1:sg:gave him money purp he:imp:take
Purpose and cause are not infrequently part of one and the same polysemy set. On the basis of the available data (see Heine et al. 1991), we argue that the former precede the latter in time; so far, however, there is no conclusive historical evidence to support this hypothesis.

**PURPOSE > (2) INFINITIVE**


**Baka (Christa Kilian-Hatz, personal communication)**

\[
\begin{array}{ccccccc}
ma & à & ye & na & sià & gba & kè. \\
1:SG & ASP & want & INF & see & village & DEM \\
\end{array}
\]

‘I want to see this village.’

Easter Island *mo*, purpose preposition > infinitive marker. Ex.

**Easter Island (Chapin 1978: 162–3)**

(a) \[
\begin{array}{cccccccc}
He & patu & mai & i & te & puaka & mo \\
past & corral & here & ACC & the & cattle & INF \\
ma’u & kiruga & ki & te & miro. \\
carry & into & to & the & boat \\
\end{array}
\]

‘(They) corralled the cattle in order to carry (them) onto the boat.’

(b) \[
\begin{array}{cccccccc}
\text{Hoki} & e & haga & ro & mo & oho & ki \\
\text{Q} & \text{NONPAST} & want & RO & INF & go & \text{to} \\
te & aga & o & te & tenito & iuta? \\
the & work & of & the & Chinese & inland \\
\end{array}
\]

‘Do (you) want to go to work for the Chinese man inland?’

Seychelles CF *pur* ‘for’, ‘in order to’, ‘so that’, purpose marker > marker having infinitive-like functions, for example, to present subject complements. Ex.

**Seychelles CF (Corne 1977: 141–2)**

(a) \[
\begin{array}{cccccccc}
mò & ti & pe & sâte & pur & (mua) & fer \\
1:SG & PAST & PROG & sing & PURP & 1:SG & make \\
u & plezir. \\
2:SG & pleasure \\
\end{array}
\]

‘I was singing in order to please you.’
(b) sa i fer li boku plezir pur
(sâte.
sing)
‘It pleases him a lot to sing.’

Perhaps related to this grammaticalization there is the following: purpose markers have given rise to complementizers in Atlantic English creoles (fɔ, fi, fu) and Romance creoles (pu, pa). Ex.

**Jamaican CE (Mufwene 1996)**

\[
\text{Jan trai fi kraas di riba.}
\]
‘John tried to cross the river.’

**Haitian CF (Mufwene 1996)**

\[
\text{li difisil pu m fè sa.}
\]
‘It’s difficult for me to do this.’

For a detailed discussion of this process, see Haspelmath 1989.

**PUT > COMPLETIVE**

Imonda *pada* ‘put’ > ‘finished’, periphrastic terminative aspect marker. Ex.

**Imonda (Seiler 1985: 104)**

\[
\text{(a) kë- l tad- pada- hape.}
\]
\[
\text{bone- NOM CLASS- put- come:back}
\]
‘He put the bones there and came back.’

\[
\text{(b) ainam uai- fuhô- pada- u!}
\]
\[
\text{quickly ACC-go up-finish-IMP}
\]
‘Be quickly finished with your climb!’

Yagaria *to-* and *bolo-* ‘put’ > *-to/-te-* and *bolo*, completive marker. Ex.

**Yagaria (Renck 1975: 94)**

\[
\text{iyalamu’ hu- bolo-d- i- e}
\]
\[
\text{shelf make-put- PAST-3:SG-IND}
\]
‘He built a shelf completely.’


This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; KEEP; LEAVE; REMAIN.
S-QUESTION > CONDITIONAL

Hopper and Traugott (1993: 179) observe that one of the sources of conditional connectives consists of interrogatives. Hua -ve interrogative, topic status ‘if’ (Hopper and Traugott 1993: 179). Russian est’ li ‘is it?’ > esli ‘if’ (Martin Haspelmath, personal communication). The relevance of this path of grammaticalization is suggested, for example, by the situation in German, where the verb-initial syntax of polar questions (see (a)) appears to have been extended to conditional protasis clauses (see (b)) – a situation that has existed since Old High German times (Harris and Campbell 1995: 296).

**German**

(a) Glaubt er, er versteh mich?
believes he he understands me
‘Does he think he understands me?’

(b) Glaubt er, er versteh mich,
dann irrt er.
believes he he understands me then errs he
‘If he thinks he understands me then he is wrong.’

Subject-verb inversion also marks conditional clauses occasionally in English. Ex.

**English (Harris and Campbell 1995: 296)**

"Were I the organizer, I would have done things differently."

Note also that in American Sign Language, one way of expressing a conditional is to use the marker of yes-no questions (Harris and Campbell 1995: 297f.).

For more details, see Haiman 1978, 1985b and Traugott 1985b. Questions provide a not uncommon structural template to develop noninterrogative grammatical markers; see, for example, **W-QUESTION**. See also **COPULA > CONDITIONAL**.

W-QUESTION > (1) COMPLEMENTIZER

Harris and Campbell (1995: 298) note that question words or forms derived from them mark some kinds of adverbial clauses and verb complements. They give Georgian ray-ta-mca ‘that’ as an example, which is derived from a question word, ray ‘what?’.

**Georgian (Harris and Campbell 1995: 298)**

da ara unda, raytamca icna vin.
and not he:want that he:know someone
‘And he didn’t want that anyone know.’
In fact, a number of languages appear to exist where question words like ‘who?’, ‘what?’, and so on are used to introduce complement clauses; for example, German was ‘what?’. Ex.

**German**
(a) Was will er?
   what want he
   ‘What does he want?’
(b) Ich weiss nicht, was er will.
   I know not what he wants
   ‘I don’t know what he wants.’

Questions provide a not uncommon structural template to develop noninterrogative grammatical markers; see also s-question.

**W-question > (2) Indefinite Pronoun**

**Slave** (Rice 1989: 1326)

meni duyíle ?éghálayedá yi ke
who can 3:work COMP: PL
rágots’eyeey dakh’é gotsé gokeduhwi.
‘Anyone who wants to work should go to the playground.’


**Chinese** (Haspelmath 1997a: 171)
(a) Tá bà shénme shū diū le?
   she ACC what book throw PFV
   ‘What books did she throw away?’
(b) Tá bà shénme shū diū le.
   she ACC what book throw PFV
   ‘She threw away a certain book.’
For details about the formal identity between interrogatives and indefinite pronouns, see Haspelmath 1997a: 170–9. A problem associated with some of these examples is that they involve more complex source forms, and it does not always become entirely clear what exactly the contribution of the question marker is in the grammaticalization to an indefinite pronoun. Nevertheless, question markers provide a not uncommon structural template to develop noninterrogative grammatical markers; see also s-question.

**W-question > (3) Relative**

Harris and Campbell (1995: 298) observe that “Q-words or forms derived from Q-words function as relative pronouns in many languages.” Baka là ‘who?’, ‘which?’, interrogative pronoun > ‘s/he who’, relative pronoun. Ex.

**Baka (Christa Kilian-Hatz, personal communication)**

(a) 3:SG ASP come who village POSS 2:SG:POSS which
   ‘Who is coming?’
(b) s/he:who 3:PL 3:PL ASP fight LOC where
   ‘Where are those who fight/quarrel with each other?’

Pirahã go ‘what’ > relative marker. Ex.

**Pirahã (Everett 1986: 276)**

<table>
<thead>
<tr>
<th>ti</th>
<th>baósaápisi</th>
<th>og-</th>
<th>abagai</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>hammock</td>
<td>want-</td>
<td>FRUSTRATED:INITIATIVE</td>
</tr>
<tr>
<td>gíxai</td>
<td>go-</td>
<td>ó</td>
<td>baósaápisi big-</td>
</tr>
<tr>
<td>2</td>
<td>INTER-</td>
<td>OBL</td>
<td>hammock show-</td>
</tr>
<tr>
<td>ão-</td>
<td>b-</td>
<td>i-</td>
<td>i</td>
</tr>
<tr>
<td>TELIC-</td>
<td></td>
<td>PROXIMATE-</td>
<td>COMPLETE:CERTAINTY</td>
</tr>
<tr>
<td>sigíai.</td>
<td></td>
<td></td>
<td>be(?)</td>
</tr>
</tbody>
</table>

same
‘I want the same hammock that you just showed me.’

English who?, which?, interrogative words > relative clause markers. French qui?, que?, interrogative pronouns > relative clause markers. Albanian kush ‘who?’ > ‘who’, relative clause marker (Buchholz et al. 1993: 265). German welch- ‘which?’, was ‘what?’, and so on, interrogative words > markers introducing relative clauses.

See Downing 1978 and Traugott 1980: 48. While the majority of examples of this pathway stem from European languages, there are also a few examples that suggest that we are not necessarily dealing with an areally defined grammaticalization. Note that question markers provide a not uncommon structural template to develop noninterrogative grammatical markers; see also s-question.
‘Reach’ see arrive

‘Receive’ see get

**REFLEXIVE > (1) ANTICAUSATIVE**

French se, third person reflexive marker > anticausative marker. Ex.

*French (Haspelmath forthc.)*

(a) Judas s’ est tué.  
Judas refl is killed  
‘Judas killed himself.’

(b) La porte s’est ouverte.  
the:F door refl is opened:F  
‘The door opened.’

German sich, third person reflexive marker > anticausative marker; for example, öffnen ‘open (TR)’; sich öffnen ‘open (INTR)’ (Haspelmath 1990: 45).

Spanish se: for example, fundir ‘melt’ (TR), fundirse ‘melt’ (INTR) (anonymous reader). Mordvinian (prä ‘head’) reflexive noun > anticausative marker. Ex.

*Mordvinian (Geniušiene 1987: 303ff.; quoted from Haspelmath 1990: 44)*

(a) läcems prä  
(shoot head)  
‘shoot oneself’

(b) kepsems prä  
(raise head)  
‘rise’


**REFLEXIVE > (2) MIDDLE**

Oneida -atat-, reflexive marker > -at/-an/-al/-atA/-a-, middle marker (Lounsbury 1953: 72–4). South !Xun /‘ee, reflexive particle > middle marker. Ex.

*South !Xun* (Köhler 1981b)

\[
\begin{array}{ccc}
  \text{mi} & \text{närød} & \text{mi} \\
  1:SG & \text{teach} & 1:SG \text{ refl} \\
\end{array}
\]

‘I am learning.’ (lit.: ‘I am teaching myself’)
Latin sē, reflexive marker > Surselvan se-, middle voice marker, verbal prefix (Kemmer 1993: 11).

This is a well-documented grammaticalization process (see Kemmer 1993 for a comprehensive treatment of it); still, it is not without problems, especially since “middle” does not appear to be a clearly definable grammatical function. Conceivably, most instances of this process can be described more profitably as being part of the (> ANTICAUSATIVE > PASSIVE process.

**REFLEXIVE > (3) PASSIVE**

North !Xun /'é, reflexive particle > passive marker. Ex.

*North !Xun (Bernd Heine, field notes)*

\[
\begin{array}{lll}
\text{mâli} & \text{/óå} & \text{ke} \\
\text{money} & \text{NEG} & \text{PAST}
\end{array} \quad \text{tc’á} \quad \text{yà} \quad \text{/'é.}
\]

Steal its self

‘The money was not stolen.’

Russian -sja (-s’ after vowels), reflexive suffix > passive marker in the imperfective aspect (Haspelmath 1990: 43). Danish -s, reflexive suffix > passive marker. Ex.

*Danish (Haspelmath 1990: 43)*

(a) \[\text{jeg elske-} \quad \text{r.}\]

\[\text{I love.}\]

(b) \[\text{jeg elske-} \quad \text{s.}\]

\[\text{I am loved.}\]

Teso -o/-a, reflexive marker, singular, and first person plural, and -os/-as, second and third person plural > passive marker. Ex.

*Teso (Hilders and Lawrance 1956: 52f.)*

(a) \[\text{e- lemar-} \quad \text{os.}\]

\[\text{They take themselves out.}\]

(b) \[\text{a- ŋaar-} \quad \text{os} \quad \text{a-konye-kec.}\]

\[\text{The eyes were opened.}\]

See Haspelmath 1990: 42–6 for a discussion of this process. Passive markers may further develop into impersonal passives; see Geniušiene 1987; Haspelmath 1990: 42ff.; Heine 2000b; Schladt 2000; König and Siemund 2000: 58 for more details. There is reason to assume that the evolution from reflexive to passive markers obligatorily involves an intermediate anticausative stage; hence, we may be dealing with a more general pathway: REFLEXIVE > ANTICAUSATIVE > PASSIVE; see ANTICAUSATIVE > PASSIVE.
REFLEXIVE > (4) RECIPROCAL

French se, third person reflexive marker > marker of naturally reciprocal activities. Ex.

_French (Haspelmath forthc.)_

(a) Judas s’est tué.
   Judas REFLEX is killed
   ‘Judas killed himself.’

(b) Elisabeth et Marie se sont rencontrées.
   Elizabeth and Mary REFLEX are met:F:PL
   ‘Elizabeth and Mary met.’

Russian -sja/s’, reflexive marker > marker of natural reciprocity. Ex.

_Russian (Haspelmath forthc.)_

Elizaveta i Marija vstretili-s’.
(Elizabeth and Mary met-
   ‘Elizabeth and Mary met.’

Reciprocal meanings may arise when reflexive markers refer to plural referents.
Reciprocity is an optional reading of reflexive markers in many languages. Ex.

_Yoruba (Awoyale 1986: 11; Heine 2000b: 13)_

Won rí ara won
   they saw body their
   ‘They saw themselves.’ / ‘They saw each other.’

In other languages again reflexive markers appear to have developed into fully conventionalized reciprocal markers. See Haspelmath forthc. and Heine 2000b: 12ff.

RELATIVE > COMPLEMENTIZER


_Early Biblical Hebrew (Cristofaro 1998: 64–5)_

ʔal tirʔu- ni she- ʔani shaxoret.
NEG see:IMP:V:3:SG:M- me REL- I dark:SG:F
   ‘Don’t see it that I am dark-skinned.’

For a discussion of how relative clauses can be reinterpreted as complement clauses in a number of genetically unrelated languages, see Lehmann 1995b: 1213–14. More research is required on the structure and the genetic and areal distribution of this pathway.

REMAIN > (1) DURATIVE

Vietnamese còn ‘remain’, ‘still exist’, ‘be still alive’ > continuative adverbial marker ‘still’ (Bisang 1998b: 652). German bleiben ‘remain’, verb > auxiliary used to express, for example, continued activity. Ex.
German

Er ist beim Reiten geblieben.

‘He stuck to horseback riding.’

Portuguese ficar ‘remain’ > ficar (a fazer), durative auxiliary. Ex.

Portuguese (Schemann and Schemann-Dias 1983: 27–8)

fico toda a noite a pensar que não durmo.

‘The whole night I keep thinking so that I can’t sleep.’

Turkish dur- ‘stand’, ‘wait’, ‘remain’, ‘endure’ forms a durative when attached to the gerund of a verb; for example, bak- ‘look’, bakadur- ‘keep on looking’


Kxoe (Köhler 1981a: 503)

//oàβà- ná- êi- yé- tè. (cover- II- DUR- I- PRES)

‘(She) covers (him) solidly.’

Note also that in North Indian languages such as Hindi, Urdu, and Punjabi, the progressive aspect is expressed with the perfect participle of the verb ‘stay’, ‘remain’ (Comrie 1976: 102; Lord 1993: 216–17). This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare BEGIN; COME FROM; COME TO; DO; FINISH; GO TO; KEEP; LEAVE; PUT.

REMAIN (‘to remain’, ‘to stay’) > (2) HABITUAL


Ewe

(a) me- ng afi.

1:SG-remain here

‘I remained here.’

(b) me- yi- na. (Heine and Reh 1984: 19)

1:SG-go-HAB

‘I (habitually) go.’

Sango ngbâ ‘remain’, verb > continuous marker (Thornell 1997: 122). This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect
functions; compare begin; come from; come to; do; finish; go to; keep; leave; put.

**RESEMBLE ('to resemble', 'to be like') > (1) COMPARATIVE**

Late Archaic and Han Chinese *bi* ‘to compare with’, ‘to be like’, ‘to imitate’, verb > Late Medieval Chinese (eighth–ninth centuries A.D.) *bi* ‘more than’, comparative marker when serving as the first verb (*V*₁) followed by a predicative adjective as *V₂* (Li and Thompson 1980; Peyraube 1988: 627–32). Ex.

**Old Chinese (Mengzi Gongsun Chou shang; quoted from Sun 1996: 39)**

(a)  
<table>
<thead>
<tr>
<th>2:SG</th>
<th>how</th>
<th>stress</th>
<th>compare</th>
<th>1:SG</th>
<th>yu</th>
<th>yu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>shi?</td>
<td></td>
</tr>
</tbody>
</table>

‘How (dare) you compare me to him?’

**Modern Mandarin Chinese (Sun 1996: 38)**

(b)  
<table>
<thead>
<tr>
<th>3:SG</th>
<th>compar</th>
<th>sister</th>
<th>pretty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘She is prettier than (her) sister.’

The data available suggest that the development of Chinese *BI* (*bi*) may have proceeded in three main stages. First, in Old Chinese, its primary meaning appears to have been that of a verb, ‘to compare’. Second, it later acquired features of a simile verb, ‘to be like’ and in Middle Chinese of a simile preposition, ‘like’. Third, it eventually assumed functions of a comparative marker (cf. Sun 1996: 38f.). Early Mandarin *ru* ‘to resemble’ > comparative marker. Ex.

**Early Mandarin Chinese (Yuan kan zaju sanshi zhong Yu Shang Wang; quoted from Sun 1996: 40)**

(a)  
| gallantly | de | part | policemen | resemble | tiger lang. | wolf |
| xiong-jiujiu | gongren | ru | hu |

‘Arrogant policemen are like tigers and wolves.’

---

60 Since with the grammaticalization of A to B, A does not necessarily disappear, it comes as no surprise that *BI* has retained uses of a lexical verb (‘to compete’) in Modern Mandarin Chinese (a), side by side with its use as a comparative marker (b) (Sun 1996: 41–2).

(a)  
<table>
<thead>
<tr>
<th>I</th>
<th>today</th>
<th>with</th>
<th>compete</th>
<th>ping pong.</th>
</tr>
</thead>
<tbody>
<tr>
<td>wo</td>
<td>jintian</td>
<td>gen</td>
<td>ni</td>
<td>bi</td>
</tr>
</tbody>
</table>

‘I will play ping pong with you today.’

(b)  
<table>
<thead>
<tr>
<th>I</th>
<th>2:SG</th>
<th>hit</th>
<th>good</th>
</tr>
</thead>
<tbody>
<tr>
<td>wo</td>
<td>bi</td>
<td>ni</td>
<td>da</td>
</tr>
</tbody>
</table>

‘I can play better than you (can).’
Early Mandarin Chinese (Yuan kan zaju sanshi zhong Yu Shang Wang, Mo he luo; quoted from Sun 1996: 40)

(b) chi le xie popei chunnuo sheng
    eat ASP some fermented spirit better
ru yu xie qiongjiang.
    better jade liquid wine

‘(I) took some fermented wine, better than the best of wine.’

Chinese XIANG ‘to resemble’, ‘to be like’ > XIANG, comparative marker (Alain Peyraube, personal communication). German wie ‘like’ > Colloquial German ‘like’, ‘(more) than’, comparative marker. Ex.

German

(a) Inge schwimmt wie ein Fisch.
    Inge swims like a fish

‘Inge swims like a fish.’

Colloquial German

(b) Inge schwimmt schneller wie ich.
    Inge swims faster like I

‘Inge swims faster than I.’

More examples are required to substantiate this grammaticalization. It would seem, however, that this is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also COME FROM; COME TO; CROSS; EXCEED; PASS. For more pathways of grammaticalization having RESEMBLE-verbs as a source, see Lord 1993.

RESEMBLE (‘to resemble’, ‘to be like’) >
(2) COMPLEMENTIZER


Twi (Lord 1993: 160)

(a) kofi se amma.
    Kofi be:like Amma

‘Kofi resembles Amma.’

(b) na ama nim se kofi yeε adwuma
    PAST Ama know that Kofi did work
    no.

‘Ama knew that Kofi had done the work.’

The situation in Twi has given rise to some confusion in that there are two phonologically similar verbs, se ‘say’ and se ‘be like’, that have developed into complementizers (see Lord 1993: 151ff.; see also SAY > COMPLEMENTIZER). See
also Kode (Baule dialect) ke ‘like’, ‘that’, complementizer after verbs of speaking and mental action. Ex.

**Kode (Lord 1993: 201)**

\[
\begin{array}{cccccc}
  n & se & ke & a & wā & ti \\
\end{array}
\]

\[
\begin{array}{cccccc}
  I & say & that & you & husband & COP \\
\end{array}
\]

\[
\begin{array}{cccccc}
  wonī. & python & \\
\end{array}
\]

‘I say that your husband is a python.’

Idoma bē ‘resemble’ > complementizer after verbs of thinking, seeing, knowing, and hearing. Ex.


\[
\begin{array}{cccccc}
  n & je & b- & o & ge & wa. \\
\end{array}
\]

\[
\begin{array}{cccccc}
  1:SG & know & resemble-he & FUT & come \\
\end{array}
\]

‘I know that he’ll come.’


**Tok Pisin PE (Woolford 1979: 116, 118)**

(a) Em i kamap yangpela boi olsem

he i grow young boy like

James.

‘He grew up to be a young boy like James (i.e., James’ size).’

(b) Na yupela i no save olsem

and you:PL i NEG know that

em i matmat?

it i cemetery

‘And you did not know that it was a cemetery?’

This is an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare say. For more pathways of grammaticalization having RESEMBLE-verbs as a source, see Lord 1993.

**RESEMBLE (‘to resemble’, ‘to be like’) > (3) SIMILE**


**Twi (Lord 1989: 257–9)**

(a) Kofi së Amma.

Kofi be:like Amma

‘Kofi resembles Amma.’
It is as red as blood.

Tamil *poola* ‘be similar with’, stative verb > ‘like’, ‘as’, postposition. Ex.

*Tamil (T. Lehmann 1989: 131)*

\[
\begin{align*}
\text{Kumar} & \quad \text{pig}- \quad \text{ACC} \quad \text{like} \quad \text{cry- PAST-3:M:SG} \\
\end{align*}
\]

‘Kumar cried like a pig.’

This appears to be an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also *COME FROM; COME TO; CROSS; EXCEED; FALL; PASS*. For more pathways of grammaticalization having RESEMBLE-verbs as a source, see Lord 1993.

**RETURN (‘to return’, ‘to go back (to)’) > ITERATIVE**

Sanuma *kô* ‘return’ > repetitive marker. Ex.

*Sanuma (Borgman 1990: 180–1)*

\[
\begin{align*}
\text{ı} & \quad \text{hamö} \quad \text{sa} \quad \text{pili-} \quad \text{a-} \quad \text{mö} \quad \text{ku-} \\
\text{REL} & \quad \text{LOC} \quad \text{1:SG} \quad \text{live-} \quad \text{DUR-} \quad \text{PURP} \quad \text{be-} \\
\text{a} & \quad \text{akô-} \quad \text{ki} \quad \text{pia} \quad \text{salo.} \\
\text{DUR} & \quad \text{return-} \quad \text{FOC} \quad \text{intend} \quad \text{RESULT} \\
\end{align*}
\]

‘I intend to live in that place again.’

Sotho *-bôëla* ‘return (applicative form)’ > repetitive auxiliary. Ex.

*Sotho (Doke and Mofokeng [1957] 1985: 247)*

(a) *Nka- bôëla môtsê- ng.*

(1:SG:POT-return village-LOC)

‘I can return to the village.’

(b) *Nka- bôëla ka- bua.*

(1:SG:POT-return 1:SG:SUB-speak)

‘I can speak again.’

Zulu *-buya* ‘return (= movement from point A to point B and back to point A)’ > *-buye* ‘do again’, repetitive auxiliary. Ex.

*Zulu (Mkhatshwa 1991: 91–2)*

(a) *U- zo- buya kusasa.*

(2:SG:FUT-return tomorrow)

‘He will return tomorrow.’

(b) *U- buy- e u- si- fund- e*

(2:SG-return-SUBJUNCT 2:SG- C7- learn-SUBJUNCT)
lesi si- fundo.

‘Study this lesson again.’


**Kikuyu (Benson 1964: 66)**

(a) Ni- tū- ra- coka mū- cii.
    part-1:pl-pres- return c3- home
    ‘We are going home.’

(b) i- ti- na- coka kū- rīa
    c10-NEG-PAST- return inf-eat
    ‘They (the cattle) did not feed again.’


**Sango (Thornell 1997: 123)**

àla kiri àla mā kpēngbā tēnē.
3:pl return 3:pl hear hard word

‘They listen to the severe message again.’


**Sardinian (Wagner 1962: 498–9)**

(a) torrate . . . ad domos uostras!
    (return:imp:pl . . . to houses your:pl)
    ‘Return (ye) . . . home!’

(b) e il presentat torra cuďdu signore.
    (and he introduce again dem man)
    ‘And he introduces that gentleman again.’

Fa d’Ambu CP vilame ‘return’, motion verb > (a) vilame, repetitive auxiliary; (b) -vla, verbal iterative suffix. Ex.

**Fa d’Ambu CP (Post 1992: 160)**

andyi se e lantā- vla . . .
one:day that 3:sg get:up-return

‘One day he got up again. . . .’

Nubi CA ārija (fógo) ‘return (be there)’ > iterative marker (simple repetition) (Boretzky 1988: 64).
**SAME > INTENSIVE-REFL**

German *selb-* ‘same’ > *selbst*, intensive reflexive (emphatic reflexive). Ex.

*German*

\[
\text{Der König } \underline{selbst} \text{ hat es getan.}
\]

‘The king himself did it’.

French *même* ‘same’ > intensive reflexive, Spanish *mismo* ‘same’ > intensive reflexive. Moravcsik (1972: 273) mentions Syrian Arabic *nafs-* and *zāt-*., Ancient Greek *autos*, and Lithuanian *pats* as further examples where the intensive reflexive (intensifier in her terminology) is “homonymous” in part or in its totality with the word for ‘same’ (cf. König and Siemund 2000). More research is required to establish that the directionality proposed here is correct.

**SAY > (1) CAUSE**

Baka *pe* ‘say’, verb > (purpose clause subordinator >) cause clause subordinator. Ex.

*Baka (Christa Kilian-Hatz, personal communication)*

\[
\underline{mo} \quad à \quad \underline{me}è \quad ?èè \quad kè \quad \underline{pe} \quad \text{nye?}
\]

‘Why do you do this?’

Lezgian *luhuz*, imperfective converb of *luhun* ‘say’ (> complementizer) > ‘because’, causal conjunction. Ex.

*Lezgian (Haspelmath 1993: 390)*

\[
Pul \quad \underline{kwadar-na} \quad \underline{luhuz} \quad buba
\]

money lose- AOR saying father

\[
k’wal- \quad \underline{er-} \quad aj \quad aqud- \quad iz
\]

house- PL- INE take:out- INF

\[
\underline{że-} \quad \underline{da-} \quad \text{ni?}
\]

‘Can we kick father out of the house because he has lost the money?’

See Saxena 1988a, 1988b; Heine et al. 1991: 158–9; Lord 1993. This appears to be an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare RESEMBLE. See also SAY > SUBORDINATOR.

**SAY > (2) COMPLEMENTIZER**

Egyptian *r dd* ‘(in order) to say’ > ‘that’. Ex.
Egyptian (Gardiner 1957: 173f.)

‘iw.’i rḥ. kw’i r d

(part:1:sg know:1:sg to say

ḥnw.f pw.

resting:place:his this)

‘I know that it is his resting place.’


Koranko (Kastenholz 1987: 265, 336)

(a) ànu kó ni yé: ’sìi yíri’

3:pl say 1:sg to sit ideo

‘They said to me: “Sit down quietly!”’

(b) ni yá a fó i yé, kó

1:sg TAM 3:sg say 2:sg to that

i kána tó yà.

2:sg TAM:NEG stay here

‘I told you that you cannot stay here.’


Vai (Koelle [1854] 1968: 123)

mòa so mú-ro: yá mu

1:pl:tam know 1:pl-say 2:sg:tam 1:pl

dìake.

love:do

‘We know that thou loves us.’

Baka pe ‘say’, verb > object clause complementizer. Ex.

Baka (Christa Kilian-Hatz, personal communication)

(a) ma pe meè bèlà kè!

1:sg say make:imp work dem

‘I say: do this work!’

(b) ma à nyi pe ?é dà.

1:sg asp know that 3:sg come

‘I know that he comes.’


**Bemba (Givón 1980: 365–6)**

(a) a- a- ebele a- a- ti umanaa- he- past- say he- past- say friend- ndi a- a- ishile. my he- past- come

‘He said: My friend has arrived.’

(b) a- a- ebele uku- ti umanaa- ndi he- past- say inf- say friend- my a- a- ishile. he- past- come

‘He said that my friend had arrived.’

**Ewe (Lord 1989: 307–8)**

(a) me- bé me- wo e. 1:sg- say 1:sg- do it

‘I said: I did it.’ / ‘I said that I did it.’

(b) me- di bé máfle awua dë- wó. some- PL 1:sg want (say) 1:sg:subjunct:buy dress

‘I want to buy some dresses.’


**Chamling (Ebert 1991: 79–80)**

khu garib hing- e rungma kanga chaid- he poor be- ? say 1:sg know- ñi.

1:sg?

‘I know: He is poor.’ / ‘I know that he is poor.’


**Buru (Klamer 2000: 78)**

<table>
<thead>
<tr>
<th>Ya tewa fen ringe iko haik.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG know fen 3:SG go PFV</td>
</tr>
</tbody>
</table>

‘I know that he has already left.’


**Lezgian (Haspelmath 1993: 367)**

<table>
<thead>
<tr>
<th>gada- di wiç k’wal- e amuq’- da</th>
</tr>
</thead>
<tbody>
<tr>
<td>boy- ERG self house- INE stay- FUT</td>
</tr>
</tbody>
</table>

The boy is shouting that (lit.: ‘saying’) he would stay at home.’

English say > Tok Pisin PE se, complementizer (Ebert 1991: 77). English say > Nigerian PE say, complementizer; for example, I tink say beggar no get choice (Ebert 1991: 77). Negerhollands CD se(e) (< Dutch zeggen) ‘say’ > object clause complementizer ‘that’. Ex.

**Negerhollands CD (Stolz 1986: 229)**

(a) Ham a se, wa di be?:

(3:SG PERF say what DEM be)

‘He said: What was that?’

(b) Am no wet se fo ko:k jamus...

(3:SG NEG know that DEM cook yam)

‘He didn’t know that he had to cook yam...’

West African PE sey. Ex.

**West African PE (Lord 1989: 333)**

<table>
<thead>
<tr>
<th>öl pipu sabi sey, miting gow déy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>all people know (say) meeting FUT LOC</td>
</tr>
</tbody>
</table>

‘All the people know that there will be a meeting.’

See especially Lord 1973, 1993: 206–8; Saxena 1988a, 1988b; Ebert 1991; Frajzyngier 1995: 200; Klamer 2000. For more examples from pidgins and creoles, see Holm
1988: 185–8 and Muysken and Veenstra 1995: 290ff. This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare resemble.

**SAY > (3) CONDITIONAL**


**Lahu (Matisoff 1991: 400)**

\[
\begin{align*}
\text{nô} & \quad \text{ô-ve} & \text{câ} & \quad \text{qo,} & \text{nà} & \quad \text{tù} & \quad \text{ve} \\
\text{2:SG} & \quad \text{DEM} & \text{eat} & \quad \text{if} & \text{PART} & \text{PART} & \text{PART}
\end{align*}
\]

\[\text{yô.}\]

‘If you eat that, you’ll get sick.’


**Ga (Lord 1989: 318)**

\[
\begin{align*}
\text{máha} & \quad \text{obu} & \text{niyeníi} & \quad \text{kê} & \text{oba.} \\
\text{give:1:SG:FUT} & \text{you} & \text{food} & \text{(say)} & \text{you:come}
\end{align*}
\]

‘I’ll give you some food if/when you come.’

Baka pe ‘say’, verb > conditional marker. Ex.

**Baka (Christa Kilian-Hatz, personal communication)**

\[
\begin{align*}
\text{pe} & \quad \text{mo} & \quad \text{ô} & \quad \text{sia} & \quad \text{lê} & \quad \text{mò} & \quad \text{jukô} \\
\text{if} & \quad \text{2:SG} & \text{NAR} & \text{see} & \text{3:SG:OBJ} & \text{2:SG} & \text{greet}
\end{align*}
\]

\[\text{kê!} \quad \text{3:SG:OBJ} \]

‘Give him my greetings if you see him!’

See Lord 1993 for more details. This is an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare resemble.

**SAY > (4) EVIDENTIAL**

Lezgian luhuda ‘one says (cf. luhun ‘say’)’ > -lda, hearsay evidential marker (Haspelmath 1993: 232). English they say > hearsay evidential marker; for example, They say she’s coming (Givón 1991a: 83). Taiwanese, Southern Min kong ‘say’ > evidential marker of hearsay information (Chappell forthcoming). More research is required on the general process leading to the rise of evidential markers (see Willett 1988).

**SAY > (5) PURPOSE**

Ewe bé ‘say’, verb (>object clause subordinator) > purpose clause subordinator (Lord 1989: 306ff.) Ex.
Ewe (Lord 1989: 313)

é-dògo bé ye- á- čiụ nù.

he-go:out (say) LOG-SUBJUNCT-eat thing

‘He went out in order to eat.’

Gokana kọ ‘say’ (> object clause subordinator) > purpose clause subordinator (Lord 1989: 325–6). Ex.

Gokana (Lord 1989: 326)

lébàreè du kọ baá mọn-èè e.

Lebare came (say) they see- LOG him

‘Lebare came for them to see him.’

Baka pe ‘say’, verb (> object clause subordinator) > purpose clause subordinator. Ex.

Baka (Christa Kilian-Hatz, personal communication)

(a) ma pe meè bèlà kè!

1:SG say make:IMP work DEM

‘I say: do this work!’

(b) tọ pe- è ngo pe ma njo!

give:IMP DAT-1:SG water that 1:SG drink

‘Give me water so that I may drink!’

Koranko kọ ‘say’, defective intransitive verb > purpose clause subordinator. Ex.

Koranko (Kastenholz 1987: 265, 336)

á dú- da tuye kọndọ kọ à

3:SG enter-TAM forest POST PURP 3:SG

sí kọlmagboenu jini.

TAM fruit search

‘He went into the forest in order to look for fruit.’

Lingala te ‘say’, verb > purpose clause marker. Ex.

Lingala (van Everbroeck 1958: 82)

kangá mbwá nsinga te áboma nsósó té!

‘Tie the dog up so that it doesn’t kill the chicken!’

Sranan CE taki ‘say’ (> clause subordinator ‘that’) > purpose clause subordinator. Ex.

Sranan CE (Ebert 1991: 86)

A sení Sa Akuba go, taki mek

(doctor sent Sa Akuba off that make)

dattra luk enj.

‘He sent Sa Akuba so that the doctor should examine her.’

Negerhollands CD se(e) (< Dutch zeggen) ‘say’ > object clause complementizer (see SAY > COMPLEMENTIZER), purpose clause subordinator. Ex.
Negerhollands CD (Stolz 1986: 229)

\[F_{o} m_{a} se \text{ pasé: } d_{i} wurum . . . .\]

\(\text{(conj \ make \ that \ go \ det \ worm)}\)

‘In order to get rid of the worms. . . .’

For more examples from pidgins and creoles, see Muysken and Veenstra 1995: 290ff. This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare resemble. See also say > subordinator.

**SAY > (6) QUOTATIVE**

Nama \( m\check{\text{i}} \) ‘say’, ‘speak’, \( t\check{\text{i}} \) \( m\check{\text{i}} \) (lit.: ‘thus speak’) > \( t\check{\text{i}}(m\check{\text{i}}) \), direct quotation marker. Ex.

**Nama** (Krönlein 1889: 231, 309; Hagman 1977: 137)

(a) \( M\check{\text{i}} \= re \= mati \= kh\check{\text{um}} \= n \= d\check{\text{i}} \)

\( \text{say \ imp \ how \ 1:M:DU \ fut \ make} \)

\( \text{!kei-} \text{.} \)

‘Tell [us] how we should do it.’

(b) \( si\check{\text{ke}} \= t\check{\text{i}} \= +\check{\text{a}}e-+\check{\text{u}}\check{\text{a}}o-p \= pit\check{\text{a}}-p \)

\( \text{(1:PL:M poss \ leader- 3:SG:M Peter-3:M:SG)} \)

\( t\check{\text{i}}(m\check{\text{i}}) \= ra \= +\check{\text{a}}i- \check{\text{h}}\check{\text{e}}-p \)

\( \text{(quot \ prog \ call-pass-3:SG)} \)

‘our leader who is called Peter’


Twi (Lord 1989: 297)

\[Onipa reba, \quad wo-\text{n-}se \quad n-se: \quad bera! \]

\( \text{man \ prog:come:cond \ you-neg-say \ neg-say \ come} \)

‘When a man is coming, you do not say: come!’


Sranan CE (Ebert 1991: 86; Lord 1989: 335)

\[Ma \= wan \= dei \quad Anansi \= taigi \= hem \quad weif\check{\text{i}} \]

but one day Anansi talk his wife

\( a \= \text{taki}: \quad . . . \)

\( ? \= \text{talk} \)

‘But one day, Anansi said to his wife: . . .’
West African PE *sey* ‘say’ > quotative marker. Ex.

**West African PE (Lord 1989: 332)**

\[ \text{mása tók sey, kom- ow.} \]

(master talk (say) come-?)

‘The master said, “Come here”’.


**Vai (Koelle [1854] 1968: 122, 134)**

(a) Áro, *wu* ńko. . . .

3:SG:say 2:PL 1:SG:give

‘She said, give me. . .’

(b) ā fō āye áro: . . .

3:SG:TAM say 3:SG:to that

‘He said to him: . . .’


**Buru (Kramer 2000: 76)**

\[ \text{Da prepa fen, “Sira rua kaduk.”} \]

3:SG say QUOT 3:PL two arrive

‘She said, “The two of them came”’.

For a discussion of this grammaticalization, see also Harris and Campbell (1995: 170ff.), who use the term “quotation-to-quotative” to refer to it. See also Krammer 2000.

**SAY > (7) SIMILE**


**Koranko (Kastenholz 1987: 334)**

\[ \begin{array}{cccc}
\text{à} & \text{má- ra} & \text{íko} & \text{à} & \text{yé} & \text{bèlè-na} \\
3:SG & make-TAM & like & 3:SG & TAM & pass-TAM \\
\text{kére} & \text{lá.} \\
\text{horn} & \text{POST} \\
\end{array} \]

‘It seemed as if he passed the horn on.’


**Vai (Koelle [1854] 1968: 123–4)**

\[ \begin{array}{cccc}
\text{pòromó} & \text{bé} & \text{iro} & \text{músú} & \text{gbándawau} \\
\text{(European cop} & \text{like} & \text{woman} & \text{unmarried}) \\
\end{array} \]

‘A European is like an unmarried woman.’
Tamil *en* ‘say, think’, verb of utterance > *ena* (‘say’ in the infinitive) ‘like’. Ex.

**Tamil (T. Lehmann 1989: 377)**

```
kumaar puli en- a paay-nt- aan.
```

Kumar tiger say-INF jump-PAST-3:M:SG

‘Kumar jumped like a tiger.’

Lezgian *na luhudi* ‘you would say’ (*you*:*erg* + archaic future of *luhun* ‘say’), similarity marker ‘as if’. Ex.

**Lezgian (Haspelmath 1993: 247)**

```
Na luhudi, aburu- z aku- r- di
```

as if they-DAT see-AOP- SBST:SG

axwar tir.

dream COP:PAST

‘It was as if what they had seen was a dream.’


For a detailed description of how the similitative construction is expressed in the languages of Europe, see Haspelmath and Buchholz 1998. See also **RESEMBLE.**

**SAY > (8) SUBORDINATOR**

In more advanced stages of grammaticalization, *say*-verbs may develop into markers of purpose, cause, and temporal adverbial clauses; see Saxena 1988a, 1988b and Heine et al. 1991: 158–9.


**Ewe (Heine et al. 1991: 237)**

(a) ɛ- bé Kofi vá.

3:SG-say Kofi come

‘He said that Kofi came.’

(b) me- tsó ga nè bé(ná) wo- á- ple

1:SG-take money give:3:SG PURP 3:SG-SUBJUNCT-buy

agbalé.

book

‘I gave him money so that he could buy a book.’

See also **SAY > CAUSE; SAY > PURPOSE.** This is an instance of a process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers used for clause combining; compare **RESEMBLE.** However, more research on the exact conceptual nature of this process is required.

**SEE > (1) ALLATIVE**

paar ‘see’, verb of perception and sensation > paarttu (participle form), post-position marking mental direction. Ex.

Tamil (T. Lehmann 1989: 129)

kumaar raajaa-v-ai-p paarttu peec-in- aan.
Kumar Raja- ACC toward talk-PAST-3:M:SG
‘Kumar talked toward Raja.’

This appears to be an instance of a pathway whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare ARRIVE; COME FROM; FOLLOW; GIVE; GO TO; LEAVE; TAKE. However, more research is required on the conceptual nature of this particular process.

SEE > (2) PASSIVE

This grammaticalization has been suggested by Alain Peyraube (personal communication), who volunteers the following examples: Archaic Chinese JIAN ‘to see’ > JIAN, passive marker. Ex.

Archaic Chinese (Alain Peyraube, personal communication)

(a) Mengzi jian Liang Hui wang.
Mencius see Liang Hui king
‘Mencius (went to) see king Hui of Liang.’

(b) Peng Chengguo jian sha.
Peng Chengguo PASS kill
‘Peng Chengguo was killed.’

French voir ‘to see’ > passive marker. Ex.

French (Alain Peyraube, personal communication)

Il s’est vu frappé par trois voyous.
he been beaten by three street hoodlums
‘He has been beaten by three street hoodlums.’

Peyraube observes that similar examples can be found in other languages (e.g., Spanish and Italian). More research on this pathway is required, which appears to be an instance of a more general process whereby constructions involving certain process verbs are grammaticalized to passive constructions; see EAT; FALL; GET.

‘Seize’ see TAKE

SHOULDER > UP

Two African languages (Heine et al. 1991: 126) and four Oceanic languages (Bowden 1992: 36) have been found to have the body part ‘shoulder’ grammaticalized to a locative marker for UP. This grammaticalization appears to be
an instance of a more general process whereby certain body parts, on account of their relative location, are used as structural templates to express deictic location; compare back; belly; buttocks; eye; face; flank; head; neck.

SIDE > (1) BESIDE

English by the side of > beside (Hopper and Traugott 1993: 107). Basque bazter ‘riverside’, edge > bazterrean (= bazter + ean (LOC)) ‘at the side of’ (Svorou 1994: 81). Basque alde, ondo, and albo, all meaning ‘side’, can function, when case marked, as postpositions meaning ‘beside’. Ex.

**Basque (Anonymous reader)**

<table>
<thead>
<tr>
<th>zure</th>
<th>ondoan</th>
</tr>
</thead>
<tbody>
<tr>
<td>zu-</td>
<td>(r)e ondo-</td>
</tr>
<tr>
<td>you-</td>
<td>gen side-</td>
</tr>
<tr>
<td>LOC</td>
<td></td>
</tr>
</tbody>
</table>

‘beside you’

Kono fe ‘side (part)’, relational noun > locative adverb, adposition. Ex.

**Kono (Donald A. Lessau, personal communication)**

(a) cénè fe mà-nyèn-nyèn!

house side on- write-write

‘Write (all) over the house wall!’

(b) mbé tá-á yií fè.

1:SG:TAM go-TAM water along

‘I am going along/beside the water.’


**Bulgarian**

(a) Na severnata strana na on northern:DEF side of kâštata njamaše prozorci. house:DEF had:not windows

‘There were no windows on the northern side of the house.’

(b) Decata se bjaxa nasâbrali children:DEF refl were gathered okolo koleleoto, a starecât gi around bicycle:DEF and old:man:DEF them
Aranda itere ‘the side of’, noun > itere ‘along’, ‘beside of’, adposition (Wilkins 1989: 314–15). We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare bottom; place; top.

SIDE > (2) LOCATIVE

Indian Ocean CF (Papen 1978: 452)

<table>
<thead>
<tr>
<th>Mo</th>
<th>reste</th>
<th>kot</th>
<th>Pol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>live</td>
<td>LOC</td>
<td>Paul</td>
</tr>
</tbody>
</table>

‘I live near Paul’s.’


Chinese PE (Hall 1944: 97)

fáenhaj- sajd             ófis- sajd
(Shanghai-side)            (office-side)
‘at Shanghai’              ‘at the office’

This is another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare bottom; place; top.

SIDE > (3) NEAR

Dullay (Amborn et al. 1980: 102)

ló?o      tálcacé      káriló      šéekáaráí.
    cow    goat:LOC     next:to     stands

‘The cow stands next to the goat.’


nabljudavaše     otstrani.
observed from:side
‘The children had gathered around the bicycle, and the old man was watching them from aside.’

**Tamil (T. Lehmann 1989: 122)**

\[\text{anta vii-TU pakkam oru aalamaram}\]

that house (OBL) near a banyan:tree

\[\text{iru-kKir- atu.}\]

be- PRES-3:N:SG

‘There is a banyan tree near our house.’

Compare Hagège 1993: 214. We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare **BOTTOM; PLACE; TOP.** Near forms can also be derived from some body parts. In Finnish, for example, it appears to be derived from the noun ‘chest’. Ex.

**Finnish (Harris and Campbell 1995: 71)**

(a) \[\text{lapse-n rinna-lla}\]

child-GEN chest-on

‘on the child’s chest’

(b) \[\text{lapse-n rinnalla}\]

child-GEN POST

‘next to the child’

**SIMILE > (1) COMPLEMENTIZER**

Kxoe *taá* (or *tá*) ‘be like (that)’, ‘thus’ > complementizer of clauses having utterance or cognition verbs as matrix predicates. Ex.

**Kxoe (Treis 2000a: 16–17)**

(a) \[\text{Tá xàǹ m kx’úí.}\]

thus lion speak

‘Thus the lion says.’

(b) \[\text{tcá /’úrí- na- han taá tí n+an- ná- han.}\]

2:M:SG forget-JUNC-PERF COMP 1:SG think-JUNC-PERF

‘I thought you had forgotten about it.’

Tok Pisin PE *olsem* ‘thus’, adverb > complementizer. Ex.

**Tok Pisin PE (Romaine 1988: 142)**

(a) \[\text{Elizabeth i tok olsem, } ‘Yumi mas}\]

(Elizabeth AGR spoke thus we must

\[\text{kisim ol samting pastaim.’}\]

get PL thing first)

‘Elizabeth spoke thus, “We must get things first”’.

---

61 A morpheme-final *n* symbolizes that the vowel preceding it is nasalized.
More research is required on the areal and genetic distribution of this process.

**SIMILE > (2) QUOTATIVE**

English *like*, comparative conjunction > *like*, nonverbatim quotative. Ex.

*English (Fleischman 1999)*

(a) *My love is like a rose.*

(b) *And I’m like: “Gimme a break, will you!”*  
*And I’m like OK, how am I gonna get her “chief complaint” out of her?*


*French (Fleischman 1999)*

(a) *des gens de ce genre*  
‘that kind/sort of people’

(b) *Quand je lui ai dit que t’étais pas sûr de venir elle était vraiment pas contente, genre si vous jouez pas je chante pas.*  
‘When I told her you weren’t sure you were coming [to her party] she was really upset, like if you won’t [be there to] play [the piano], I won’t sing.’

Finnish *niinku* ‘like’ > *niinku*, nonverbatim quotative. Ex.

*Finnish (Fleischman 1999)*

*Ja sit mä olin niinku että herrajumala et voi olla totta.*  
‘And then I was like oh my God, I can’t believe it.’

Swedish *liksom* ‘like’ (< ‘like’ + ‘as’) > *liksom*, nonverbatim quotative. Ex.

*Swedish (Fleischman 1999)*

*Jag tittade pa° honom och liksom inte en chans!*  
‘I looked at him and like no way!’

German *so* ‘thus’, ‘so’, ‘in this way’, adverb of manner > *so*, nonverbatim quotative. Ex.

*Colloquial German (Fleischman 1999)*

*Ich sagte ihm, dass er gehen muss. Und er so, ich werde es mir überlegen.*

‘I told him he had to go. And he’s like I’ll think about it.’
Kxoe $\text{taá} ‘be like (that)’, ‘thus’, verb or particle > quotative marker. Ex.

Kxoe (Treis 2000a: 15)

$\text{má-ká } \text{tcá } \text{kúún-wà- } \text{gòè } \text{taá } \text{tí}$

Q- LOC 2:M:SG go- I- FUT like:that 1:SG

$\text{≠’òa-ra- } \text{han.}$

ask- II- PERF

‘I asked you where you are going.’

**SINCE (TEMPORAL) > CAUSE**


**English (Traugott and König 1991: 194)**

(a) I have done quite a bit of writing since we last met. (temporal)

(b) Since you are not coming with me, I will have to go alone. (causal)

Basque gero is an adverb and postposition meaning ‘after’, ‘later’; but when following instrumental/adverbial -z, it means ‘since’ (causal). Ex.

**Basque (anonymous reader)**

(a) Ikusi ta gero, etxera joan naiz.

Ikusi ta gero etxe- ra joan n-

see[PFV] and after house- ALL go[PFV] 1:SG:ABS-

aiz.

AUX

‘After I saw it, I went home.’

(b) Ikusi dudanez gero, badakit nolakoa den.

Ikusi d- u- da- n- (e)z

see[PFV] PRES- AUX- 1:SG:ERG- SUB- INSTR

gero, ba- d- aki- t nolako- a

after EMPTY-PRES-KNOW-1:SG:ERG what:kind:of-DET

d- e- n.

PRES-AUX-SUB

‘Since I’ve seen it, I know what it’s like.’


**Aranda (Wilkins 1989: 206, 210)**

(a) nwerne lhe-ke. . . dinner-iperre

‘After dinner, we went. . .’

(b) Ngkwerne ultake-lhe-ke re arne-nge tnye-ke-l-iperre

‘Her leg was broken from her falling out of a tree.’ (i.e., because she fell out of a tree)

This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of
“logical” grammatical relations, such as adversative, causal, concern, concessive, and conditional relations; see, for example, **allative; locative; temporal; up**.

**sit** (‘to sit’, ‘to stay’) > (1) **CONTINUOUS**


**Diola Fogny (Blansitt 1975: 26–7)**

\[
i- \text{lak} \ 1\text{sg}-\text{sit} \ 1\text{sg}-\text{eat} \\]

\[\text{I was eating.}\]

Or

\[
i- \text{lak} \ 1\text{sg}-\text{sit} \ \text{fu-ri} \ | \ \text{INF-eat} \\]

\[\text{I was eating.}\]


**Mamvu (Vorbichler 1971: 248–50)**

\[\text{µe} \ \text{mu-} \ \text{taju.}\]

\[\text{dance} \ 1\text{sg}-\text{sit} \\]

\[\text{I was dancing.}\]


**Nobiin (Werner 1987: 152)**

\[\text{ày àa(g)-kàbir.}\]

\[\text{I am eating.}\]

Kxoe *n+yè ‘sit’, defective verb > *n+yè or -n̩, present, progressive particle, especially used to denote an action performed while sitting (cf. Köhler 1962: 545, 1981a: 530). Ex.

**Kxoe (Bernd Heine, field notes)**

\[\text{tí} \ \text{mùùn-a-n+yè.}\]

\[1\text{sg} \ \text{see-} \ \text{I-PRES} \\]

\[\text{I see (while sitting).}\]

Ngambay-Moundou (Blansitt 1975: 27)

\[ m\- i\bar{s}\bar{i} \quad m\- u\bar{s}\bar{\bar{a}} \quad d\bar{\bar{a}}. \]

1:SG-sit 1:SG-eat meat

‘I am eating meat.’

or

\[ m\- i\bar{s}\bar{i} \quad m\bar{b} \quad k\- u\bar{s}\bar{\bar{a}} \quad d\bar{\bar{a}}. \]

1:SG-sit for NOMIN-eat meat

‘I am eating meat.’

Ngambay-Moundou, Mouroum dialect \(i\bar{s}\bar{i}\) ‘to sit’, verb > progressive auxiliary (Hagège 1993: 224). Danish \(s\ddot{a}d\ddot{e}\) ‘sit’ + og (coordinating conjunction, ‘and’) + head verb > progressive aspect (Blansitt 1975: 7). Burmese \(n\dot{e}\) ‘stay’ > progressive auxiliary (Park 1992: 16). Kedah Malay \(d\ddot{u}d\ddot{d}o\kern-2pt k\), \(d\ddot{u}k\) ‘sit’, ‘stay’ when preceding other verbs > \(d\ddot{o}k\), progressive marker. Ex.

**Kedah Malay** (Rajak 1993: 123)

(a) Aku \(d\ddot{o}k\) runah Chat kemarin.

I stayed house Chat yesterday

‘I stayed at Chat’s house yesterday.’

(b) Aku \(d\ddot{u}g\) kacau Chat kemarin.

I \(P R O G\) disturb Chat last night

‘I kept disturbing Chat last night.’

Korean \(a\ddot{n}c\) ‘sit’ > progressive auxiliary. Ex.

**Korean** (Song 2000: 5, 22)

(a) \(k\ddot{u}\) haksayng- \(i\) chayksang- \(a\ddot{h}\) ey

the student- NOM desk- front- LOC

anc- a- iss- ta.

sit- F- is- IND

‘The student is sitting at the desk.’

(b) oay ne- nun mayn nal

why you- TOP every day

\(t\ddot{t}w\ddot{m}c\ddot{i}l\) man ha- ko anc-

running- only do- conj sit-

a- iss- nya?

\(r\ddot{e}\) is- Q

‘Why are you doing nothing but running every day?’

This pathway is part of a more general process whereby postural verbs (‘sit’, ‘stand’, ‘lie’) are grammaticalized to continuous and other aspectual markers (see, e.g., Bybee et al. 1994: 127); compare \(LIE\); \(STAND\) and see also \(SIT > HABIT\) ual. Kuteva (1999, forthc.b) proposes a four-stage grammaticalization development of the bodily posture verbs \(SIT\), \(STAND\), and \(LIE\) into \(CONTINUOUS\) markers: human bodily posture verbs > canonical encoding of spatial position
of objects > CONTINUOUS (with inanimate subjects) > CONTINUOUS (with both inanimate and animate subjects). For an alternative proposal, see Song 2000.

**SIT (‘to sit’, ‘to stay’) > (2) COPULA**


**Imonda (W. Seiler 1985: 158)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louise</td>
<td>kuii-l ale-f.</td>
</tr>
<tr>
<td>Louise</td>
<td>long-NOMIN sit-PRES</td>
</tr>
</tbody>
</table>

‘Louise is tall.’

Sango dutï ‘sit’ > copula expressing description and location. Ex.

**Sango (Thornell 1997: 122)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tōngana</td>
<td>mo dutï na mběnî zò. . . .</td>
</tr>
<tr>
<td>when</td>
<td>2:SG sit with INDEF human</td>
</tr>
</tbody>
</table>

‘When you are together with somebody. . . .’

Not infrequently, verbs meaning ‘sit’ have some copula-like uses in certain contexts. For example, the verb kumpa- ‘to sit’ of Jiwarli includes such meanings as ‘to camp’, ‘to stay’, ‘to live’, and ‘to be’ (Austin 1998: 21). This pathway appears to be primarily an instance of desemanticization, but more information is required on the conceptual nature of the process.

**SIT (‘to sit’, ‘to stay’) > (3) HABITUAL**

SIT-verbs may give rise to CONTINUOUS markers (see SIT > CONTINUOUS), which again may further develop into HABITUAL markers. Yankunytjatjara nyina- ‘to sit’ > auxiliary serving to code a “customary” or generic situation. Ex.

**Yankunytjatjara (Goddard 1985: 207; Austin 1998: 32)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wati-ngku</td>
<td>karli at-ra nyina-</td>
</tr>
<tr>
<td>man-ERG</td>
<td>boomerang:ACC chop-serial sit-nyi.</td>
</tr>
<tr>
<td>PRES</td>
<td>‘The man makes boomerangs.’</td>
</tr>
</tbody>
</table>


**Bulgarian (Kuteva 1999: 195)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedi</td>
<td>i čisti po cjal</td>
</tr>
<tr>
<td>sit:3:SG:PRES and clean:3:SG:PRES along whole</td>
<td></td>
</tr>
<tr>
<td>den</td>
<td>v kāsti</td>
</tr>
<tr>
<td>day</td>
<td>in house</td>
</tr>
</tbody>
</table>

‘She cleans the house all day long.’ / ‘She habitually cleans the house all day long.’

**Kanakuru** *(Newman and Schuh 1974: 35)*

(a) à q’uwó- tó.

(3:SG sit- 3:F:SG)

‘She remained.’ / ‘She sat.’

(b) (à) q’uwó -tó shír- mái.

((3:SG) sit- 3:F:SG steal)

‘She habitually steals.’


**Shona** *(Hannan 1987: 184)*

(a) U- no- gara ku- pi?

(2:SG-PRES-sit LOC-INTER)

‘Where do you live?’

(b) ndi-no- gara ndi- chi-dya ne- nguva dzino.

1:SG-PRES-sit 1:SG-PM-eat COM-time this

‘I usually eat at this time.’

Sudan Arabic ga:sid ‘sit’, verb > Nubi CA gi, progressive, habitual particle (Boretzky 1988: 60–1). This pathway is part of a more general process whereby postural verbs (‘sit’, ‘stand’, ‘lie’) are grammaticalized to continuous and other aspectual markers; compare lie; stand; see also sit > continuous.

**SKY > UP**


**Kikuyu** *(Barlow 1960: 202)*

Nyonyi i- thi- aga igūrū

(c10:bird c10-go- DUR sky)

rīa mītī.

of c4:tree)

‘The birds fly above the trees.’


**Lingala** *(van Everbroeck 1958: 141)*

ótíya masáni o likoló lya mésa!

‘Put the crockery on the table!’

Moré nyīngri ‘firmament, sky’ > ‘above’, ‘up’ (adverb). Ex.
Moré (Alexandre 1953b: 292)
(a) ãdes bé nyëngri
   ‘The stars are at the firmament.’
(b) gyës nyëngri!
   ‘Look up!’

In some regions (e.g., in much of the southern half of Africa), this constitutes the primary source for up markers. Thus, the Proto-Bantu noun *-gudu or *-judu ‘sky’, ‘top’ has given rise to many superessive markers (‘above’, ‘up’) in Bantu languages in the form of adverbs, prepositions, or affixes (see Güldemann 1999b: 53–5 for details). This is an instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see, for example, back; earth; home.

SONG > CLASSIFIER

This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also branch; child; man; piece; tree; woman. More research is required on the genetic and areal distribution of this process.

‘Speak’ see say

STAND > (1) CONTINUOUS

Bulgarian (Kuteva 1999: 194)

\[
\begin{align*}
\text{Stoi} & \quad \text{stand;3:sg:pres} \quad \text{and} \quad \text{refl} \quad \text{lookat:oneself;3:sg:pres} \\
\text{v} & \quad \text{ogledaloto!} \\
\text{in} & \quad \text{mirror;def} \\
\text{‘She’s been looking at herself in the mirror all the time!’}
\end{align*}
\]

Latin stare ‘to stand’, verb > Italian stare (a fare) (intensive) progressive. Ex.
Italian (Devoto and Oli 1971: 2347)

\[\text{cosa stai a leggere?}\]

(what stand:2:SG at read:INF)

(‘What are you reading there?’)


**Spanish (Corominas 1954a: 420)**

\[\text{està pasando.}\]

be:3:SG pass:GER

‘He is passing.’


**Ngambay-Moundou (Heine and Reh 1984: 126)**

\[\begin{array}{c}
\text{m- ár} \\
\text{m- úsā dā.}
\end{array}\]

1:SG-stand 1:SG-eat meat

‘I am eating meat.’

or

\[\begin{array}{c}
\text{m- ár} \\
\text{mbā k- úsā dā.}
\end{array}\]

1:SG-stand for NOMIN-eat meat

‘I am eating meat.’

Kxoe *tē* or *tiīn* ‘stand’, ‘be present’, verb > *tē* present tense/continuous marker, especially used to denote an action performed in a standing position (cf. Köhler 1962: 545). Ex.

**Kxoe (Bernd Heine, field notes)**

\[\begin{array}{c}
\text{tí} \\
\text{müūn- à- tē.}
\end{array}\]

(1:SG see I- PRES)

‘I see (while standing).’


**Diegueño (Blansitt 1975: 26)**

\[\begin{array}{c}
\text{ʔa.yp} \\
\text{taʔyu.w.}
\end{array}\]

I:talk I’m:standing

‘I’m talking.’

Imonda *lōh* ‘stand’, ‘be’ > durative marker. Ex.

**Imonda (Seiler 1985: 105)**

\[\begin{array}{c}
\text{po} \\
\text{feha-lōh- ò- n- b.}
\end{array}\]

water fall- DUR-LNK-PAST-DUR

‘It was raining for a long time.’

Tariana (Aikhenvald 1997: 7)

bird-island 3:PL-stay 3:PL:stand
‘They stayed at Bird island for a long time.’

This pathway is part of a more general process whereby postural verbs (‘sit’, ‘stand’, ‘lie’) are grammaticalized to continuous and other aspectual markers; compare LIE; SIT; see also SIT > HABITUAL. Kuteva (1999; forthc.b) proposes a four-stage grammaticalization development of the bodily posture verbs SIT, STAND, and LIE into CONTINUOUS markers: human bodily posture verbs > canonical encoding of spatial position of objects > CONTINUOUS (with inanimate subjects) > CONTINUOUS (with both inanimate and animate subjects).

CONTINUOUS markers may further develop into HABITUAL markers; for example, Imonda lõh ‘stand’, ‘be’ > habitual aspect marker. Ex.

Imonda (Seiler 1985: 105)

ed- ia ka nön li- lõh- f.
PX-LOC I sleep lie-HAB-PRES
‘I (habitually) sleep over there.’

STAND > (2) COPULA


Imonda (Seiler 1985: 107, 158)

(a) agô- ianêi sabla ed- ia
women- NPL two PX-LOC
ekuk lõh- ual- fna.
distance stand- DU- PROG
‘The two women were standing there in the distance.’

(b) pilin ed- ia fa- hÔdô- lõh- f.
plate PX-LOC CLASS-put:up-be- PRES
‘The plate is up there.’

This is an instance of a more general process whereby postural verbs serve to develop copular markers; compare LIE; SIT.

‘Start’ see BEGIN

‘Stay’ see LIVE

‘Stomach’ see BELLY
**STOP > PROHIBITIVE**


**Welsh (Wiliam 1960: 78)**

\[\text{Pa} \text{i} \text{d} \quad \text{à} \quad \text{my} \text{n} \text{d}!\]

(stop:IMP:2:SG and go:VN)

‘Don’t go!’


**Bassa (Marchese 1986: 191)**

\[bɔ \quad kùà \quad nyu-ɛ.\]

stop work do- NOMIN

‘Don’t work.’

**Klao (Marchese 1986: 191)**

\[bɔ \quad dɛ \quad di- di- dɛ.\]

stop thing eat-eat-NOMIN

‘Don’t eat anything.’

**Tchien Krahn (Marchese 1986: 191)**

\[s \quad bɔ \quad dbû’ \quad tê- \; ē.\]

he stop rope buy-NOMIN

‘He shouldn’t buy a rope.’

**Sapo (Marchese 1986: 191)**

(a) \[ɔ \quad bɔ \quad kò \quad dî- ē.\]

he stop rice eat-NOMIN

‘He stopped eating rice.’

(b) \[b- \; ɔ \quad bɔ \quad kò \quad dî- ē.\]

that-he stop rice eat-NOMIN

‘He mustn’t eat rice.’

**Wobé (Marchese 1986: 192)**

(a) \[s \quad bɔ \quad blè- \; à.\]

he stop sing-NOMIN

‘He stopped singing.’

(b) \[ɛ \quad bɔ \quad à \quad blâał\]

you NEG us hit:NOMIN

‘Don’t hit us.’


**Teso (Hilders and Lawrance 1956: 30)**

\[Ki- \quad nyék \quad a- \quad losit!\]

(2:SG-stop INF-go)

‘Do not go!’
Seychelles CF *aret* ‘stop’ > negative imperative. Ex.

**Seychelles CF (Corne 1977: 184)**

\[ aret \quad vol \quad sitrô! \]
\[(stop \quad steal \quad lime)\]

‘Stop stealing the limes!’

This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also *COME FROM; COME TO; CROSS; EXCEED; FALL; PASS; RESEMBLE.*

**SUFFER > PASSIVE**


**Early Medieval Chinese (Shi shuo xin yu: fang zheng; quoted from Peyraube 1996: 176)**

\[ Liangzi \quad bei \quad Su \quad Jun \quad hai. \]
\[ Liangzi \quad PASS \quad Su \quad Jun \quad kill \]

‘Liangzi was killed by Sun Jun.’

More research is required on the exact nature and the genetic and areal distribution of this process. This appears to be an instance of a more general process whereby constructions involving inactive verbs are grammaticalized to passive constructions; see also *EAT; FALL; GET; SEE.*

‘Sufficient’ see **SUITABLE**

**SUITABLE (‘to be sufficient, enough’, ‘to be fitting’, ‘to be suitable’) > (1) ABILITY**

Classical Chinese *zu* ‘to suffice’, ‘to be sufficient’, verb > auxiliary verb meaning (a) ‘to be worthy of’, (b) ‘can’, ‘to be able’ (Peyraube 1999: 36ff.). Ex.

**Warring States period Chinese (Peyraube 1999: 37)**

\[ gu \quad tui \quad en \quad zu \quad yi \]
\[ therefore \quad carry:out \quad kindness \quad able:to \quad with \]
\[ bao \quad si \quad hai. \]
\[ protect \quad four \quad sea \]

---

62 This Seychelles CF example appears to be a weakly grammaticalized instance of the process since the lexical meaning (‘stop’) is still present.

63 Originally, *bei* was a noun meaning ‘blanket’. It later turned into a verb meaning ‘to cover’, ‘to wear’ before acquiring the meanings ‘to receive’, ‘to suffer’, ‘to be affected’ (Peyraube 1996: 176).
‘Therefore, (if one) carries out (his) kindness, (he) will be able, with (it), to protect the (people of the) world.’


Lingala -koka ‘fit’, verb > auxiliary expressing ability. Ex.

**Lingala (Mufwene and Bokamba 1979: 244–7)**

(a) Kázi a -kok-i na lisano óyo.
   (Kazi he-fit -NPERF COM game this)
   ‘Kazi should be good for this game.’

(b) Kázi a -kok-i ko- béta ndembó.
   Kazi he-fit -NPERF INF- beat soccer:ball
   ‘Kazi can play soccer.’

Awtuw yirin ‘enough’ > marker of ability (used in conjunction with the future tense). Ex.

**Awtuw (Feldman 1986: 57)**

\[
\begin{array}{cccc}
\text{Topor} & \yn & \text{yirin} & \text{yek} & \text{taw} \\
\text{that} & \text{child} & \text{enough} & \text{PART} & \text{tree} \\
\text{w-} & \text{uwk-} & \text{re.} \\
\text{IMPFV-} & \text{fell-} & \text{FUT} \\
\end{array}
\]

‘That child can fell a tree.’

More research is required on the conceptual and contextual frame of this grammaticalization.

**SUITABLE (‘to be sufficient, enough’, ‘to be fitting’, ‘to be suitable’) > (2) OBLIGATION**


**Ik**

(a) itámáan- ón.
   beenough-INF
   ‘It is enough.’

(b) itámáaná en- iá nící wík.
   beenough see-1:SG my children
   ‘I have to see my children.’

---

64 Presumably, the intended meaning is ‘one’s’, rather than ‘his’, and ‘one’, rather than ‘he’. 
Evidence for this grammaticalization comes exclusively from African languages; conceivably, therefore, we are dealing with an areal phenomenon. More cross-linguistic data are required to establish this grammaticalization as a more general process.

‘Surpass’ see exceed; pass

**SURROUND > AROUND (SPATIAL)**


*Haitian CF*

\[
\text{Gē pyēbwa āturé kay- la.}
\]

(exist tree around house-DEF)

‘There are trees around the house.’

For more examples from pidgins and creoles, see Arends et al. 1995 and Muysken and Veenstra 1995: 290ff. This is an instance of a process whereby a verb, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see also come from; come to; cross; exceed; fall; pass; resemble; stop.

**TAKE (‘to take’, ‘to seize’) > (1) CAUSATIVE**

Chinese BA ‘to take’ > BA, causative marker (Alain Peyraube, personal communication). Twi *de ‘take’ > de transitivizer, causative marker. Ex.

*Twi* (Riis 1854: 97; Lord 1989: 137,143)

\[
o- de gwañ a- ba.
\]

he-(take) sheep PFV-come

‘He has brought a sheep.’

Nupe la ‘take’, verb > transitivizer, causative marker. Ex.

*Nupe* (Lord 1989: 225)

\[
yígídí lá mángòrò dzú.
\]

sun (took) mango red

‘The sun reddened the mango.’

Lord (1989: 237) notes that the verb for ‘take’ in the Amerindian language Chikasaw can mark instruments and has the effect of making intransitive motion verbs transitive (or causative). Still, this grammaticalization needs more research to determine its exact nature and its genetic and areal distribution.
TAKE (‘to take’, ‘to seize’) > (2) COMITATIVE

Twi (*de ‘take’ > comitative (Lord 1989: 134ff.). Ex.

Twi (Lord 1989: 137)

\[ \text{g- de né mnípa fòro bépow.} \]

he-(take) his men ascend mountain

‘He ascends a mountain with his men.’


Nama (Krönlein 1889: 312; Hagman 1977: 78)

(a) \[ \text{ô //na /guí soa- sa.} \]

(1SG take that one barrel-3:FSG)

‘Take one barrel down.’

(b) \[ \text{tiita ke úúù-ñà ra /xii- ú.} \]

(1:SG PART eat- 3:PL:C IMPFV come-COM)

‘I am bringing food.’ (lit.: “I am coming with food’)

See Muysken and Veenstra 1995: 290 for examples from pidgins and creoles. A somewhat unusual series of grammaticalizations appears to have occurred in Chinese, where the verbs ji ‘to catch up (with)’, ‘to succeed’, yu ‘to give’, and gong ‘to share (with)’ (> ‘together’ > ‘with’)\(^{65}\) are said to have given rise to comitative prepositions (Peyraube 1996: 188–9). The exact conceptual nature of the present process is not yet entirely clear; more examples are required. Nevertheless, we seem to be dealing with an instance of a process whereby process verbs give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GIVE; GO TO; SEE.

TAKE (‘to take’, ‘to seize’) > (3) COMPLETIVE


Nupe (Heine and Reh 1984: 163)

\[ \text{*musa á tsu. > musa á tsu.} \]

Musa took death/dying Musa \text{pred:} \text{FOC} died

‘Musa is dead.’

Compare also Gwari lá, PL kú ‘take’, verb > perfective aspect marker. Ex.

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\(^{65}\) In particular, the last case deserves attention since, conceivably, there are other languages that have undergone a similar process. Originally, a verb meaning ‘to share (with)’, gong was grammaticalized to an adverb ‘together’ in Late Archaic Chinese. Since the Early Medieval period, it developed into a comitative preposition (‘with’), and from the Song period onward it acquired uses as an NP-and conjunction (Peyraube 1996: 189–90).
Gwari (Hyman and Magaji 1971: 66)

\[ \text{wó lá shnamá lá.} \quad \text{wó kú à-shnamá kú.} \]

(he PFV yam take:SG)  (he PFV PL-yam take:PL)

‘He has taken a yam.’  ‘He has taken some yams.’

Fa d’Ambu CP ma ‘take’, verb > resultative aspect marker. Ex.

Fa d’Ambu CP (Post 1992: 164)

\[ \text{mina ma dyumi beza.} \]

child take sleep already

‘The child fell asleep already.’

This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare come to; do; finish; go to; keep; leave.

TAKE (‘to take’, ‘to seize’) > (4) FUTURE

Chinese JIANG ‘to hold’, ‘to take’ > JIANG future tense marker (Alain Peyraube, personal communication). Sinto lav ‘to take’ > future marker. Ex.

Sinto (Ramat 1987: 15)

\[ \text{lav te gáva.} \]

take:1:SG that go:1:SG

‘I shall go.’


Hungarian (Szent-Iványi 1964: 89)

\[ \text{vární fog- ok.} \]

(1:SG:pres) wait fetch-

‘I will wait.’

We are listing this case only tentatively here; more research is required on the exact nature and the genetic and areal distribution of it. Conceivably, it is an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare come to; do; finish; go to; keep; leave.

TAKE (‘to take’, ‘to seize’) > (5) INSTRUMENT


Lahu (Matisoff 1991: 434)

\[ \begin{array}{lllll}
\text{yó} & \text{á-ci-ka} & \text{yù} & \text{le} & \text{gó-cá} \\
3:SG & \text{chopstick} & \text{take} & \text{part} & \text{cabbage}
\end{array} \]
'He eats cabbage with chopsticks.' (lit.: ‘He, taking chopsticks, eats cabbage’)


Efik (Welmers 1968: 69; Claudi 1993: 45)

då èkuri sibé éto.  
take axe cut tree

‘Cut down the tree with an axe.’

Ijo àkì ‘take’, verb > instrument case marker. Ex.

Kolokuma, dialect of Ijo (Claudi 1993: 46)

eri ogidi aki-nì indi pei- mi.  
he machete take fish cut:up-PAST

‘He cut up a fish with a machete.’

For more examples from pidgins and creoles, see Muysken and Veenstra 1995: 290ff. That TAKE-verbs assume an INSTRUMENT function in certain contexts can be observed in quite a number of languages. It is unclear, however, whether or to what extent the TAKE-verbs figuring in the previous examples have in fact developed into fully conventionalized INSTRUMENT markers. We are dealing with an instance of a more general process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare COME FROM; FOLLOW; GIVE; GO TO; SEE.

TAKE (‘to take’, ‘to seize’) > (6) PATIENT


Old Chinese (Shijing; quoted from Sun 1996: 60)

(a) wu jiang dache.  
NEG hold cart

‘Do not drive the cart.’

---

66 In a similar fashion, this Chinese example is described by Peyraube as a development from a verb ba ‘to take’, ‘to hold’, ‘to grasp’ to an accusative marker when used as V, in a serial verb construction (Peyraube 1988: 619–26).

67 Before 600 A.D., jiang was used primarily as a verb meaning ‘to assist’, ‘to guide’, ‘to give’ (Sun 1996: 60).
Tenth century Chinese (Zutangji; quoted from Sun 1996: 68)

(b) shei jiang sheng-si yu ru?

Who (would) give you (his) life?

Lord (1993: 135) also mentions Kalam in this connection, where the verb d ‘take’ appears to mark instrument and patient objects in specific contexts. Ex.

Kalam (Lord 1993: 135)

... bin- ak ak spet ominal
d- ap...
da take...

‘... the man brings over two spades...’


Twii (Lord 1989: 136)

o- de afoa ce boha- m.

he-(take) sword put scabbard-inside

‘He put the sword into the scabbard.’

Note that with transfer verbs involving physical manipulation, such as ma ‘give’, kye ‘give’, bre ‘bring’, and mane ‘send’, definite direct objects must be introduced by means of de, which according to Lord is historically derived from *de ‘take’. Ex.

Twii (Lord 1989: 204)

ɔ- de siká nó maa me.

he-(take) money the gave me

‘He gave me the money.’

*ɔ-maa me siká nó
he-gave me money def

(‘He gave me the money.’)

See Givón 1975a: 76, 88–9, 93ff. and Lord 1982, 1989: 14ff., 1993 for more examples. For examples from pidgins and creoles, see Muysken and Veenstra 1995: 290ff. This appears to be another instance of a more general process whereby process verbs, on account of some salient semantic property, give rise to grammatical markers expressing case relations; compare come from; follow; give; go to; see.

TAKE (‘to take’, ‘to seize’) > (7) H-POSSESSIVE

Proto-Germanic *haffjan ‘seize’, verb > English have, German haben ‘to have’ (Lehmann 1982: 27). Waata (Oromo dialect) qaw- ‘take’, ‘seize’, action verb > ‘have’, marker of predicative possession (have-possession). Ex.

H-POSSESSIVE, or HAVE-possessive, stands for constructions of predicative possession, as in I have a dog.
Waata (Claudi 1986: 13)

(a) an’i hintal qaw- a.
I girl seize- IMPFV
‘I seize a girl.’

(b) an’i min qaw- a.
I house seize- IMPFV
‘I have a house.’

In some Akan languages of West Africa, there are verbs whose meanings include ‘take’ as well as ‘have’, ‘possess’; compare Twi de ‘take’, ‘hold’, ‘have’, ‘possess’, ‘own’ (Lord 1993: 70–1). This process has been documented abundantly, especially in European languages, where verbs meaning ‘take’, ‘seize’, or ‘hold’ have given rise to HAVE-verbs, that is, to markers of predicative possession. For more details, see Heine 1997a.

**TEMPORAL > (1) ADVERSATIVE**


Lingala (van Everbroeck 1958: 83)

nabyángákí yó, nzóka ndé okendékí kotámbola.
‘I called you but while you were out for a walk.’

So far, only examples from African languages have been found. Nevertheless, this appears to be an instance of a widespread process whereby temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adversative, causal, concessive, and conditional relations; see, for example, SINCE.

**TEMPORAL > (2) CAUSE**


For a special instance of this path of grammaticalization, see SINCE > CAUSE. This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations such as adversative, causal, concern, concessive, and conditional relations; see, for example, ALLATIVE; LOCATIVE; SINCE; TEMPORAL > CONCESSIVE; TEMPORAL > CONDITIONAL; UP.
TEMPORAL > (3) CONCESSIVE

(Old English *while* *ðe* ‘at the time that’ >) Middle English *while* ‘during’ > Modern English ‘although’ (Traugott and König 1991: 199–203). German *während* ‘while,’ temporal preposition, conjunction > concessive conjunction. Ex.

**German**

(a) Während er aß, las er Zeitung.

while he ate read he newspaper

‘While he was eating he read a newspaper.’

(b) Während es gestern noch regnete,

while it yesterday still rained

scheint jetzt die Sonne.

shines now the sun

‘While it was still raining yesterday, the sun is shining now.’

Baka *ʔe kè . . . ne* ‘while,’ marker of temporal clauses > *ʔe kè*, marker of concessive clauses. Ex.

**Baka (Christa Kilian-Hatz, personal communication)**

na.ngè bèlà ?a à mbeé

poss:3:sg work 3:sg:narasp finish:past

ʔe kè namò bèlà mbe só.

while poss:2:sg work mbe só.

‘His work is finished, while yours is not yet.’

Bulgarian *dokato* ‘while’, ‘at the same time’, temporal marker > *dokato* ‘although’, concessive clause marker. Ex.

**Bulgarian**

(a) Dokato ti gotviš, az

while you cook:2sg:pres I

že čistja banjata.

fut clean:1sg:pres bathroom:def

‘While you are cooking, I’ll be cleaning the bathroom.’

(b) Dokato namiram poezijata mu za

while find:1sg:pres poetry:def his for

interesna, romanite mu mi

interesting novels:def his me

xaresvat mnogo poveče.

like:3:pl:pres much more

‘Although I find his poetry interesting, I like his novels much better.’

The following example from Seychelles CF may also belong here, although the marker concerned, *dà* ‘in’, may also refer to locative rather than to temporal participants. Seychelles CF *dà* ‘in’, preposition > concessive marker. Ex.
Seychelles CF (Corne 1977: 148)

dà tu sô fatige, i ti bizuê
(in all his tire 3:SG PAST must
help poor balen.

‘Even though he was tired, he had to help poor Whale.’

For a detailed discussion of the sources for concessive markers, see König 1985a, 1985b, 1988. This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adversative, causal, concern, concessive, and conditional relations; see, for example, under ALLATIVE; LOCATIVE; SINCE; TEMPORAL > CAUSE, TEMPORAL > CONDITIONAL, UP.

TEMPORAL > (4) CONDITIONAL

Hopper and Traugott (1993: 179) observe that one source of conditional connectives consists of “temporals expressing duration, or temporals that are ambiguous between duration and punctuality,” and they give the following examples.69 Hittite mân ‘when’, ‘if’, ‘potential’; Tagalog (ka)pag(ka), kung ‘if’, ‘then’, ‘while’; Indonesian djika ‘if’, ‘when’; kalau ‘if’; ‘when’, ‘as for’. Karok = aha.k ‘when’ >= aha.k ‘if’ (Bright 1957: 126). Hollenbach (1995: 186) argues that in some Mixtec languages, the noun nú ‘face’ has given rise to temporal markers (‘when’, ‘whenever’) (e.g., in Yosondúa), which have further developed into markers of conditional protasis (e.g., in Diuxi-Tilantongo). See also Haiman 1985b and Traugott 1985b.

This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adversative, causal, concern, concessive, and conditional relations; see, for example, ALLATIVE; LOCATIVE; SINCE; TEMPORAL > CAUSE; TEMPORAL > CONDITIONAL; UP.

THEN > FUTURE

Bari (e)dé ‘then’, ‘afterward’, adverb > dé, future tense marker (Heine and Reh 1984: 120). Ex.

Bari (Spagnolo 1933: 105–6)

(a) dé nan kɔn . . .
then 1:SG do
‘I do ... then’

(b) nan dé kɔn . . .
1:SG FUT do
‘I shall do . . .’

69 They also cite the Swahili connective i-ki-wa (lit.: ‘if it is’) as an example, which we prefer to ignore since conditional protasis is already expressed by the marker -ki- ‘if’.
Lingala ndé ‘then’ > ndé-, future tense marker. Ex.

*Lingala (van Everbroeck 1969: 68)*

\[\text{ndé-} \text{ na- sál- í} \quad \text{ndé-} \text{ to- ke-í} \quad \text{na} \quad \text{ebale.}\]

\[\text{(then-1:SG-work-PAST)} \quad \text{(then-1:PL-go-PAST to river)}\]

‘I’ll work.’

‘We’ll go to the river.’

Tok Pisin PE baimbai ‘afterward’, ‘later’ (< English by-and-by) > future tense marker (Sankoff and Laberge 1974). While being a semantically plausible pathway of grammaticalization, this process appears to be far less common compared to other pathways leading to the rise of future tense markers; see especially **COME TO; GO TO; WANT**.

**THERE > DEMONSTRATIVE**


*French*

(a) *il est là.*

‘he is there.’

(b) *cet homme-là*

‘this man- DISTAL

‘that man’

Baka kɔ ‘there’, distal adverb > distal demonstrative. Ex.

*Baka (Christa Kilian-Hatz, personal communication)*

(a) *wósòlò kɔ kɔ!*

‘stand:up only there

‘Let’s stop there!’

(b) *ma nyì bo kɔ ode.*

1:SG know person that NEG

‘I don’t know that person.’

Hausa cân ‘there’, locative adverb > ‘that’, distal demonstrative. Ex.

*Hausa (Cowan and Schuh 1976: 165)*

(a) *Audù yanà cân.*

(Audu 3:M:be there)

‘Audu is over there.’

(b) *dabbòbin cân*

(animals that)

‘those animals (over there)”

\(^{70}\text{Very likely, the past marker } -i \text{ in both of these examples has a function other than past tense.}\)
While the directionality of this grammaticalization appears to be well established (see also HERE), there are examples that can be interpreted as suggestive of an opposite directionality; more research is required on this issue. Note that there is a view according to which demonstratives are diachronically, so to speak, “semantic primitives”; that is, they may give rise to various kinds of grammatical markers, while they themselves cannot be historically derived from other entities like lexical items (Plank 1979; Diessel 1999b: 150–2).

‘They’ seepers-pron, third plural

THING > (1) COMPLEMENTIZER
The Japanese nominalizer/complementizer koto has the etymological meaning ‘thing’ (Lehmann 1982: 65). Ex.


<table>
<thead>
<tr>
<th>Ano</th>
<th>hito</th>
<th>ga/no</th>
<th>hon</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>that</td>
<td>person</td>
<td>NOM/GEN</td>
<td>book</td>
<td>ACC</td>
</tr>
<tr>
<td>kai-</td>
<td>ta</td>
<td>koto</td>
<td>ga</td>
<td>yoku</td>
</tr>
<tr>
<td>write-</td>
<td>part</td>
<td>NOMIN</td>
<td>NOM</td>
<td>well</td>
</tr>
</tbody>
</table>

‘That that person has written a book is well known.’

Ik kɔrɔbáa ‘thing, matter’, noun > ‘that’, complementizer.\(^\text{71}\) Ex.

Ik (König 1999: 324–6)

\[
\begin{array}{llll}
\text{ritá} & \text{ye-} & \text{i-} & \text{i} \\
\text{NEG} & \text{killow-} & 1:\text{SG-} & \text{NEG} \\
\text{a} & \text{itiyá-} & \text{id-} & a \\
\text{NOM} & \text{do-} & 2:\text{SG-} & a \\
\end{array}
\]

‘I don’t know what you do.’

This appears to be an instance of a more general process whereby certain generic nouns serving as nominal complements are grammaticalized to markers of complement clauses. In many languages, this process has not proceeded beyond an incipient stage where it remains controversial whether, or to what extent, the relevant noun constitutes a noun or a clause subordinator; see König 1999 for a discussion. See also matter; place.

THING > (2) INDEFINITE PRONOUN


\(^\text{71}\) Since Ik nouns retain their case inflections even when grammaticalized to complementizers, this language has several case-inflected clause subordinators (see König 1999).
Swahili

si- on-i ki-tu.
NEG:1SG-see-NEG C7-thing
‘I don’t see anything.’


Albanian (Buchholz et al. 1993: 173)
a ke gjë përc të ënhë?
‘Do you have something to say?’


See also Lehmann 1982: 51–2; Heine and Reh 1984: 272; Haspelmath 1997a: 182. This grammaticalization appears to be an instance of a more general process whereby generic nouns give rise to pronominal categories; compare MAN; PEOPLE; PERSON; PLACE.

THING > (3) A-POSSESSIVE

Thai khọọŋ ‘thing’, ‘object’ > genitive marker. Ex.

Thai (Matisoff 1991: 391)
(a) paj sỳy khọọŋ
‘go buy things’
(b) mia khọọŋ phöm
wife GEN 1:SG
‘my wife’

Khmer ṛbōh ‘thing’ > genitive marker. Ex.

Khmer (Matisoff 1991: 391)
(a) ṛbōh nuh kee haw thaa kmaw-day.
thing DEM 3:SG call QUOT pencil
‘That thing is called a pencil.’
(b) puq-maaq touc ṛbōh kñom pii neeq
friend little GEN 1:SG two CLASS
nih
DEM
‘these two little friends of mine’

In Japanese, the construction [possessor no possessee] is said to go back to a construction [possessor’s thing, possessee] (Lehmann 1982: 110). Proto-Central Khoisan *ti ‘thing’ > Kxoе (di ‘property’) > di ‘of’, marker of alienable posses-

---

72 A-POSSESSIVE stands for attributive possession, expressed, for example, in English by either of or ’s (see Heine 1997a).
sion (Bernd Heine, personal notes). More research is required on the exact nature and the genetic and areal distribution of this process.

THREE (NUMERAL) > TRIAL, PLURAL

Ambrym *sul* ‘three’ > *-sul* trial, paucal\(^3\) marker on personal pronouns and other word categories. Ex.

*Ambrym (Paton 1971: 16, 24, 44–6)*

(a) \(\text{veen} \quad \text{ŋa-} \quad \text{sul}\)

woman \(\text{PART-} \quad \text{TRI}\)

‘three women’

(b) \(\text{gam-} \quad \text{sul}\)

\(2:PL- \quad \text{TRI}\)

‘you three’

!Xun !\(\text{o}\) ‘three’, cardinal numeral (North !Xun) > (a) -!(a)o, plural marker on personal pronouns (West !Xun), -la, pronominal plural suffix (South !Xun); (b) -lao, trial suffix on personal pronouns (West !Xun; Bernd Heine, personal notes). Gadsup-Agarabi kamore ‘three’ > -kaamode, trial number marker (on nouns) (Stolz 1992b: 643). More research is required on the genetic and areal distribution of this grammaticalization, which is an instance of a process whereby lower numerals may assume the function of grammatical number markers, typically on nouns; compare one; two.

THROW (‘to throw (away)’) > PERFECT

Diyari *wara-* ‘throw’ > perfect auxiliary. Ex.

*Diyari (Austin 1981: 91)*

\(\text{karari} \quad \text{ŋandu} \quad \text{tukudu} \quad \text{wayi-ŋa}\)

today:LOC 3:SG:F:ERG kangaroo cook-PARTCP

\(\text{wara-}y\text{i}.\)

\(\text{AUX-} \quad \text{PRES}\)

‘She cooked a kangaroo today.’ (lit.: ‘she threw cookingly’)


\(^3\) It would seem that the Ambrym trial marker -*sul* expresses in the same way trial and paucal (i.e., ‘few’) number. Paton (1971: 24) observes that trial “may mean either *three* or a few, i.e., any reasonably small number.”
ing tense or aspect functions; compare **come to; do; finish; go to; keep; leave; take**.

PERFECT markers may further develop into PAST tense markers (Bybee et al. 1994: 81–7); compare Diyari *wara* ‘throw’ > auxiliary encoding immediate past time (Austin 1981: 91). See **perfect > past**.

**TIME > TEMPORAL**


**Japanese (Bisang 1998a: 647)**

\[
\begin{array}{llll}
\text{Tori} & \text{ga/no} & \text{tob-u} & \text{toki} \\
\text{bird} & \text{subj/GEN} & \text{fly-} & \text{PRES} \text{time}
\end{array}
\]

‘when a bird flies’


**Turkish (anonymous reader; Lewis [1967] 1985: 185)**

\[
\begin{array}{llll}
\text{Türkiyede calistigim zaman} \\
\text{Türkiye-de calis-tik-im zaman} \\
\text{Turkey-LOC work-PART-1:SG time}
\end{array}
\]

‘when I worked in Turkey’


**Early Biblical Hebrew (Givón 1991b: 259)**

\[
\begin{array}{llll}
\text{"ad} & \text{shuv-xa} & \text{’el-ha-’adama} \\
\text{till return:INF-your to-the-soil}
\end{array}
\]

‘till you return to the ground’


**Kikuyu (Mathias Schladt, personal communication)**

(a) \[
\begin{array}{lllll}
\text{a-} & \text{ceragir-uo} & \text{hingo} & \text{ci-othe.} \\
\text{3:SG-} & \text{be:late} & \text{c10-time} & \text{c10-all}
\end{array}
\]

‘He is always late.’

(b) \[
\begin{array}{lllll}
\text{ikara} & \text{na} & \text{ru-} & \text{hiu-} & \text{ru-} \\
\text{IMP:stay} & \text{with} & \text{c14-knife} & \text{c14-} \\
\text{this} & \text{exactly} & \text{time} & \text{1:SG-come}
\end{array}
\]

‘Keep this knife until I come.’
Tamil pootu ‘time’, relational noun > noun functioning as a temporal clause marker. Ex.

_Tamil (T. Lehmann 1989: 341)_

| Tamil word | Dual | Has to come | dual-adj
|----------------|-------|-------------|----------------|
| kumar | viit-t- ukku | va- nt- a | Kumar | house-DAT | come-PAST-ADJ
| pootu | elloorum | tuuñk-i-k | kɔn- tʊ | time | everyone sleep- PARTCP | hold-PARTCP | iru-nt- aarkal. | be-PAST-3:PL

‘At the time at which Kumar came home, everyone was sleeping.’

This is an instance of a process whereby a noun, on account of some salient semantic property, gives rise to a grammatical marker highlighting that property; see, for example, **BACK; EARTH; HOME; SKY.**

**TOMORROW > (1) FUTURE**

Neyo keele ‘tomorrow’ > le, future tense marker. Ex.


<table>
<thead>
<tr>
<th></th>
<th>yi</th>
<th>le</th>
<th>saaa</th>
<th>nà</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>POT</td>
<td>FUT</td>
<td>also</td>
<td>your</td>
</tr>
<tr>
<td>jɔjoɔ</td>
<td>pi</td>
<td>wée.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CÔN:DEF</td>
<td>fix</td>
<td>INTJ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Later (in the day), I will cook your corn.’

Cedepo kà ‘tomorrow’ > tense marker. Tepe ḡàpà ‘tomorrow’ > ḡà, tense marker (Marchese 1986: 256). Bakwé sremagbàpek ‘tomorrow’ > pe, tense marker (Marchese 1986: 257). Mandinka sîna ‘tomorrow’ (si ‘sun’, na ‘come’) > si, future tense marker (Claudi 1994: 198). While being a semantically plausible pathway of grammaticalization, this process appears to be far less common compared to other pathways leading to the rise of future tense markers; see especially **COME TO; GO TO; WANT.**

**TOMORROW > (2) NEXT**


**TOP > UP**

**Colonial Quiché (Dürr 1988: 58–9)**

cate puch x- e- acan- ic
then and CPL-3:ABS-ascend-1S
ch- u- vi che.
LOC-3:SG:ERG-top tree

‘And then they climbed the tree.’

Hausa kán ‘top’ > locative preposition ‘on’, ‘over’ (Cowan and Schuh 1976: 58).

We are dealing with another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare BOTTOM; PLACE; SIDE.

**TRACE (‘trace’, ‘track’) > (1) AFTER**


**Welsh (Wiliam 1960: 35)**

\[ ar \quad dy \quad öl \]

(PREP 2:SG:POSS track)

‘after you’

Basque atz ‘trace’, ‘track’, ‘footprint’ has given rise to the postposition atzean ‘behind’. Ex.

**Basque (anonymous reader)**

etxe(aren) atzean
etz-
(a-
ren)
atze-
an\(^{24}\)

house-(ART-GEN) behind-LOC

‘behind the house’

**TRACE (‘trace’, ‘track’) > (2) BEHIND**


\(^{24}\) The vowel e following atz is required for phonological reasons; the item is now analyzed as atze ‘space behind’ + -an locative (anonymous reader).
Kono (Donald A. Lessau, personal communication)

(a) ɲàngùmá gbà

‘trace of a cat’

(b) ɣéé i gbàà!

return 2:SG backward

‘Go back!’

Bambara nò ‘trace (of an animal)’ + fè ‘at’ > nò fè ‘behind (a line of people)’.

Ex.

Bambara (Ebermann 1986: 119, 224)

(a) sogo nò filè!

(animal trace see)

‘Look, the trace of the animal!’

(b) i kà i bìla bèè nò fè

‘stand behind’ (lit.: ‘to put/place oneself in the trace of all’)

This appears to be another instance of a more general process whereby relational nouns (including nouns for body parts) give rise to relational (typically spatial or temporal) grammatical markers; compare BOTTOM; PLACE; SIDE.

TREE > CLASSIFIER


Kilivila (Senft 1996: 20)

\[
\begin{align*}
\text{ma-} & \quad \text{ke-} & \quad \text{na} & \quad \text{nuya} & \quad \text{bwa-} & \quad \text{veaka} \\
\text{this-} & \quad \text{wooden-} & \quad \text{this} & \quad \text{coconut} & \quad \text{tree-} & \quad \text{big}
\end{align*}
\]

‘this big coconut tree’


Chinese (Bisang 1999: 132)

\[
\begin{align*}
\text{sān} & \quad \text{ge} & \quad \text{jiàoshòu} \\
\text{three} & \quad \text{CL} & \quad \text{professor}
\end{align*}
\]

‘three professors’ (unmarked)

Concerning the rise and development of classifiers in Chinese, see Peyraube 1998. Note that nouns for ‘tree’ have recurrently been grammaticalized into classificatory particles in both Kilivila and Chinese; that is, more than one lexical

\textsuperscript{75} According to Peyraube (1998: 56), the lexical meaning of ge is ‘bamboo trunk’.
morpheme denoting ‘tree’ have served as the source for this development in each language. This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also branch; child; man; piece; song; woman. More research is required on the genetic and areal distribution of this process.

TRUE (‘true’, ‘real’) > INTENSIFIER

Baka (Christa Kilian-Hatz, personal communication)
(a) ?é ko lè- báká!
3:SG truly child-Baka
‘He is a true Baka’
(b) wósè ?é ko jökò!
woman 3:SG very beauty
‘She is very pretty!’
mo mèèle bèlà ko sítí.
2:SG do:Past work very badly
‘You have worked very badly.’

More research is required on the exact nature and the genetic and areal distribution of this process.

‘Turn around’ see RETURN

TWO (NUMERAL) > (1) DUAL

Ambrym (Paton 1971: 16, 44–6)
(a) vanten ña ru
man PART two
‘two men’
(b) ñe- ro
they- DU
‘they (two)’

West !Xun (Heikkinen 1987: 11, 91)

i- tsa túíh!
(2:PL-DU rise)
‘Rise you two!’

This grammaticalization path is common in Papuan languages. Seychelles CF de ‘two’ > dual marker in certain contexts involving paired objects. Ex.

Seychelles CF (Corne 1977: 21)
mò de lipie
(my two foot)
‘my feet’

This is an instance of a more general process whereby lower numerals are pressed into service to function as number markers, typically on nouns; compare ONE; THREE. Still, more research on the areal and genetic distribution of this process is required, as well as on its conceptual nature. See also TWO > NP-AND; DUAL > NP-AND.

TWO (NUMERAL) > (2) NP-AND
Aranda tara ‘two’ > marker of noun phrase coordination. Ex.

Aranda (Stassen 2000; quoted from Strehlow 1944: 208)

Ara aranga tara
red:kangaroo euro two
‘the red kangaroo and the euro’

Aranda therre ‘two’, numeral > ‘and’, NP-coordinator conjoining names of two people who form a common couple, such as husband and wife (Wilkins 1989: 371). Ex.

Aranda (Wilkins 1989: 371)

Ayenge lhe-ke Sandy therre-nge Wendy therre-nge.
‘I went with Sandy and Wendy.’ (where Sandy and Wendy are sisters)


Vai (Koelle [1854] 1968: 27, 39; Donald A. Lessau, personal communication)

(a) tām féra
ten two
‘twelve’

(b) wu féra wu bɔnu
2:PL with 2:PL:POS friends
‘ye and your friends’

We owe this information to an anonymous reader of an earlier version of this work, who also suggested that the Gothic dual marker -t goes back to the numeral ‘two’.
West !Xun *tsa* ‘two’, cardinal numeral > *sá*, particle conjoining noun phrases. Ex.

*West !Xun (Heikkinen 1987: 69)*

\[
sá \quad dàhmà
\]

the:two \quad wife

‘he and his wife’

Seychelles CF *de* ‘two’, cardinal numeral > marker conjoining two participants in certain contexts. Ex.

*Seychelles CF (Corne 1977: 21)*

\[
\begin{array}{llll}
nu & de & Gabriel, & nu \quad ava \quad ale.
\end{array}
\]

(we \quad two \quad Gabrielle \quad we \quad FUT \quad go)

‘Gabrielle and I shall go.’

In Kxoe, it seems that it was the third person dual suffix -tcà, rather than the numeral for ‘two’, which has given rise to NP-AND involving two participants. Ex.

*Kxoe (Treis 2000a: 105)*

(a) \(á-\quad tcà\)

DEM-3M:DU

‘they’ (two male referents)

(b) \(xáò-\quad tcà\quad /é-\quad tcà\)

hippopotamus-3M:DU \quad fire-3M:DU

‘the hippo and the fire’

Note that numerals for ‘two’ appear to constitute the main, if not the only, source for dual markers (see TWO > DUAL); note further that the Kxoe dual marker -tcà appears to be etymologically related to the numeral *tsá* or *tsa* ‘two’ in the neighboring !Xun (Ju|'hoansi) language (Heikkinen 1987; Dickens 1992). See also DUAL > NP-AND. It remains unclear whether we are dealing with a straight evolution from numeral to marker of NP-coordination or whether there is an intermediate stage of a dual category; that is, whether the most common pathway is not TWO > DUAL > NP-AND.

UNTIL (*‘until’, ‘up to’*) > EQUATIVE COMPARATIVE


---

77 Kxoe and !Xun are presumably genetically related. What appears to be more relevant to the present case is that these two Khoisan languages exhibit a close areal relationship.
Dogon (Calame-Griaule 1968: 28–9)

\[ \text{vò mú bà: yèse} \]

‘He is as rich as I.’ (lit.: ‘He owns up to me’)

Lezgian \( q’\text{wan} \) ‘up to’, ‘as far as’, ‘until’, locative/temporal postposition > ‘as much/many as’, marker of quantitative comparison (Haspelmath 1993: 439f).

For a detailed description of how the equative is expressed in the languages of Europe, see Haspelmath and Buchholz 1998. More research is required on the genetic distribution of this process.

**UP > (1) ADDITIVE**

Kono \( kùmà \) ‘over’, ‘on top’, adverb, postposition > numeral linker ‘and’ (joining tens with digits). Ex.

*Kono* (Donald A. Lessau, personal communication)

\[
\begin{array}{llllll}
\text{àà} & \text{dén} & \text{tán} & \text{kùmà} & \text{diùù-} & \text{nù} \\
3:SG:POSS & child & ten & and & five- & PL
\end{array}
\]

‘his/her fifteen children’

Romanian \( \text{cincisprezece} \) ‘fifteen’ (= \( \text{cinci-spre-zece} \) ‘five-over-ten’) (Popinceanu 1962: 32). See Heine 1997b: 18–34.

More research is required on the genetic and areal distribution of this process.

**UP > (2) COMPARATIVE**

Chukchee \(-ik\) ‘on’, locative suffix > marker of standard noun phrases in comparative constructions. Ex.

*Chukchee* (Stassen 1985: 147)

\[
\begin{array}{llllll}
\text{Gamga-} & \text{qla’ul-ik} & \text{qetvu-} & \text{ci-} & \text{iùm.} \\
all- & men- & on & strong- & more-1:SG
\end{array}
\]

‘I am stronger than all men.’


*Naga, Sino-Tibetan* (Stassen 1985: 147)

\[
\begin{array}{llllll}
\text{Themma} & \text{hau} & \text{lu} & \text{ki} & \text{vi-} & \text{we.} \\
\text{man} & \text{this} & \text{that} & \text{on} & \text{good-is}
\end{array}
\]

‘This man is better than that man.’


*Ubykh* (Stassen 1985: 147)

\[
\begin{array}{llllll}
\text{Yi-} & \text{gune} & \text{wo-} & \text{gune-n} & \text{ca-} & \text{qasaqa-j.} \\
\text{this-tree} & \text{that-tree-} & \text{on} & \text{more-big-} & 3:SG
\end{array}
\]

‘This tree is taller than that tree.’

**Miwok (Stassen 1985: 148)**

Oš’akci-? tunic’kci-? manik nangakci-y.

girl- Nom small:one-Nom more boy- on

‘The girl is smaller than the boy.’


**Salinan (Stassen 1985: 149)**

Ragas-mo in luwa ti hek.

surely-you more man on me

‘You are certainly more of a man than me.’


**Mandinka (Stassen 1985: 149)**

A ka gya ni ma.

he is big me on

‘He is bigger than me.’


**Tamazight (Stassen 1985: 149)**

Enta ihengrin foull i.

he is:tall upon me

‘He is taller than me.’


**Tamil (Stassen 1985: 151)**

At- il- um ittu cinnatu.

that-on-part this big

‘This is bigger than that.’


**Mapuche (Stassen 1985: 153)**

Karlos doi fucha-i Francesko meu.

Karlos more tall- 3:SG FRANCESKO on/to

‘Karlos is taller than Francesko.’
This is another instance of a process whereby spatial markers are grammaticalized to markers introducing the standard of comparison; compare ablative; locative.

**UP > (3) CONCERN**

English *on*, locative preposition > ‘about’, concern marker. Ex.

*English (anonymous reader)*

(a) *The book is on the table.*

(b) *She was speaking on Chinese porcelain.*

German *über* ‘over’ > ‘about’, concern marker. Ex.

*German*

(a) *Der Vogel fliegt über die Kirche.*

The bird flies over the church

‘The bird is flying over the church.’

(b) *Er spricht nicht gerne über seine Vergangenheit.*

he speaks not with:pleasure over his past

‘He doesn’t like to speak about his past.’

Spanish *sobre* ‘on’ > ‘about’. Ex.

*Spanish (anonymous reader)*

(a) *sobre la mesa*  

on the table

‘on the table’

(b) *un libro sobre el euskera*  

a book on the Basque

‘a book about Basque’


*French (anonymous reader)*

(a) *sur la table*  

on the table

‘on the table’

(b) *une conférence sur la drogue*  

a conference on the drug

‘a lecture on drug addiction’

In the Guipuzcoan dialect of Basque, the common postposition *gainean* (from *gain-*(<-*e*)an ‘top’-loc) has recently come to be used in vernacular speech as a concern marker. Ex.
**Basque, Guipuzcoan dialect (anonymous reader)**

(a) \textit{mendi gain-ean}

mountain top-LOC

‘on top of the mountain’

(b) \textit{kimika gain-ean}

mountain top-LOC

‘about chemistry’

**Swahili**

\textit{juu ya} ‘above’, ‘on top of’, ‘up’ > concern marker. Ex.

(a) 

\textit{Ndege yu-ko juuya nyumba.}

bird cl-LOC above house

‘The bird is above the house.’

(b) 

\textit{A-na kataa ku-sema juuya ajali yake.}

he-pres-refuse to-speak on:top:of accident his

‘He refuses to talk about his accident.’

See also \textit{give}; \textit{locative}. This appears to be an instance of a widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations, such as adversative, causal, concern, concessive, and conditional relations; see, for example, \textit{allative}; \textit{locative}; \textit{since}; \textit{temporal}.

**USE > HABITUAL**

English \textit{used to} > past habitual marker. Ex.

(a) He used all the money.

(b) He used to come on Tuesdays.

Hagège (1993: 217) observes that verbal items denoting ‘be used to’ or ‘get used to’ tend to develop into markers for static or dynamic habitualls. This grammaticalization appears to be an instance of a more general process whereby process verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare \textit{come to}; \textit{do}; \textit{finish}; \textit{go to}; \textit{keep}; \textit{leave}; \textit{take}; \textit{throw}.

\textbf{VENITIVE > FUTURE}

Iraqw \textit{ni}, venitive marker (“hither marker”) > near future marker (\textit{nfut}) having present relevance. Ex.
Iraqi (Mous 1993: 134–5)

(a) inós ni xa-xéer
    3:SG VEN HAB-COME:3:F:SG
di-r
doo-ren-
place:CONSTRUCT:CASE-F house-1:PL:poss-
ee.

BACKGROUND
‘She comes to our house.’

(b) atén ni da‘-āan.
    1:PL NFUT sing-1:PL
‘We are going to sing.’

Maa -u(n), venitive (“motion hither”) derivative extension > -u, (inchoative marker >) future tense marker with verbs of state (Tucker and Mpaayei 1955: 141; König 1993: 294–316). While the evidence supporting this process comes from two different language phyla, the languages concerned may be areally related. More research is required on the genetic and areal distribution of this process.

W

WANT (PAST) > (1) AVERTIVE

Bulgarian štjax ‘want’ (PAST) > avertive auxiliary (Kuteva 1998). Ex.

Bulgarian (Kuteva 1998: 115)

(a) Ne štjax dori da go
    not want:1:SG:PAST even to him
    pogledna.
‘I didn’t even want to take a look at him.’

(b) Pomniš li, če lani
    remember:2:SG:PRES that last:year
štjax da si izkärta
edin zāb ot toja proklet oriz!
one tooth from this damn rice
‘Remember, last year I nearly broke a tooth of mine because of that damn rice!’

Venda todo u (wanted-perf inf) ‘have wanted to’ > todo, ‘almost’ marker. Ex.

Venda (Poulos 1990: 332; Heine 1997d: 5)

(a) Ndo todo u mu rwa.
    (I want:perf inf him hit)
‘I wanted to hit him.’
(b) Ndo erokee  mu  rwa.
   (I almost him hit)
   ‘I nearly hit him.’


Southern Sotho (Doke and Mofokeng [1957] 1985: 247)
(a) Kê-ile ka-batla libuka tseô.
   ‘I wanted those books.’
(b) Kê-ile ka-batla kê-ê-shôa
   ‘I nearly died.’

Margi àyi ‘want’, verb > ‘nearly’. Ex.

Margi (Hoffmann 1963: 219)
kwâlûdi  ìjku  àyi  gà  tòdqû,  djav
(ink pot wanted to fall, then

Êà  dzûgwà  kà’ûbâ.
1:SG caught)
‘The ink pot nearly fell, then I caught it.’

For more details, see Kuteva 1998. This grammaticalization is an instance of a more general process whereby verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare come to; do; finish; go to; keep; leave; take; throw.

WANT (‘want’, ‘wish’, ‘desire’) > (2) FUTURE

Latin (Pinkster 1987: 195)
(a) voło  cantare.
   (want:1:SG sing:INF)
   ‘I want to sing.’

Romanian
(b) voî  cinta.
   (want:1:SG sing:INF)
   ‘I will sing.’

Mabiha (Botne 1989: 170)

\[ tu- \text{lembela} \ text{ku- tenda} \ \text{OR} \ \text{tu- lembe} - \text{ku- tenda} \]

\[ (1:\text{PL-want} \ \text{INF-make}) \ \text{OR} \ (1:\text{PL-want-} \ \text{INF-make}) \]

‘we will make’ (remote)


\text{Swahili}

(a) \text{a- taka ku- ja.}

\[ 3:\text{SG:}\text{.pres-want} \ \text{INF-come} \]

‘She wants to come.’

(b) \text{a- ta- ku- ja.}

\[ 3:\text{SG:}\text{fut-INF-come} \]

‘She will come.’


\text{Kimbundu (Botne 1989: 173)}

\[ tu- \text{anda} \ \text{ku- bang} \]

\[ (1:\text{PL-FUT} \ \text{INF-make}) \]

‘we will make’

Bulgarian -\text{šte} ‘want’ (3:SG:PRE), verb > future tense marker (invariable particle). Ex.

\text{Bulgarian}

(a) Ne te \text{šte za bulka.}

\[ \text{not you:ACC want:3:SG:PRE for bride} \]

‘He does not want you as a bride.’

(b) Toj \text{šte doide.}

\[ 3:\text{SG FUT come:3:SG:PRE} \]

‘He will come.’

This process has been discussed in much detail by Bybee et al. (1991); see also Bybee et al. 1994; for a monographic treatment, see Tsangalidis 1999. The process is an instance of a more general process whereby verbs are grammaticialized to auxiliaries denoting tense or aspect functions; compare \text{come to; do; finish; go to; keep; leave; take; throw}. WANT-verbs exhibit a widespread overlap with (> \text{LOVE} verbs.

\text{WANT (‘want’, ‘like’, ‘love’, ‘desire’) > (3) PROXIMATIVE}

// \text{Ani ka ‘want’, verb > ‘be about to’, proximative auxiliary. Ex.}

// \text{Ani (Heine 1999a: 21)}
Want (‘want’, ‘like’, ‘love’, ‘desire’) > (3) proximative

(a) tsá ka-ra-hàn sè-kù-fiè
   want-JUNC-PERF marry-REC-PASS
   tomorrow
   ‘You want to marry (your lady) tomorrow. . . .’

(b) á-m yi-má /qáí-/xè ka-tè.
   DEM-M:SG tree-M:SG fall-INT want-PRES
   ‘That tree is about to fall.’

Ewe dí ‘want’, verb > proximative marker. Ex.

Ewe (Ameka 1990: 145; Heine 1997d: 5)

(a) kofi dí bé ye-a kpó wò.
   Kofi want that LOG-IRR see 2:SG
   ‘Kofi wants to see you.’

(b) tsí dí bé ye-a dza.
   water want that LOG-IRR fall
   ‘It is about to rain.’ (lit.: ‘Water wants to fall’)

Chamus, dialect of Maa (k)e-yyéú ‘s/he wants’ > (k)-eyyéú, proximative marker. Ex.

Chamus, dialect of Maa (Heine 1992: 338–9)

(a) k-á- yyéú n-daá.
   k-1:SG-want F-food
   ‘I want food.’

(b) (k)-eyyéú a-ók nánó kylè
   k-PROX 1:SG- drink I: NOM milk
   ‘I was about to drink milk.’

Chrau co’nh ‘want to’ > ‘almost’, ‘about to’ (non-negatable preverbal), particle. Ex.

Chrau (Matisoff 1991: 394)

(a) anh co’nh saq.
   1:SG want:to go
   ‘I want to go.’

(b) anh co’nh chu’t.
   1:SG almost die
   ‘I am about to die.’


Hungarian (Halász 1973: 15)

(a) nem akar dolgoz-ni.
   (not 3:SG:PRES:want work-INF)
   ‘He does not want to work.’
The house is about to collapse.

Persian \textit{xastan} ‘want’ > \textit{xastan} ‘to be on the point of doing something’, auxiliary. Ex.

\textit{Persian} (Lambton 1979: 54)

\begin{verbatim}
mixast         bemirad.
\end{verbatim}

\begin{verbatim}
\end{verbatim}

‘He was about to die.’

Old English \textit{willan} ‘want’ > \textit{willan} ‘be about to’, auxiliary. Ex.

\textit{Old English} (Anglo-Saxon Dictionary: 1227)

\begin{verbatim}
Hit wolde dagian.
\end{verbatim}

‘The day was about to break.’

Thompson -\textit{-mēmn}, desiderative suffix expressing wishes > -\textit{-mēmn}, “impending event”. Ex.

\textit{Thompson} (Thompson and Thompson 1992: 107–8)

\begin{verbatim}
(a) /x "ɔs-t-mēmn kn.
\end{verbatim}

‘I want to go home’

\begin{verbatim}
(b) /wux "t-mēmn.
\end{verbatim}

‘It acts as though it is going to snow.’

For a more detailed treatment of this instance of grammaticalization, see Heine 1994b, 1997d and Kuteva 1998, forth.c.a, forth.c.b. This grammaticalization is an instance of a more general process whereby verbs are grammaticalized to auxiliaries denoting tense or aspect functions; compare \textit{come} to; \textit{do}; \textit{finish}; \textit{go to}; \textit{keep}; \textit{leave}; \textit{take}; \textit{throw}. See also \textit{love}; compare \textit{near}.

‘Will’ see \textit{want}

‘Wish’ see \textit{want}

\textbf{WOMAN} (‘woman’, ‘wife’) > (1) \textbf{CLASSIFIER}

Akatek \textit{ix} or ‘\textit{ix}’8 ‘woman’, noun > ‘\textit{ix}’, classificatory particle for human beings, saints, and mythological animals (Zavala 2000: 134). Ex.

\textit{Akatek} (Zavala 2000: 121, 122)

\begin{verbatim}
(a) manaj  ox-    wan  'ix  tu'.
\end{verbatim}

\begin{verbatim}
not    three-  CLASS  woman  DISTAL
\end{verbatim}

‘It is not the three women [that the boss said].’

\footnote{8 The writing of the noun for ‘woman’ is not consistent: both forms, \textit{ix} and ‘\textit{ix}’, do occur (cf. Zavala 2000: 121, 122).}
There were two women lying down.\textsuperscript{79}


\textit{Kilivila (Senft 1996: 22)}

\begin{align*}
o & \text{da-} & \text{valu-} & \text{si} & \text{e-} & \text{sisu-} \\
in & \text{INCL-} & \text{village-} & \text{PL} & \text{3-} & \text{live-} \\
si & \text{tommota} & \text{to-} & \text{paisewa} \\
\text{PL} & \text{people} & \text{human:beings-} & \text{work} \\
vivila & \text{na-} & \text{salau} & \text{tauwau} & \text{to-} \\
\text{woman} & \text{female-busy} & \text{men} & \text{male-} \\
\text{bugubagula} & \text{tommota} & \text{gala} & \text{to-} \\
\text{workin:the:garden} & \text{people} & \text{not} & \text{human:beings-} \\
\text{dubakasala} & \text{kena} & \text{kumwedona} \\
rude & \text{but} & \text{all} \\
e- & \text{nukwali-} & \text{si} & \text{bubune-} & \text{si} & \text{bwena.} \\
3- & \text{know-} & \text{PL} & \text{manners-} & \text{their} & \text{good} \\
\end{align*}

‘In our village live people taking pleasure in their work. The women are busy, the men are good gardeners. The people are not rude, but all have good manners.’

Concerning the rise and development of classifiers in Chinese, see Peyraube 1998. This grammaticalization appears to be part of a more general process whereby certain nouns, on account of some specific semantic characteristic, are recruited as structural templates for a folk taxonomic classification of nominal concepts; see also \textit{BRANCH; CHILD; MAN; PIECE; SONG; TREE}. More research is required on the genetic and areal distribution of this process.

\textbf{WOMAN (‘woman’, ‘wife’) > (2) FEMALE}

Nouns meaning ‘woman’ or ‘wife’ appear to be natural candidates for nominal modifiers referring to female participants and, in fact, in a number of languages nouns for ‘woman’ or ‘wife’ have given rise to closed-class items denoting ‘female’, encoded as adjectival or derivative markers. Ewe ny\textsuperscript{ũ}nu ‘woman’, noun > -ny\textsuperscript{ũ}nu ‘female’, derivative suffix of limited productivity. Ex.

\textit{Ewe (cf. Westermann 1907: 48–9)}

\begin{align*}
\text{vi} & \text{vi-ny\textsuperscript{ũ}nu} \\
\text{‘child’} & \text{‘daughter’} \\
\end{align*}

\textsuperscript{79} There is probably a mistake in this line: Rather than \textit{two}, the numeral should be \textit{three}. 
The Proto-Bantu nominal root \( *-kadî \) includes ‘woman’, ‘wife’, and ‘female’ among its meanings, and this root has given rise to a derivative suffix ‘female’ in a number of eastern and southern Bantu languages (see, e.g., Güldemann 1999b). Proto-Bantu \( *-kadî \) ‘woman’, ‘wife’, ‘female’ > Hunde -katsi ‘female’, derivative suffix.

**Hunde** (Mateene 1992: 121; quoted from Güldemann 1999b: 57)

\[
\begin{array}{l}
\text{mu-} & \text{twá-} & \text{katsi} & \text{im-} & \text{bwá-} & \text{katsi} \\
\text{cl-} & \text{pygmy-} & \text{fem} & \text{c9-} & \text{dog-} & \text{fem} \\
\end{array}
\]

‘a pygmy woman’ ‘bitch’

More research is required on the areal and genetic distribution of this pathway, which is an instance of a more general process whereby certain nouns, on account of some specific semantic characteristic, develop into grammatical markers highlighting this characteristic; see also child; man; mother.

### YESTERDAY > PAST


**Baka** (Brisson and Boursier 1979: 342)

\[
\begin{array}{l}
pàmè & ?è & wòtò- & ngi & ngili. \\
\text{wild:boar} & 3:SG & \text{pass-} & \text{PAST} & \text{yesterday} \\
\end{array}
\]

‘A wild boar passed (here) yesterday.’


\[
\begin{array}{l}
\text{ɔ} & \text{kpɔ} & \text{wà} & \text{smi-ɔ} & \text{seèdè}. \\
\text{he} & \text{catch} & \text{PAST} & \text{fish-DEF} & \text{a:long:time:ago} \\
\end{array}
\]

‘He caught the fish a long time ago.’


**Neyo** (Marchese 1984: 206–7; 1986: 257)

\[
\begin{array}{l}
\text{ma} & \text{bòylée} & \text{blá} & \text{la} & \text{mòc}. \\
\text{but} & \text{foot} & \text{kill} & \text{PAST} & \text{me} \\
\end{array}
\]

‘But my foot was killing me.’
Kipsikiis *koon* ‘yesterday’ > *kɔɔ-/koo-* (hesternal), past tense marker (Dimmendaal 1995: 34).

Conceivably, this is a conceptually plausible but possibly areally induced pathway of grammaticalization, since it appears to be confined to Africa. More research is required on the exact nature and the genetic and areal distribution of this process.
### APPENDIX 1

Source–Target List

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APPENDIX 3

A List of Languages

The following is a list of all languages treated in this work. The information on language classification is meant to assist the reader in locating the languages treated; that is, it serves a referential purpose and does not make any claim on the existence or nonexistence of genetic relationship. Information is confined to giving the name of the family or phylum plus some salient subgrouping. The plus sign (+) stands for an extinct or ancient language.

Pidgin (P) and creole (C) examples are marked by adding abbreviated labels after the language name. For example, “CE” stands for “English-based creole.” Note that the classification underlying this usage is a crude one, since terms like “English-based,” “Portuguese-based,” and so on are not unproblematic, and the boundary between pidgins and creole languages is often fuzzy.

|Xam (+); Southern, Khoisan
!Xóõ; Southern, Khoisan
!Xun (!Kung, Zhu, Ju); Northern, Khoisan
!Ora (Korana); Central (or Khoe), Khoisan
||Ani; Central (or Khoe), Khoisan
Abaza; Northwest, North, Caucasian
Abipon; Ge-Pano, Ge-Pano-Carib, Amerind
Abkhaz (Abxaz); Northwest, North, Caucasian
Akkadian (Akkadian) (+); Semitic, Afroasiatic
Acholi; Nilotic, Nilo-Saharan
Acoma Keresan; Keresiouan, Northern Amerind
Ainu; Korean-Japanese, Altaic
Akan; Kwa, Niger-Congo
Akatek; Q’anjob’alan, Mayan
Akha; Burmic, Tibeto-Burman
Akkadian see Accadian
Alacatlatzala; Mixtecan, Oto-Manguean
Alamblak; Sepik, Sepik-Ramu
Albanian; Albanian, Indo-European
Alyawarra; Arandic, Pama-Nyungan
Ambrym (Lonwolwol); Oceanic, Malayo-Polynesian
Ambulas; Sepik, Sepik-Ramu
American Sign Language
Amharic; Semitic, Afroasiatic
Anyi; Kwa, Niger-Congo
Anywa; Nilotic, Nilo-Saharan
Amharic; Semitic, Afroasiatic
Arabic; Semitic, Afroasiatic
Aranda; Arandic, Pama-Nyungan
Arawak; Macro-Arawakan, Equatorial-Tucanoan
Armenian; Indo-European
’Are’are; Oceanic, Austronesian, Austro-Tai
Arosi; Oceanic, Austronesian
Atchin; Oceanic, Austronesian
Attié; Togo (Kwa), Niger-Congo
Awtuw (Autu) see Awtuw
Avar; North, Caucasian
Awtuw (Autu); Sepik, Sepik-Ramu
Awtu; Kwa, Niger-Congo
Aztec (Nahuatl); Aztec, Uto-Aztecan. Cf. Nahuatl
Bagirmi; Central Sudanic, Nilo-Saharan
Bahamian CE; English-based creole
Baka; Ubangian, Niger-Congo
Bakwé; Kru, Niger-Congo
Baluchi; Indo-Iranian, Indo-European
Bambara; Mande, Niger-Congo
Banda; Austronesian, Austro-Tai
Barasano (Southern); Tucanoan, Equatorial-Tucanoan
Bari; Nilotic, Nilo-Saharan
Basque; isolate
Bassa; Kru, Niger-Congo
Belizean CE; English-based creole
Bemba; Bantu, Niger-Congo
Bengali; Indo-Iranian, Indo-European
Bété; Kru, Niger-Congo
Big Nambas; Oceanic, Malayo-Polynesian
Bihari; Indo-Iranian, Indo-European
Bongo; Central Sudanic, Nilo-Saharan
Boni; Cushitic, Afroasiatic
Borobo; Kru, Niger-Congo
Breton; Celtic, Indo-European
Buang; Austronesian, Austro-Tai
Bulgarian; Slavic, Indo-European
Bulu; Bantu, Niger-Congo
Bura; Chadic, Afroasiatic
Burmese; Tibeto-Burman, Sino-Tibetan
Buru; Central, Malayo-Polynesian
Cagaba; Aruak, Chibchan
Cahuilla; Takic, Uto-Aztecan
Cakchiquel; Mayan, Penutian
Cameroonian PE; English-based pidgin
Canela-Krahô; Ge-Pano, Macro-Carib
Cantonese; Sinitic, Sino-Tibetan
Catalan; Romance, Indo-European
Cayapo; Ge-Pano, Amerind
Cayenne CF; French-based creole
Cebaara; Gur (= Voltaic), Niger-Congo
Cedepo; Kru, Niger-Congo
Chacaltongo-Mixtec; Mixtecan, Oto-Manguean
Chaga (Chagga); Bantu, Niger-Congo
Chaga (Mochi dialect); Bantu, Niger-Congo
Chamling; Tibeto-Burman, Sino-Tibetan
Chamus (Maa dialect); Nilotic, Nilo-Saharan
Chikasaw; Penutian
Chinese (Mandarin); Sinitic, Sino-Tibetan
Chinese PE; English-based pidgin
Chinese Pidgin Russian; pidgin
Chinook; Penutian, Amerind
Chinook Jargon; Chinook-based pidgin
Chrau; Mon-Khmer, Austroasiatic
Chukchee (Chukchi); Chukchi, Chukchi-Kamchatkan
Copala Trique see Trique
Coptic (+); Egyptian, Afroasiatic
Cora; Corachol, Uto-Aztecan
Cree see Plains Cree
Croatian; Slavic, Indo-European
Dagbane; Gur (= Voltaic), Niger-Congo
Dakota (Lakhota); Keresiouan, Northern Amerind
Danish; Germanic, Indo-European
Dewoin; Kru, Niger-Congo
Dholuo see Luo
Dida (Lakota Dida); Kru, Niger-Congo
Didilinga; Eastern Sudanic, Nilo-Saharan
Diegueño; Hokan, Amerind
Diola Fogny (Diola); West Atlantic, Niger-Congo
Dioula (= Dyula); Mande, Niger-Congo
Diuxi-Tilantongo; Mixtecan, Oto-Manguean
Diyari; Karnic, Pama-Nyungan
Djinang; Yuulngu, Pama-Nyungan
Djinba; Yuulngu, Pama-Nyungan
Djuká see Ndjuka
Djwarli see Jiwarli
Dogon; Gur, Niger-Congo
Dolakha-Newari see Newari
Dschang; Benue-Congo, Niger-Congo
Duala; Bantu, Niger-Congo
Dullay; Cushitic, Afroasiatic
Dutch; Germanic, Indo-European
Dyabo; Kru, Niger-Congo
Dyirbal; Dyirbalic, Pama-Nyungan
Dyula see Dioula
Easter Island (Rapanui); Oceanic, Malayo-Polynesian
Eastern Australian PE; English-based pidgin
Ebira; Kwa, Niger-Congo
Efik; Benue-Congo, Niger-Congo
Egyptian (+); Afroasiatic
Engenni; Edo, Niger-Congo
English; Germanic, Indo-European
Estonian; Finnic, Finno-Ugric
Ewe; Kwa, Niger-Congo
Fa d’Ambu CP; Portuguese-based creole
Faroese; Germanic, Indo-European
Fijian; Oceanic, Austronesian
Finnish; Finnic, Finno-Ugric
Fon; Kwa, Niger-Congo
Fore; Trans-New Guinea, Indo-Pacific
French; Romance, Indo-European
Frisian; Germanic, Indo-European
Fulfulde (Fula, Ful, Fulani, Peul); West Atlantic, Niger-Congo
Futa Toro (Fulfulde dialect); West Atlantic, Niger-Congo
Ga (Gã); Kwa, Niger-Congo
Gabu (Gobu); Adamawa-Ubangi, Niger-Congo
Gadsup (Gadsup-Agarabi); Trans-New Guinea
Gaelic, Scottish; Celtic, Indo-European
Ganda; Bantu, Niger-Congo
Gbaya; Ubangian, Niger-Congo
Gbuu; Kru, Niger-Congo
Ge’ez (Geez) (+); Semitic, Afroasiatic
Georgian; South, Caucasian
German; Germanic, Indo-European
Ghanaian PE; English-based pidgin
Gidar (Gidari); Chadic, Afroasiatic
Gikuyu see Kikuyu
Gimira; Omotic, Afroasiatic
Gisiga; Chadic, Afroasiatic
Gobu see Gabu
Godié; Kru, Niger-Congo
Gokana; Benue-Congo, Niger-Congo
Gola; West Atlantic, Niger-Congo
Gothic; Germanic, Indo-European
Grand Bassa; Kru, Niger-Congo
Grebo; Kru, Niger-Congo
Greek; Greek, Indo-European
Gurenne; Gur (= Voltaic), Niger-Congo
Guyanese CE; English-based creole
Guyanese CF; French-based creole
Gwari; Central Niger, Niger-Congo
Haitian CF; French-based creole
Halia; Oceanic, Austronesian
Hamer (Hamar); Omotic, Afroasiatic
Hausa; Chadic, Afroasiatic
Hawaiian; Oceanic, Malayo-Polynesian
Hebrew; Semitic, Afroasiatic
Herero; Bantu, Niger-Congo
Hindi; Indo-Iranian, Indo-European
Hittite; Indo-European
Hixkaryana (Hishkaryana); Southern, Carib
Hmong; Miao-Yao, Austric
Hona; Chadic, Afroasiatic
Hua; Gorokan, Trans-New Guinea
Hunde; Bantu, Niger-Congo
Hungarian; Ugric, Finno-Ugric
Ibibio; Kwa, Niger-Congo
Icelandic; Germanic, Indo-European
Idoma; Central Niger, Niger-Congo
Igbo; Lower Niger, Niger-Congo
Ijo; Ijo, Niger-Congo
Ik; Kuliak, Nilo-Saharan
Imbabura Quechua; Andean, Amerind
Imonda; Waris, Trans-New Guinea
Indian Ocean CF; French-based creole
Indonesian; Malayo-Polynesian, Austronesian

1 Note that there are two different Guayanese creoles.
Inuit; Eskimo, Eskimo-Aleut
Iraqw; Cushitic, Afroasiatic
Irish (Gaelic); Celtic, Indo-European
Italian; Romance, Indo-European
Jicalteco; Mayan, Penutian
Jamaican CE; English-based creole
Japanese; Korean-Japanese, Altaic
Jeri (Jeli); Mande, Niger-Congo
Jiddu (Somali dialect); Cushitic, Afroasiatic
Jimini (Dyimini); Gur (= Voltaic), Niger-Congo
Jiwarli (Djwarli); South-West, Pama-Nyungan
Ju see !Xun
Juang; Munda, Austroasiatic
Kabiye (Kabre); Gur (= Voltaic), Niger-Congo
Kabuverdiano (Cape Verde) CP; Portuguese-based creole
Kagbo; Kru, Niger-Congo
Kala Lagau Ya (Mabuiag); Pama-Nyungan
Kalam; East New Guinea Highlands, Indo-Pacific
Kalasha; Indo-Iranian, Indo-European
Kaliko see Keliko
Kamba; Bantu, Niger-Congo
Kanakuru; Chadic, Afroasiatic
Kannada; South, Dravidian
Kanuri; Saharan, Nilo-Saharan
Karok; Northern, Hokin
Kashmiri; Indo-Iranian, Indo-European
Kedah Malay; Malayo-Polynesian, Austronesian
Keliko (Kaliko); Central Sudanic, Nilo-Saharan
Kenya PS; Swahili-based pidgin
Ket; isolate
Kharia, Munda, Austroasiatic
Khasi; Mon-Khmer, Austroasiatic
Khmer (Cambodian); Mon-Khmer, Austroasiatic
Khowar; Indo-Iranian, Indo-European
Kikongo see Kongo
Kikuyu (Gikuyu); Bantu, Niger-Congo
Kilivila; Oceanic, Austronesian
Kimbundu; Bantu, Niger-Congo
Kiowa; Tanoan, Central Amerind
Kipsikiis (Kipsigis); Nilotic, Nilo-Saharan
Kirma; Gur (= Voltaic), Niger-Congo
Kisi; West Atlantic, Niger-Congo Proper
Klaol (Klau); Kru, Niger-Congo
Koasati; Muskogean, Penutian
Kode (Baule dialect); Kwa, Niger-Congo
Kongo (Kikongo); Bantu, Niger-Congo
Kono; Mande, Niger-Congo
Koranko; Mande, Niger-Congo
Korean; Korean-Japanese, Altaic
Koromfe; Gur (= Voltaic), Niger-Congo
Kotiya Oriya (Oriya); Indo-Iranian, Indo-European
Koyo; Kru, Niger-Congo
Kpelle; Mande, Niger-Congo
Krahn (Tchien Krahn); Kru, Niger-Congo
Krio CE; English-based creole
Krongo; Kordofanian, Kongo-Kordofanian
Kuba; Bantu, Niger-Congo
Kui; Telugu-Kui, Dravidian
Kupto; Chadic, Afroasiatic
Kusasi (Kusal); Gur (= Voltaic), Niger-Congo
Kusal see Kusasi
Kwaio; Oceanic, Austronesian
Kwami; Chadic, Afroasiatic
Kwar’a;e; Oceanic, Austronesian
Kxoe; Central (= Khoe), Khoisan
Lahu; Tibeto-Burman, Sino-Tibetan
Lakota Dida see Dida
Lamang; Chadic, Afroasiatic
Lango; Nilotic, Nilo-Saharan
Latin (+); Italic, Indo-European
Latvian; Baltic, Indo-European
Lele; Chadic, Afroasiatic
Lendu; East Sudanic, Nilo-Saharan
Lezgian; North, Caucasian
Lhasa; Tibeto-Burman, Sino-Tibetan
Limbu; Tibeto-Burman, Sino-Tibetan
Lingala; Bantu, Niger-Congo
Lithuanian; Baltic, Indo-European
Logbara see Lugbara
Logo; Central Sudanic, Nilo-Saharan
Logone; Chadic, Afroasiatic
Lomwe; Bantu, Niger-Congo
Londo; Bantu, Niger-Congo
Lonwolwol see Ambrym
Lotuko (Lotuxo); Nilotic, Nilo-Saharan
Louisiana CF; French-based creole
Luba; Bantu, Niger-Congo
Lugbara (Logbara); Central Sudanic, Nilo-Saharan
Luo (Dholuo); Nilotic, Nilo-Saharan
Maa; Nilotic, Nilo-Saharan
Maasai (Maa dialect); Nilotic, Nilo-Saharan
Mabiga; Bantu, Niger-Congo
Mabuiag see Kala Lagau Ya
Macedonian; Slavic, Indo-European
Malagasy; Malayo-Polynesian, Austronesian
Malayalam; South, Dravidian
Malinke; Mande, Niger-Congo
Maltese; Semitic, Afroasiatic
Malti; unclassified
Mamvu; Central Sudanic, Nilo-Saharan
Manam; Oceanic, Austronesian
Mandan; Siouan, Keresian
Mandara; Chadic, Afroasiatic
Mandarin Chinese; Sinitic, Sino-Tibetan
Manding; Mande, Niger-Congo
Mandinka; Mande, Niger-Congo
Maninka; Mande, Niger-Congo
Mando; Mande, Niger-Congo
Maori; Polynesian, Austronesian
Mapuche (Mapudungu [= Araucanian]); Southern Andean, Amerind
Marathi; Indo-Iranian, Indo-European
Margi; Chadic, Afroasiatic
Maricopa; Yuman, Hokan
Mauritius CF; French-based creole
Mayo see Yessan-Mayo
Mezquital Otomi (Otomi); Otomian, Oto-Manguean
Midhaga; Karnic, Pama-Nyungan
Mina; Chadic, Afroasiatic
Mingrelian; South, Caucasian
Miwok; Penutian
Mixe; Mexican, Penutian
Mixe-Zoque; Mexican, Penutian
Mixtec; Mixtecan, Oto-Manguean
Mochi see Chaga
Mokilese; Oceanic, Austronesian
Mongolian; Mongolian-Tungus, Altaic
Mopun see Mupun
Mordvin(ian); Finnic, Finno-Ugric
Moré (More); Gur (= Voltaic), Niger-Congo
Moru; Central Sudanic, Nilo-Saharan
Motu; Oceanic, Austronesian
Muduug (Somali dialect); Cushitic, Afroasiatic
Mundari; Munda, Austroasiatic
Mupun (Mopun); Chadic, Afroasiatic
Mursi; Surma, Nilo-Saharan
Naga; Tibeto-Burman, Sino-Tibetan
Naga; Malayo-Polynesian, Austronesian
Naga Pidgin see Naga; Malayo-Polynesian
Nahuatl; Aztec, Uto-Aztecan. Cf. Aztec
Nama; Central (= Khoe), Khoisan
Namakura; Oceanic, Austronesian
Nambas see Big Nambas
Nanay (Gold); Tungusic, Manchu-Tungusic
Ndebele; Bantu, Niger-Congo
Ndjuka (Djuká) CE; English-based creole
Negerhollands CD; Dutch-based creole
Nepali; Indo-Iranian, Indo-European
Newari; Tibeto-Burman, Sino-Tibetan
Neyo; Kru, Niger-Congo
Ngalakan; Gunywinyguan, Australian
Ngambay Moundou (Gambai); Central Sudanic, Nilo-Saharan
Ngbaka; Ubangian, Niger-Congo
Ngbaka Ma’Bo; Ubangian, Niger-Congo
Ngbandi; Ubangian, Niger-Congo
Ngiti; Central Sudanic, Nilo-Saharan
Nguna; Austronesian, Austro-Tai
Nigerian PE; English-based pidgin
Nobiin; Nubian, Nilo-Saharan
Norse, Old; Germanic, Indo-European
Norwegian; Germanic, Indo-European
Nubi CA; Arabic-based creole
Nuer; Nilotic, Nilo-Saharan
Nung; Tibeto-Burman, Sino-Tibetan
Nupe; Central Niger, Niger-Congo
Nyabo; Kru, Niger-Congo
Nyanja; Bantu, Niger-Congo
Nzakara; Ubangian, Niger-Congo
Omyene; Bantu, Niger-Congo
Oneida; Iroquoian, Keresiouan
Oriya see Kotiya Oriya
Oromo; Cushitic, Afroasiatic
Óró; Kwa, Niger-Congo
Otomí see Mezquital Otomi
Paamese; Oceanic, Austronesian
Pakaas Novos see Wari’
Palaung (Rumai); Mon-Khmer, Austroasiatic
Papago (= Pima); Uto-Aztecan, Amerind
Papia Kristang CP; Portuguese-based creole
Papiamentu CS, CP; Spanish/Portuguese-based creole
Päri; Nilotic, Nilo-Saharan
Pero; Chadic, Afroasiatic
Persian (Farsi); Indo-Iranian, Indo-European
Peul see Fulfulde
Pilara; Gur (= Voltaic), Niger-Congo
Pima see Papago
Pipil; Aztec, Uto-Aztecan
Pirahã; Mura, Macro-Chibcha
Pitta-Pitta; Karnic, Pama-Nyungan
Plains Cree; Algonquian, Almosan
Pokomo; Bantu, Niger-Congo
Polish; Slavic, Indo-European
Ponapean; Oceanic, Austronesian
Portuguese; Romance, Indo-European
Punjabi; Indo-Iranian, Indo-European
Quechua; Andean, Amerind
Quiché; Mayan, Penutian
Rama; Chibchan, Amerind
Rapanui see Easter Island
Rendille; Cushitic, Afroasiatic
Réunion CF; French-based creole
River Cess Bassa; Kru, Niger-Congo
Rodrigues CF; French-based creole
Romanian; Romance, Indo-European
Rukai; Tsouic, Austronesian
Russian; Slavic, Indo-European
Sa’a; Oceanic, Austronesian
Saho; Cushitic, Afroasiatic
Salinan; Hokan, Amerind
Samburu (Maa dialect); Nilotic, Nilo-Saharan
Sami (Saami) (Lappic); Finnic, Finno-Ugric
Samoan; Polynesian, Austronesian
Sango; Ubangian, Niger-Congo
Sanskrit (+); Indo-Iranian, Indo-European
Santali; Munda, Austroasiatic
Sanuma; Yanomam, Chibchan
São Tomense CP; Portuguese-based creole
Sapo; Kru, Niger-Congo
Saramaccan (Surinam creole) CE; English-based creole
Sardinian (Sardic); Romance, Indo-European
Scottish Gaelic see Gaelic
LIST OF LANGUAGES

Senufo (Senari); Gur (= Voltaic), Niger-Congo
Serbo-Croatian; Slavic, Indo-European
Seselwa see Seychelles CF
Sesothe see Sotho, Southern
Setswana see Tswana
Settra; Kru, Niger-Congo
Seychelles (Seselwa) CF; French-based creole
Shilluk; Nilotic, Nilo-Saharan
Shona; Bantu, Niger-Congo
Shuswap; Salish, Amerind
Silacayoapan; Mixtecan, Oto-Manguean
Sinhalese; Indo-Iranian, Indo-European
Sinto; Indo-Iranian, Indo-European
Siroi; Mandang, Trans–New Guinea
Slave; Athapaskan, Na-Dene
Slavic, Common; Slavic, Indo-European
So; Kuliak, Nilo-Saharan
Solomon Pijin CE; English-based creole
Somi; Cushitic, Afroasiatic
Sora; Munda, Austroasiatic
Sorbian (Upper); Slavic, Indo-European
Sotho, Northern; Bantu, Niger-Congo
Sotho (Sesotho), Southern; Bantu, Niger-Congo
Southern Barasano see Barasano
Spanish; Romance, Indo-European
Squamish; Salish, Amerind
Sranan CE (Surinam creole); English-based creole
Sri Lanka CP; Portuguese-based creole
Sumerian (+); isolate
Sunwar; Tibetic, Tibeto-Burman
Supyire (Suppire); Gur (= Voltaic), Niger-Congo
Surselvan; Rhaeto-Romance, Indo-European
Susu; Mande, Niger-Congo
Swahili; Bantu, Niger-Congo
Swedish; Germanic, Indo-European
Tagalog; Malayo-Polynesian, Austronesian
Tagbana; Gur (= Voltaic), Niger-Congo
Taiwanese; Southern Min, Sino-Tibetan
Takelma (+); Penutian
Tamang; Tibeto-Burman, Sino-Tibetan
Tamazight; Berber, Afroasiatic
Tamil; Dravidian, Elamo-Dravidian
Tarahumara; Uto-Aztecan, Amerind
Tariana; North Arawak, Arawakan
Tatar; Turkic, Altaic
Tayo CF; French-based creole
Tchien Krahn see Krahn
Telugu; Dravidian, Elamo-Dravidian
Tepo; Kru, Niger-Congo
Teso; Nilotic, Nilo-Saharan
Thai (Siamese); Daic, Austric
Thompson; Salish, Almosan-Keresiouan
Tibetan; Tibeto-Burman, Sino-Tibetan
Tigrinya; Semitic, Afroasiatic
To’aba’ita (Toqabaqita); Oceanic, Austronesian
Tok Pisin PE (or CE); English-based creole
Tondano; Celebes, Malayo-Polynesian
Tonga; Bantu, Niger-Congo
Tonga-Inhambane; Bantu, Niger-Congo
Tongan; Oceanic, Austronesian
Toqabaqita see To’aba’ita
Trique; Oto-Manguean, Amerind
Trukese; Oceanic, Malayo-Polynesian
Tsonga; Bantu, Niger-Congo
Tswana (Setswana); Bantu, Niger-Congo
Tunica; Gulf, Penutian
Turkana; Nilotic, Nilo-Saharan
Turkish; Turkic, Altaic
Turku PA; Arabic-based pidgin
Twi (Akan); Kwa, Niger-Congo
Tyurama; Gur (= Voltaic), Niger-Congo
Tzotzil; Mayan, Penutian
Ubykh (Ubyx); Northwest, Caucasian
Udmurt; Finnic, Finno-Ugric
Ulithian; Oceanic, Malayo-Polynesian
Umbundu; Bantu, Niger-Congo
Urdu; Indo-Iranian, Indo-European
Usàk Èdèt; Kwa, Niger-Congo
Usan; Numagenan, Trans-New Guinea
Vagala; Gur (= Voltaic), Niger-Congo
Vai; Mande, Niger-Congo
Vangunu; Oceanic, Austronesian
Vata; Kru, Niger-Congo
Venda; Bantu, Niger-Congo
Vietnamese; Mon-Khmer, Austroasiatic
Waata (Oromo dialect); Cushitic, Afroasiatic
Waŋkumara; Karnic, Pama-Nyungan
Wapa (Jukun dialect); Jukunoid, Niger-Congo
Warao; Paezan (isolate?)
Wari’ (Pakaas Novos); Chapacuran, Arawakan
Waropen; Eastern, Malayo-Polynesian
Washo; Hokan, Northern Amerind
Welsh; Celtic, Indo-European
West African PE; English-based pidgin
Wichita; Caddoan, Keresiouan
Wobé; Kru, Niger-Congo
Wolof; West Atlantic, Niger-Congo
Xdi; Chadic, Afroasiatic
Xhosa; Bantu, Niger-Congo
Yabem (Yaben); Madang-Adelbert Range, Trans-New Guinea
Yagaria; Gorokan, Trans-New Guinea
Yagua; Peba-Yaguan, isolate
Yankunytjatjara; Pama-Nyungan
Yao Samsao; Sino-Tibetan
Yaqui; Taracahitic, Uto-Aztecan
Yatye; Central Niger, Niger-Congo
Yessan-Mayo (Mayo); Sepik, Sepik-Ramu
Yindjibarndi; South-West, Pama-Nyungan
Yolngu; Pama-Nyungan
Yoruba; Kwa, Niger-Congo
Yosondúa; Mixtecan, Oto-Manguean
Yucatec; Mayan, Penutian
Zabana; Oceanic, Austronesian
Zande; Ubangian, Niger-Congo
Zulu; Bantu, Niger-Congo
Zway; Semitic, Afroasiatic
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