Grammaticisation processes and reanalyses in Sulawesi languages

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1. Introduction[1]

1.1 Why Sulawesi?

The Indonesian island of Sulawesi is home to more than one hundred languages belonging to eleven different low-level subgroups of the Western Malayo-Polynesian (WMP) linkage of Austronesian. The three north-easternmost of these groups have been argued by Blust (1991) to belong to the Greater Central Philippines subgroup. These are the Sangiric group, represented here by Ratahan, the Minahasan group, to which Tondano and Totemboan belong, and the Gorontalo-Mongondow group, represented here by Buol. With the exception of the extensive South Sulawesi group, which includes Buginese and Makassarese, the remaining subgroups have been argued to belong to a Celebic 'supergroup' by Mead (2003), revising an earlier proposal by van den Berg (1996). This proposal, however, has not yet been widely accepted. Proceeding from the northwest to the southeast, the seven subgroups of the putative Celebic supergroup are (member languages referred to in this chapter given in parentheses): Tomini-Tolitoli, the group the author is most familiar with (Lauje, Tajio, Totoli), Kaili-Pamona (Da'a, Uma), Saluan-Banggai (Balantak), Bunggku-Tolaki (Mori, Padoe, Tolaki), Wotu-Wolio, Muna-Buton (Muna) and Tukang Besi (Tukang-Besi).

Sulawesi belongs to the most linguistically diverse islands in the Austronesian world with regard to morphosyntactic structures (much less so with regard to phonology). More specifically, Sulawesi languages provide evidence for some of the more dramatic restructuring processes that have occurred in the Austronesian family, while at the same time also witnessing grammaticisation and reanalysis processes found in other branches of the family. Thus, to a certain extent, Sulawesi languages may be considered to be representative for such processes in Austronesian more generally. However, it should be clearly understood that Sulawesi languages do not provide a comprehensive picture in this regard. In fact, within the confines of the present chapter, it will not even be possible to cover comprehensively all relevant processes attested in these languages.

In line with many Austronesian languages, most Sulawesi languages share a preference for verb-initial clause structures. They differ as to whether they also make regular use of an alternative construction where the subject argument appears in clause-internal preverbal position (which needs to be distinguished from a clause-external topic position available at the left edge in all languages). This is illustrated by the Totoli examples in (1) which also illustrate the fact that many Sulawesi languages allow for two (or more) transitive constructions of more or less equal status. The prototypical systems of this type are widely known as symmetrical voice systems (formerly also as Philippine-type 'focus' systems), which are attested throughout the Philippines and the northern half of Sulawesi. Such systems contrast an actor voice, where the actor argument is the subject (*Ali* in (1)), with one or more undergoer voices, where the undergoer is the subject (*deuk* in (1)).

(1) TOTOLI: Actor voice vs. undergoer voice

    a. *i   Ali   nambalung   deuk   itu*
       i   Ali   noN[2]-mbalung   deuk   itu
       HON   AV.RLS-throw:at dog   DIST
          'Ali threw (stones) at the dog.'

    b. *deuk   itu   ni-mbalung   i   Ali*
       dog   DIST UV.RLS-throw:at HON
          'Ali threw (stones) at the dog.'

Unlike passive alternations, these alternations are symmetrical in that they are both marked by voice morphology (e.g. in (1a) by the actor voice realis prefix *noN-*, and in (1b) by the undergoer voice realis prefix *ni-*) and case marking patterns are identical across the two constructions (in the case of Totoli, both NPs are not marked for case). Further, subject and non-subject arguments respectively show identical behavioural properties. So, for example, only the subjects (= the pre-verbal arguments) in (1a) and (1b) could function as heads of relative clauses, and only the non-subject arguments (= the post-verbal arguments in (1a) and (1b)) form a constituent with the verb. Riesberg (2014a) provides a detailed analysis of such systems and shows that the degree of symmetry varies significantly across the family, with Totoli showing almost perfect symmetry.

A common trait of Sulawesi languages is the occurrence of person markers (affixes or clitics) on the verb, with massive variation in terms of the number and completeness of person marking paradigms and their functions (see section 3.3). Related to the variation in person marking is considerable variation in alignment systems, with Sulawesi languages having been analysed as nominative-accusative, ergative or symmetrical voice languages. Further widely attested verbal morphology includes applicatives and reciprocals. Verbal mood marking (realis vs. non-realis) is also widespread, but does not occur in the South Sulawesi subgroup.

Nominal modifiers other than numerals typically follow the head noun, which is normally unmarked but may be preceded by determiner-like or case-marking clitics (see section 2.4). Numeral classifiers are widespread and typically precede the head noun together with the numeral, with post-nominal position often being a secondary option.

1.2 Introductory observations on grammaticisation in Austronesian

To date, most of the work on grammaticisation in Austronesian languages relates to the extensive Oceanic subgroup (> 500 languages), while relatively little has been done on the western half of the family, which next to the WMP linkage and the Formosan languages also includes the Central Malayo-Polynesian (CMP) and the South Halmahera-West New Guinea (SHWNG) languages. Work on Oceanic deals with the grammaticisation of articles and possessive markers, directionals/prepositions/serial verbs, TAM marking, or reason and cause markers, inter alia, as perhaps best exemplified in the work of the late František Lichtenberk (e.g. 1991, 2013a, 2013b). The reason why there is so much more work on grammaticisation in Oceanic is that the history of this subfamily is reasonably well understood. There is a relatively clear and widely agreed reconstruction of Proto-Oceanic grammar and lexicon as well as ample and transparent variation among closely related languages, relatively many of which have been carefully described and documented. Hence, both source items and source constructions are relatively easy to identify, and there is little doubt about the directionality of the attested changes.

The situation in the remainder of the family is different for a number of reasons. As for CMP and SHWNG, good comprehensive descriptions are still few, and hence the synchronic basis for

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[2] Capital N represents a homorganic nasal which assimilates to or substitutes for the base-initial consonant; it most often substitutes for the base-initial consonant if it is voiceless (see Newman 1984 and Pater 2001 for further details).

identifying grammaticisations is insufficient. Relatively speaking, there are more and better descriptions for Formosan and WMP languages (but still less than for Oceanic), but here the main problem pertains to the fact that much of the core grammatical morphology reconstructed to the proto-level persists in present-day languages or has been lost *without* leading to major new grammaticisations (exceptions to be noted in the following sections). That is, what is amply attested is the reorganisation of a grammatical system centring on voice morphology and determiner-like elements. These changes, however, may not be instances of grammaticisation in the strict sense of an (essentially self-propelled) development along a unidirectional cline, but rather may instantiate reanalyses of various types, including analogical extensions. More importantly perhaps, more often than not the directionality of the attested changes is unclear (is construction X the predecessor of construction Y or the other way around?), as further exemplified below. Finally, apart from Malay and Javanese, which are intermittently attested from the 7th and 9th century AD onward, historical records for individual languages are scarce and, with few exceptions, date to the colonial period at the earliest.

Table 1 provides a typical example for the kind of changes attested in historical records. It shows the reorganisation of the aspect-mood paradigm for the actor voice infix *-um-* (inserted after the first consonant of the stem) and the actor voice prefix *mag-* in the Philippine language Bikol. These affixes functionally correspond to the Totoli prefix *noN-* in example (1) above (there are no major functional differences between infix and prefix, the choice between them largely depending on the stem). The development is essentially one of reduction and consolidation, with one mood (subjunctive) and the infix *-um-* being lost.

Table 1:   The development of the actor voice paradigms in Bikol, *R-* = reduplication of stem-initial syllable (cp. Lobel 2013:47)[3]

	OLD BIKOL (C. 1610)		MIDDLE BIKOL (C. 1879)		MODERN BIKOL
	-um-	*mag-*	*-um-*	*mag-*	*mag-*
NON-REALIS	*-um-*	*mag-*	*-um-*	*mag-*	*mag-*
REALIS	*-imin-*	*nag-*	*-imin ~ -umin-*	*nag-*	*nag-*
REALIS IMPERFECTIVE	*na- ~mina-*	*nag-R-*	*mina-*	*nag-R-*	*nag-R-*
NON-REALIS IMPERFECTIVE	*ma-*	*mag-R-*	*ma-*	*mag-R-*	*ma:-*
SUBJUNCTIVE	*ø-*	*pag-*	---	---	---
SUBJUNCTIVE IMPERFECTIVE	*R-*	*pag-R-*	---	---	---

Table 2 illustrates the problem of determining the direction of change. It lists proclitic person markers in a number of Central Sulawesi languages, the paradigms varying significantly with regard to the number of occupied cells. Van den Berg (1996) argues that Lauje represents the endpoint of a reduction of a formerly complete paradigm, while Himmelmann (1996) believes that Lauje shows the beginning of the build-up of a person-marking paradigm seen in full in Uma.

Table 2: Proclitic person markers in Central Sulawesi Languages

	UMA KAILI-PAMONA	DA'A KAILI-PAMONA	PENDAU TOMINI	LAUJE TOMINI
1s	ku-	ku-	'u-	'u-
2s	nu-	mu-	mu-	-
3s	na-	-	-	-
1P.IN	ta-	-	-	-
1P.EX	ki-	-	-	-

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[3] Lobel uses tense-based terminology (e.g. PAST) instead of the mode-aspect based terminology (e.g. REALIS) preferred in this chapter.

2P	ni-	-	-	-
3P	ra-	-	-	-

2. Grammaticisation of nominal categories

2.1 Numeral classifiers

In Austronesian languages quite generally, weakly grammaticised numeral classifiers are often obligatory in count constructions (a major exception being Philippine and Formosan languages). Numerals precede the classifier, and the numeral classifier-unit in turn precedes the head noun. Post-nominal position, however, is often also an option. In example (2) from Tajio, lower numerals are prefixed to the classifier.

(2)   TAJIO: Classifier construction
   a. **so-bua**   *te=motor*   b.   *te=oto*   **ro-bua**
      one-CLF.piece   ART=motorbike   ART=car   two-CLF.piece
      'one motorbike'   'two cars' (Mayani 2013)

The inventories of classifiers are usually relatively small (< a dozen) and include formatives which also function as independent nouns (illustrated by Tajio in Table 3). In cases where the forms of the noun and the related classifier differ, the difference is usually minimal (cp. *puu* vs. *puung* in Table 3). There is usually one general default classifier (often the word for 'fruit', 'seed' or 'stone') for all kinds of objects, but excluding animates. Humans, and sometimes more generally animates, can often be counted directly, i.e. they do not require the classifier construction.

Table 3: Tajio Classifiers (Mayani 2013)

Classifier	**Literal meaning**	**used in counting**
too	'person'	humans, including kin
baang	'tail'	non-human animates including large fish
bua	'piece'	default for objects
vuu	'seed; bone'	small round objects (including fruit), small fish, cigar-like shapes
puung	*puu* 'tree'	trees
ndaang	'branch'	leaves
lae	'sheet'	thin and flat objects
peka	'plank'	flat and hard objects
kolo	-	means of transport (boat, car, motorbike), rarely used

Classifier constructions are usually not distinguishable from measure constructions (arguably, then, there is only a single classifier/measure construction in Tajio). The latter make use of the same form of the numerals and the same overall construction pattern, with measure nouns taking the place of the classifying nouns.[4]

(3)   TAJIO: Measure construction
   lima-m-pulu   karung   te=uli
   five-LK-ten   sack   ART=skin
      'fifty sacks of peelings (lit. skin)' (Mayani 2013)

2.2 Number

Nouns are generally not marked for number in Sulawesi languages. A major exception is Muna,

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[4] In all examples cited from the literature, morpheme analysis and glossing have been adapted to the conventions used throughout this chapter. Free translations are from the original source, unless noted otherwise.

where nouns may be suffixed with *-hi* for plural (e.g. *sau* 'tree', *sau-hi* 'trees', van den Berg 1989:288), but this suffix occurs in all parts of speech and has a wide range of functions, its origin being unknown.

Doubling of roots to express plurality (e.g. *guru-guru* 'teachers') may sporadically be found, but this does not seem to be a fully grammaticised marking option, but rather an occasional calque of a Malayic pattern. The Dutch colonial linguist Esser notes in this regard that '[w]hen use is made of reduplication with substantives to indicate plurality, this is a detestable Malayism' (Esser & Mead 2011:70).

Number is regularly distinguished in pronouns and occasionally also in articles, demonstratives, interrogatives, relativisers and the like. Plural articles and pronouns are used to form associative plurals with personal names and kin terms, as in Balantak *ari Herman* (*ari* = plural article) 'Herman and his companions' (van den Berg & Busenitz 2012:46) or in Mori *ondae i Tansumawi* (3P HON Tansumawi) 'Tansumawi and those of his' (Esser & Mead 2011:128).

Minahasan Totemboan and Tonsawang make use of the plural word *manga*, which is also widely found in other parts of the Austronesian world, including the Philippines. Sneddon (1978:104) analyses it as a prefix in Tonsawang, e.g. *manga-wene* (PL-woman) 'women'.

2.3 Possession

In possessive constructions, possessum and possessor (in this order) are usually connected by a kind of linking element that is probably of a demonstrative origin and often formally similar or identical to the third person possessive pronoun, cp. Muna *roo-no sau* (leaf-LK tree; *-no* is also the third person possessive suffix) 'leaf of a tree' (van den Berg 1989:86).[5] Languages which make consistent use of articles typically have a special genitive form of the article which begins with a dental nasal and, historically speaking, in all likelihood is a combination of the possessive linker and the article as, for example, in Tajio *topombalu nu=bau* (seller GEN=fish) 'seller of fish'. This is regularly the case for the honorific article *si* or *i* used with personal names and more generally in polite reference to humans, as in Balantak *tama-ni Aman* (father-GEN.HON Aman) 'Aman's father', cp. *i Aman* 'Aman' (van den Berg & Busenitz 2012:62). The nasal linking element is often also visible in the possessive pronoun series (suffixes or enclitics), for example in Balantak *lima-ngku* 'my hand' or *tama-nta* 'our (incl.) father' (van den Berg & Busenitz 2012:11).

2.4 Determiners and case

Use of article-like elements is widespread in Sulawesi languages. The exact function of these elements is controversial, as is apparent from the wide range of terms in use for designating them. Next to 'article' and 'determiner', these include 'case', 'phrase' or 'noun (phrase) marker' (cp. Reid 2002, Blust 2015:437–439). Three features contribute to their cross-linguistically remarkable profile. First, they typically occur in paradigms of clitic (rarely affixal) elements which combine determiner and case functions. Second, the paradigms always include a distinction between honorific and non-honorific forms, the grammatical properties of these two series diverging slightly. Third, with few exceptions, they do not signal definiteness, but rather specificity or they lack any clearly specifiable semanto-pragmatic function. In fact, Sulawesi languages show a particularly large variability in the factors governing their use, providing ample evidence for the final stages in the grammaticisation of articles (*noun markers* in the terminology of Greenberg 1978).

Regarding the first point, Table 4 and Table 5 illustrate typical paradigms from a number of

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[5] Grammars vary as to whether these linkers are represented as clitics or affixes and whether they form a phonological unit with the preceding head noun (enclitc or suffix), or with the possessor noun (proclitic). It is unclear whether these differences in representation reflect a substantial difference or are simply due to different analytical preferences of the authors.

Sulawesi languages and, for comparative purposes, Tagalog. While the labels for the genitive/possessive and locative/dative rows are widely agreed, labels for the row *article* vary widely and include *nominative*, *subject*, *topic*, and many more. It is very likely that the elements for common nouns in this row historically derive from demonstratives and have a determiner-like function, even though other factors may conspire to restrict their use only to core arguments and possibly only to a single core argument, thus giving them the appearance of case or grammatical function markers.[6] A major factor in this regard is the complementary distribution of the elements in each column. The genitive/possessive markers are typically transparently related to the article, consisting of the nasal ligature already discussed in the preceding section and the article, as in Tagalog *nang < na+ang* or Pendau *nu < n+u*. Article and genitive/possessive markers are without exception in complementary distribution: a nominal expression can only be preceded by one of these markers, never by both. This makes sense, as it were, inasmuch as the genitive markers include an article, historically speaking.

Table 4: Phrase markers in Ratahan (Minahasan), Tondano (Sangiric), and Tagalog

	RATAHAN		TONDANO		TAGALOG	
	COMMON	HON	**INANIMATE**	**ANIMATE**	COMMON	HON
ARTICLE	-	i	(N=)	si (sg) sè (pl)	ang	si
GEN/POSS	(nu)	ni	-	ni (sg) nè (pl)	ng [naŋ]	ni
LOC/DAT	su	si	-	-	sa	kay

Table 5: Phrase markers in three Tomini languages

	LAUJE		PENDAU		TAJIO	
	COMMON	HON	COMMON	HONOR	COMMON	HON
ARTICLE	(nu₁)	si	(u)	si	**te**	si
GEN/POSS	nu₂	ni	nu	ni	nu	ni
LOC/DAT	li	(li)	ri	(ri)	(r)i	(r)i

The locative/dative markers are usually not transparently related to the article, but often reflect a form *ri/di/li* or *sV*. Although this is less clear than in the case of the articles, it is possible that these forms also go back to deictics (and more specifically a deictic adverbial). Importantly, these elements are often the only preposition-like element in a given language (though today the inventory is often extended with loans from Malay). In many languages, complementarity of locative/dative markers with the article and the genitive/possessive marker is also without exception, but in some languages the units marked by the locative marker can be preceded by the articles as in Tagalog *ang sa bahay* (SPEC LOC house) 'the one in the house' (cp. Himmelmann 2015). But the reverse order (i.e. *sa ang X) is not possible. The example of Tajio is particularly instructive in this regard, because in this language vowel-initial nouns are obligatorily marked with the common-noun article *te* unless preceded by a preposition or the genitive marker *nu*, as exemplified in example (4).

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[6] While there may be a superficial similarity with other instances where (often already case-marked) indexicals provide the source for nominal case markers (cp., for example, McGregor 2008), the appearance of a case-marking function in the case of WMP languages essentially depends on paradigmatic interactions and works very differently from the cases reviewed by McGregor.

(4)   TAJIO (TOMINI):
      te=*asu*   *nonavuao*   **te**=*wani*   **yami**   *puu*   **nu**=*ayu*
      ART=dog   AV.RLS:fall:APPL   ART=wasp   from   tree   GEN=wood
          'The dog caused the wasp (nest) to fall down from the tree.' (Mayani 2013)

Use of the common noun article *te* after *yami* (*yami tepuu*) or *nu* (*nuteayu*) is ungrammatical.
One possible explanation for this state of affairs is that grammaticisation of articles is blocked in
prepositional phrases (cp. Himmelmann 1998 for further evidence and discussion). Whether such
blocking is particularly likely to occur when the inventory of (primary) prepositions is small and
prepositions themselves are derived from deictic elements is a matter for further investigation.

   Note that Tajio *te* is remarkable in that Tajio is the only Tomini language making use of *te*, the
other eight Tomini languages using *(n)u* instead. While *te* in article-like functions is attested
elsewhere in Sulawesi (e.g. Banggai, Tukang Besi), it is missing in the area where Tajio is spoken.

   Turning now to our second point, Table 4 and Table 5 clearly show that articles in Austronesian
come in two series, the honorific series for respected humans, which typically include older kin and
anthropomorphised protagonists in folktales, and the common noun series for all other nouns. The
two series are somewhat unequal in three regards. First, the honorific series is more widely attested
than the common noun series, with *(s)i* as the honorific marker in almost all languages. That is,
quite a few languages only have an honorific article but no common-noun article, standard varieties
of Malay being the most prominent example. Second, the honorific article tends to be more strongly
grammaticised than the common noun article, which is often inseparable from its host. This is very
common for personal pronouns, many of which include *(s)i* as an obligatory initial syllable.
Compare the following Tajio forms: *sia'u* 1S, *sio'o* 2S, *siia* 3S, *siita* 1P.IN, *siami* 1P.EX, *simiu* 2P,
and *sisia* 3P.

   Third, despite the fact that both common and honorific articles have a strong tendency to
grammaticise further, it is rather rare that the kind of gender or noun-class systems predicted by
Greenberg (1978) arise. Some northern Sulawesi languages are possible exceptions. A well-
documented example is Tondano, a language that appears to have innovated the system both
formally and semantically (cp. Sneddon 1975:114–117, Brickell 2014:344–357). Formally, the
'honorific' series is identical to the third person pronominal proclitics and accordingly distinguishes
a singular and plural form (cp. Table 4). The 'common noun' series is formally identical to the
linking nasal (*N*). Consequently, the functions of marking nominal phrases (article) and linking the
elements within a phrase (linking element) are not distinguished. Semantically, use of the
'honorific' series has been broadened to include all kinds of animates, whereas the linking nasal
only marks inanimates, illustrated in the following two examples.

(5)   TONDANO (MINAHASAN)
      mèi   *kumaan*   *sèko'ko*   *wo*   *sètièi*
      <um>èi   k<um>aan   sè=ko'ko'   wo   sè=tièy
      <AV>come   <AV>eat   AN.PL=chicken   and   AN.PL=pig
          '(he) comes to eat chicken and pork' (Brickell 2014:346)

(6)   TONDANO (MINAHASAN)
      sikimirong[7]   **em**pistol
      si=k<im>irong   N=pistol
      3S=<AV.RLS>conceal   INAN=pistol
          'he hid a pistol (in his clothes)' (Brickell 2014:354)

Similar developments appear to have occurred in other Minahasan languages (Sneddon 1978:172)

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[7] The text has *sikimiring*, but this appears to be a mistake.

and in Buol (Zobel 2005:632f). The Buol and Totemboan data point to the possibility that definiteness may have played a role in the extension of the honorific noun marker to animates. In Buol, the honorific marker *ti* (no number distinction!) is used with personal names and definite human nouns, though not consistently with the latter.

In most other Sulawesi languages, no such semantic changes have happened. What we can observe in these languages is that use of the honorific articles is more or less obligatory with personal names and respected (elder) kin and that they are often obligatorily incorporated into the independent personal pronoun series, as illustrated with the Tajio free pronoun forms above. The common-noun series, on the other hand, tends to become phonologised in the final stages of its grammaticisation, thereby not leading to semantically motivated subclasses in the nominal lexicon, as illustrated shortly.

In terms of function, the article-like elements in Sulawesi languages, and in western Austronesian more generally, do not mark definiteness, with the exception of the honorific noun-markers used for definite reference to humans in a few northern Sulawesi languages, as noted previously. The only clear semantic contrast manifest throughout the area is between honorific and common-noun phrases. Otherwise, the use of these elements appears to be largely determined by the grammatical construction. Given that they are usually blocked from occurring in prepositional phrases (cp. example (4) above), article-like elements commonly occur in phrases with core argument functions (subject, object), in topic expressions, in possessor phrases and in nominal predicates. Among these contexts, there is usually only a real choice with regard to the nominal predicate function. The use of the article here correlates with the difference between a referential and a non-referential reading, as illustrated by the following example from Tagalog:

(7)   TAGALOG
a)   ***ma-lakí***   *ang*   *kwarto-ng iyon*.
       ST-bigness   SPEC   room-LK   DIST
           'That room is big.'

b)   ***ang   ma-lakí***   *ang*   *kwarto-ng iyon*.
       SPEC   ST-bigness   SPEC   room-LK   DIST
           'That room is the big one.'

Otherwise, use of the common-noun phrase markers is either obligatory for non-prepositional arguments and topics, or it is semantically rather elusive. In Tajio, for example, the common-noun article *te* is optional in subject and object position for all consonant-initial bases. Compare:

(8)   TAJIO (TOMINI)
       (te=)saping neng-inang (te=)gugus
       ART=cow   AV.RLS-eat   ART=grass
           'Cows feed on grass./The cows feed on (the) grass.' (Mayani 2013)

In Tajio spontaneous discourse, use of the article appears to be the default case, and reasons why it is occasionally dropped with consonant-initial stems are poorly understood. But it would appear very likely that the functional load with regard to signalling distinctions of accessibility (given, new) is rather low or absent. This is further supported by the fact that the article is obligatory for vowel-initial bases occurring in subject or object functions (in example (4), it must be *te=asu*; *asu* on its own would be ungrammatical).

Note that all languages in the area typically have alternative constructions for introducing new referents into the discourse world and for non-referential mentions. These constructions make use of an existential quantifier, as illustrated by the following Tajio example.

(9) TAJIO (TOMINI)
amai *te=alaiong* *i* *ndaang* *nu=ayu*
EXIST ART=owl LOC branch GEN=wood
'There was an owl on the branch of the tree.' (Mayani 2013)

Many Sulawesi languages, especially in the southern half of the island, show advanced stages in the grammaticisation of the common-noun article. The usage conditions for these advanced stages are partly syntactic, partly phonotactic, as van den Berg (2012) adeptly illustrated in his survey of 'elusive articles' in Sulawesi. In Tolaki, for example, the article is used with disyllabic bases only:

(10) TOLAKI (BUNGKU-TOLAKI)
o=piso *o=donga* **o=kaluku* **o=laika*[8]
'the/a knife' 'the/a deer' 'the/a coconut' 'the/a house' (van den Berg 2012:218)

In Balantak, the article only occurs with subject arguments, provided that these are in post-verbal position.

(11) BALANTAK (SALUAN-BANGGAI)
a) *Ma-polos* *tuu'* **a** *sengke'-ku*.
   INTR-hurt very ART back-1S.POSS

b) *Sengke'-ku* *ma-polos* *tuu'*.
   back-1S.POSS INTR-hurt very
   'My back really hurts.' (van den Berg 2012:210)

Tukang Besi has a similar restriction in that only one core argument can be marked with the article *na=* in postverbal position. But here all other core arguments are marked with another article, *te=*, including all arguments in preverbal position, regardless of their syntactic function.

(12) TUKANG BESI
a) *No-'ita* **te** *kadadi* **na** *wowine*.
   3S.RLS-see ART bird ART woman

b) **Te** *wowine* *no-'ita* **te** *kadadi*.
   ART woman 3S.RLS-see ART bird
   'The woman watched birds.' (Donohue 2009:771)

Table 6 from van den Berg (2012) provides further details on the factors determining the use of articles in three Sulawesi languages. These clearly show that the articles in question do not convey semantic functions and that even though they are restricted to common nouns, it is not likely that they are developing into common noun markers as predicted in Greenberg (1978).

Table 6: Comparison of the article in Balantak, Muna and Tolaki (van den Berg 2012:223)

		Balantak *a*	Muna *o*	Tolaki *o=*
semantic	independent meaning	no	no	no
syntax	Category	common nouns	common nouns	common nouns
	grammatical function of NP	subjects only	any	any
	position in clause	post-predicate	a. clause-initial b. free-standing	any
	with possessive suffixes	yes	no	no
	with bound numerals	yes	no	no
	after prepositions	no	no	no
prosody	shape of noun root	any	any	disyllabic

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[8] In Sulawesi, vowel sequences are rarely diphthongised. This is a trisyllabic root.

				only
clitic position		enclitic	proclitic	proclitic
position in intonation phrase		medial	only initial	anywhere

To complete this survey on article developments in Sulawesi, a major innovation has occurred in some of the South Sulawesi languages, in particular Makassarese and Bugis. These languages show phrase-*final* articles in common-noun phrases. These are obligatory for definite NPs, but can also be used together with the numeral 'one' to express 'a certain X', and as nominalisers (Jukes 2006:153). For personal names, the 'standard' honorific *i* is used, in the form of a prefix or proclitic depending on the language and the analysis.

(13) MAKASSARESE (SOUTH SULAWESI)
      *Bambang=i   allo-**a***.
      hot=3   day-DEF
          'The day is hot.' (Jukes 2006:335)

(14) MAKASSARESE (SOUTH SULAWESI)
      *Ku=kanre=i   unti-**a***.
      1=eat=3   banana-DEF
          'I eat the bananas.' (Jukes 2006:152)

Jukes (2006:151) suggests that it 'seems likely that there is a historical connection' between the definite marker -*a* and the 3rd person pronoun *ia* (used for singular and plural).

There are articles following their heads in other western Austronesian languages outside of Sulawesi which typically derive from the third person possessive pronoun and are often in fact formally indistinguishable from them (i.e. they present cases of incipient grammaticisation). Himmelmann (1997:219–221, 2001a:839) calls these *possessive articles* and speculates that their grammaticisation follows a somewhat different trajectory than the trajectory of demonstrative pronouns turning into articles. Specifically, he proposes that they arise from an extension of what is widely referred to as associative anaphora in the definiteness literature, where definite reference is based on the fact that the newly introduced referent belongs to the frame of a preceding referent (mentioning a house allows for definite reference to its door(s) and window(s), for example). The following example from Malay illustrates such an extended use, which, however, can probably still be accounted for in terms of the semantics of possessive pronouns:

(15) MALAY
      *air-**nya***
      water-ART?
          (room service knocking at the door:) the (drinking) water (you asked for/that is found as standard in a hotel room)

Balinese provides an example of a more strongly grammaticised possessive article. In Balinese, anaphoric reference requires this article, which historically derives from the cognate of Malay -*nya*. Compare:

(16) BALINESE =(***n***)***e***
      *Tiang ngelah   kuluk ajak meong.   Kuluk=**e** putih   meong=**e**   selem.*
      1S   AV:own   dog   and   cat   dog=ART white cat=ART   black
          'I have a dog and a cat. The dog is white, the cat is black.' (Mayani, p.c.)

The possessive article may occur in all syntactic functions, including prepositional phrases. In fact, there is a tendency—the details of which are not yet well understood—to use it in prepositional phrases even in those instances where it is not clear what the referential anchor for a definite mention could be, as in the following example:

(17) BALINESE
    montor-ne   *tomplok-ang=a*   *ke*   *tembok=e*
    car-3S.POSS   collide-APPL=3S   to   wall=**ART**
      'He crashed his car into **a** wall.' (Clynes 1995:241)

3. Grammaticisation of verbal categories

Quite a few verbal categories receive clitic or affixal expression in Sulawesi languages. However, it is here that the problems in identifying grammaticisation paths in western Austronesian noted in section 1.2 are most noticeable. Following the pioneering work of Wolff (1973), it has been widely assumed that Proto-Austronesian clause structure and verb morphology looked very much like current Meso-Philippine languages. Ross (1995, 2009) has shifted this focus somewhat towards Formosan languages, and in particular Puyuma, but in essence the reconstruction still very much resembles Philippine-type languages. Importantly, there are no serious speculations as to the origins of the roughly twenty affixes that are generally reconstructed at the proto level. Blust, in his detailed survey of Proto Austronesian affixes (Blust 2013, Chapter 6), provides hypotheses on likely meanings and functions of these affixes, but in no instance does he mention possible origins. Furthermore, the suggested meanings and functions often do not differ significantly from the ones attested in the current daughter languages (exceptions to be discussed below). Hence, not much development can be observed, other than the loss of many (or sometimes all) of these affixes.

The lone dissenting voice of Lemaréchal (2010), who argues for a scenario in which South Sulawesi languages such as Bugis and Makassarese are deemed to be representative of the oldest stages of the proto-language, does not fundamentally change this overall picture. That is, Lemaréchal works with essentially the same set of reconstructed affixes (sometimes adding additional morphological structure). The major difference to the 'standard' view is that he reconstructs a complete set of person markers of the kind illustrated in Table 2 at the highest proto level. Furthermore, he postulates in part different meanings for the reconstructed affixes and offers a few not very well-supported speculations as to the origin of some of them (mostly verbs meaning 'take, put', cp. Lemaréchal 2010:287–306).[9]

The following exposition is largely framed within the widely shared hypothesis that the general direction of historical developments affecting Austronesian affixes is from close to Philippine-type to Sulawesi and beyond (i.e. inasmuch as Sulawesi languages diverge from Philippine patterns, they represent innovations). However, it may be useful to keep in mind that the reverse direction has also been proposed and that it is, in fact, not straightforward to decide between competing views at our current stage of knowledge.

3.1. Voice/valency

As much of the currently attested voice, and more generally valency, morphology is reconstructed at the PAN level, nothing much can be said as to how this came about. As to further developments, there are only very few where the available data and analyses allow for reasonably well-supported hypotheses. One concerns the prefix *ni-* which occurs in example (1b) above, where it marks realis

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[9] Lemaréchal's ideas also boldly contradict general assumptions regarding phonological and lexical developments, thus leading him to fundamentally question the widely shared out-of-Taiwan hypothesis for the early stages of the spread of Austronesian. However, even if one agrees with this hypothesis and the bulk of the proposed lexical and phonological reconstructions, this does not necessarily mean that Formosan and Philippine languages are the most conservative with regard to the morphosyntactic level, as appears to be widely believed in the relevant literature (most reconstructions, perhaps inadvertently, imply that the structures of most Philippine and some of the Formosan languages have hardly changed over the last 5000–6000 years). To my mind, unless and until it can be shown that the morphosyntactic systems attested throughout the Austronesian family can be properly accounted for in terms of sequences of plausible changes of the reconstructed system (and possibly contact interferences), the jury on the main direction of change is still out. See Foley (2014) for a fuller assessment of Lemaréchal's proposals.

mood in undergoer voice. This affix is widely attested throughout the Austronesian world and can safely be reconstructed at the proto level (cp. Blust 2013:385–389 for details). It is very likely that the primary shape of this affix was an infix *-in-*, with the prefixal allomorph *ni-* developing in later stages, first before bases beginning with a liquid (r, l), then becoming the most frequent allomorph in some languages such as Totoli. In terms of function, it seems very likely that it was primarily an aspect or mode marker (perfective or realis) which, importantly, was not restricted to undergoer voices, but also occurred in the actor voice, as is still the case in Ratahan (*-im-* < *-in-um-*):

(18) RATAHAN
  *te isé t<**im**>umpa   e*
  then 3s <AV.RLS>jump.down CPL
   'Then he jumped down.' (Himmelmann & Wolff 1999)

In the majority of Philippine and Sulawesi languages, however, *-in-/ni-* is today restricted to the undergoer voices. In languages which no longer distinguish realis from non-realis voice-marked forms, *-in-/ni-* typically becomes a simple undergoer voice marker, as seen in the following example from Mori:

(19) MORI
  in-ala-mu   ke wunta andio?
  UV-get-2S.GEN Q book PRX
   'is this book the one (one of the ones) fetched by you?' (Esser & Mead 2011:458)

Esser & Mead label this construction a passive, which, strictly speaking, it is not, because the actor argument can still appear in a core argument position (as a genitive clitic/suffix, the standard in undergoer voice constructions). As the translation indicates, however, this construction has a strongly nominal character, the predicate phrase being interpretable as a headless relative clause. In many south-eastern Sulawesi languages, this construction is in fact restricted to appear in relative clause constructions, as illustrated by the following example from Tolaki:

(20) TOLAKI
  *o gandu s<**in**>olongako-ro i tonga   m-bada*
  ART corn <UV>pour.out-3P.GEN at middle LK-field
   'the corn which had been poured out by them in the middle of the field' (Mead 2002:160)

Unlike in Mori, use of this formation as a main clause predicate in Tolaki is obligatorily agentless. Hence, a gloss as a passive here is entirely appropriate (the pronominal prefix *no-* here refers to the undergoer 'this'):

(21) TOLAKI
  Ni'ino, iamo   no-in-ala.
  PRX NEG.IMP 3S-PASS-take
   'This must not be taken.' (Mead 2002:161)

In some South Sulawesi languages, *ni-* is used only as a passive marker in an innovative construction in which the actor argument is no longer a core argument. Rather, it is introduced by the general locative preposition *ri* in a construction roughly similar to English *by*-passives as in:

(22) MAKASSARESE
  Ruku' ni-kanre ri   tedong
  grass PASS-eat LOC buffalo
   'Grass was eaten by the buffalo.' (Jukes 2006:259)

The current exposition suggests that the passive and relative-clause uses of *ni-* illustrated in the preceding examples may be developments from the earlier realis or perfective marker *-in-* (possibly

providing another instance of the well-known development of resultatives to passives, cp. Nedjalkov (1988), among many other contributions). However, it may very well be that the trajectory of these developments is more closely linked to the nominalising uses of *ni-/-in-*, which are also widely attested and reconstructible to the PAN level. The most widely attested use here is in deverbal object nouns such as Tagalog *sina'ing* 'boiled rice' from the root *sa'ing* 'boil rice'. Note also denominal derivations such as Ilokano *binunga* 'child' from *bunga* 'fruit', or Tagalog *in-anak* 'descendant' from *anak* 'child' (cp. Blust 2013:387).

3.2 Tense, aspect, mood

The realis/non-realis distinction mentioned in the preceding section is closely interlinked with the voice morphology and, in those languages that have it, with person marking (see next section). This distinction has also been analysed as a tense-related distinction, in which case the affix *-in-* discussed in the preceding section is analysed as a past or past-perfect marker.

   Many western Austronesian languages make regular use of reduplication to express imperfective, habitual, or iterative events. Non-reduplicated verbs, then, by default implicate a perfective state of affairs.

   In addition to reduplication, many Sulawesi languages mark a similar aspectual distinction by (cognates of) the enclitics *=mo* 'completive (also called perfective)' and *=po* 'incompletive (or continuative)', which are also very widespread in Philippine languages. They roughly correspond to English 'already' (in combination with a negator 'no more') and 'still' (in combination with a negator 'not yet'), respectively.

(23) TAJIO
   *te=bau   ni-ita=mu=**mo***
   ART=fish   UV.RLS-see=2S.GEN=CPL
      'You have already seen the fish.' (Mayani 2013)

These clitics are usually not obligatory (i.e. not every verbal predication has to include them), but they are very frequent. More importantly, their function does not appear to be restricted to the aspectual domain. The clitic *=mo*, for example, is also very common in imperative constructions, usually for more polite variants.

(24) TAJIO
   *tuut=**mo**   sia'u*
   follow=CPL   1S
      'Please follow me!' (without =mo this would be a brusquer 'follow me'; Mayani 2013)

The clitic *=po* is often a regular part of comparative constructions:

(25) TAJIO
   *te=vonua='u   na-basag=**po**   pa   te=vonua=mu*
   ART=house=1S.GEN   ST.RLS-big=ICPL   than   GEN=house=2S.GEN
      'My house is bigger than your house.' (Mayani 2013)

No sources for these clitics have been suggested, but in Tajio the enclitic *=po* is in complementary distribution with the particle *ompo* 'still', which seems to be a likely source of the clitic.

(26) TAJIO
   *siia nonggabu=**po**   / **ompo***
   3S   AV.RLS:cook=ICPL   still
      'He is still cooking.'

3.3 Person marking

Sulawesi languages are remarkable for their great variety of verbal person-marking systems. The major innovation is the occurrence of one or two prefix series of person markers marking either transitive actors (A in the widely used letter code for semanto-syntactic role labelling) or subjects (i.e. transitive actors and the single core argument of an intransitive verb (S/A)). As already noted with regard to Table 5 above, a major parameter of variation here is the number of prefixed person markers. In Lauje, only the first person singular is marked by a prefix, as illustrated in example (27) where second and third person singular actors are marked instead by suffixes. Furthermore, in Tomini languages such as Lauje, as well as in the neighbouring Kaili languages, the person-marking prefixes are restricted to non-realis mode. Example (28) shows that in realis mode, first person agents are also marked by suffixes. The nexus between person marking and non-realis mode will recur throughout this section and provides important evidence for the source construction(s) of these person markers.

(27) LAUJE (TOMINI)
    láupe   ***'u-otoi***   / *no-'ootoi-**im**?*   /   *no-'ootoí-**ny***
    not.yet 1S-know   NRLS.UV-know-2S.GEN   NRLS.UV-know-3S.GEN
        'I don't know yet / You don't know yet? / She doesn't know yet.'

(28) LAUJE (TOMINI)
    'alolongoome   *binee**'e***   *unga'e.*
    'alolong-O-Vme   b<in>ee-'u   unga-'u
    rope-EPV-2S.GEN   <RLS(UV)>give-1S.GEN   child-1S.GEN
        'I gave your rope to my child.'

As also illustrated by these examples, the shape of the prefix series usually mirrors the suffixed series used to express actors in the undergoer voice (as in (28)), which here is glossed as GEN(ITIVE) because this series usually functions both for marking possessors in possessive constructions (cp. Lauje *unga'e* in (28)) and for non-subject actors in undergoer voice constructions. Such a genitive series occurs in most western Austronesian languages and it is always suffixal (or enclitic, the difference often being difficult to diagnose).[10] Hence, it seems very likely that the preposed person markers found in many Sulawesi languages historically derive from the enclitic genitive series, as suggested by Jonker (1911),[11] Haaksma (1933) and Wolff (1996), among others. We will return to this issue below. First, however, the variation attested in person-marking systems in Sulawesi languages is illustrated further.

   South Sulawesi person-marking systems show a major innovation in that the former pronominal clitics/affixes have become proper agreement (or cross-reference) markers. That is, they may co-occur with co-referential lexical NPs, but they do not have to be accompanied by them. Furthermore, South Sulawesi languages show both a proclitic and an enclitic series, as illustrated with Makassarese pronouns in Table 7. Their pronoun paradigms are somewhat reduced compared to other western Austronesian languages as they do not systematically distinguish singular and plural forms.

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[10] Cp. Himmelmann (2001b:91f) for an argument as to why the Lauje person markers in examples (27) and (28) can be analysed as suffixes and Kaufman (2010) for a thorough analysis of clitics in WMP languages, with a special focus on Tagalog and Sulawesi languages.

[11] Jonker (1911) reconstructs the prefix series to the Proto-Malayo-Polynesian level, in this regard resembling the approach developed in Lemaréchal (2010). If this is assumed to be correct, the phenomena reviewed here would need to be accounted for in terms of restructuring and loss.

Table 7: Pronominal clitics in Makassarese (South Sulawesi, Jukes 2006:143f)[12]

	Proclitics	*Enclitics*	*Possessive*
1	*ku=*	*=a'*	*=ku*
2 familiar	*nu=*	*=ko*	*=nu*
lp.in/2 polite	*ki=*	*=ki'*	*=ta*
3	*na=*	*=i*	*=na*

The proclitic series is again clearly related to the genitive (possessive) enclitics (same shape excepting possessive first person inclusive =*ta*). The enclitic series is related to the subject form of the pronouns, which often allows for both clitic and free uses in most Philippine and a few Sulawesi languages (the latter often only allow free form pronouns in subject function).

    Examples (29) and (30) show that both the proclitic and the enclitic series may cross-refer to full NPs in the same clause. The enclitics cross-reference the single core argument of intransitive predicates (S) and the undergoer argument of transitive predicates (P). The proclitics cross-reference actors of transitive arguments. (30) also shows that no strict ordering rules apply to lexical arguments.

(29) MAKASSARESE (SOUTH SULAWESI)
    *Tinro=**i**   i   Ali.*
    sleep=3 HON Ali
      'Ali is sleeping.' (Jukes 2006:333)

(30) MAKASSARESE (SOUTH SULAWESI)
    *Na=cinik=**i** tedongku   i   Ali.*
    3=see=3   buffalo-1.POSS HON   Ali
      'Ali sees my buffalo / my buffalo sees Ali.' (Jukes 2006:340)

On first sight, the distribution of the pro- and enclitic series may look like a straightforward ergative pattern, with transitive actors (A) being cross-referenced by proclitics, and transitive undergoers (P) and single core arguments of intransitive predicates (S) by enclitics. However, this is not quite as straightforward as it appears, since in negated sentences the single core argument of an intransitive predicate is marked by the supposedly ergative *pro*clitic, as seen in the following example:

(31) MAKASSARESE (SOUTH SULAWESI)
    *Tena   **na**=tinro.*
    NEG   3=sleep
      She doesn't/didn't sleep. (Jukes 2006:320)

In transitive clauses, there are two possibilities. Either the negated clause pattern is identical to the non-negated one (cp. (32)), or both actor and undergoer are represented by the 'ergative' proclitics, as in (33).

(32) MAKASSARESE (SOUTH SULAWESI)
    ***Ku**=buntul=uk=**ki'**.   Tena (na)   **ku**=buntul=uk=**ki'**.*
    1=meet=EPV=2.POL   NEG   COMP 1=meet=EPV=2.POL
      'I met you.'   'I didn't meet you.'   (Jukes 2006:322)

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[12] The rarely used archaic form =*kang* for first plural exclusive has been omitted. Jukes (2006) analyses the possessive series as 'affixal clitics' in order to account for the fact that these markers show evidence for both clitic and affixal status.

(33) MAKASSARESE (SOUTH SULAWESI)
Tena   (na)   ki=ku=buntul=u'.
NEG   COMP   2.POL=1=meet=EPV
    'I didn't meet you.' (Jukes 2006:322)

In both instances, the negator may optionally be followed by the complementiser *na*. This suggests that, at least historically speaking, we are dealing here with a kind of complement construction in which a matrix predicate (the negator in the preceding examples) governs an embedded predicate. In such a construction, what now appear to be proclitics may also be realised as enclitics on a preceding constituent. In fact, some speakers actually allow just that, i.e. an enclitic realisation of the proclitics:

(34) MAKASSARESE (SOUTH SULAWESI)
ri   allo-nna   arabaia   tette'   sampulo–asse're na=ku ...   a'-lampa
LOC day-3.POSS Wednesday o'clock ten-LK.one   COMP=1   INTR-go

ammekang   ri   Bulukumba.
TR:hook   LOC Bulukumba
    'On Wednesday at 11 o'clock I went fishing at Bulukumba.' (Jukes 2006:324)

We will return to possible scenarios for the historical development below. First, another major parameter of variation needs to be added, primarily attested in south-eastern Sulawesi. Here, it is typical to find *two* series of proclitics/prefixes, as illustrated for Tukang Besi in Table 8.

Table 8: Verbal agreement in Tukang Besi (Donohue 1999)

Position:	Pre-root			Post-root	Independent
Role:	S,A			O	(any)
(mood):	Realis	irrealis			
1s	*ku-*	*ku-*		*=aku*	*iaku*
2s	*'u-*	*ko-*		*=ko*	*iko'o*
3(SG, PL)	*no- / o-*	*na- / a-*		*='e*	*ia, amai*
1 PAUCAL	*ko-*	*ka-*		*=kami*	*ikami*
1 PLURAL	*to-*	*ta-*		*=kita*	*ikita*
2P	*i-*	*ki-*		*=komini*	*ikomiu*

The two series mark the modal distinction characteristic of symmetrical voice systems; that is, realis vs. non-realis eventualities (example (35)). They are usually analysed as agreement markers, meaning they can co-occur with co-referential full NPs, which, however, are not grammatically required (example (36)). Finally, the prefixes cross-reference the single core argument of intransitive clauses and the actor argument of transitive clauses (i.e. they clearly show nominative alignment).

(35) TUKANG BESI
no-baiara-'e   na-baiara-'e
3s.RLS-pay-3s   3s.NRLS-pay-3s
    'She has paid it.'   'She is going to pay it.' (Donohue 1999:153)

(36) TUKANG BESI
no-tapa-'e   na   ana   te   wowine
3s.RLS-slap-3s   ART   child   ART   woman
    'The woman slapped the child.' (Donohue 1999:164)

(37) TUKANG BESI
Jari no-'eka   di   wunua-no.

so   3S.RLS-climb   LOC house-3.POSS
    'So she went up to her house.' (Donohue 1999:152)

A full account of the historical development of the different person-marking systems reviewed above must provide for the different alignment options, the different number of paradigms (up to two prefix series and one suffix series), and the propensity of one prefix series to mark non-realis mode, if modal distinctions are marked at all on the verb. While many details are still missing for such a comprehensive account, it seems very likely that the prefixal series has its origins in a construction with the following features: an auxiliary-like matrix predicate followed by a subordinate predicate usually in a special subjunctive mode. The clitic pronoun or pronouns specifying arguments of the subordinate predicate are second-position clitics and thus occur in between the matrix and subordinate predicates. This construction type is widely attested in Philippine languages. The following example is from Cebuano and illustrates the regular negation construction, in which the negator *waʔ* functions as the matrix predicate governing the subjunctive form of the embedded predicate:

(38) CEBUANO

    waʔ   ***niya***   *saky-**i***   *ang*   *taksi*
    NEG.PAST   3S.GEN   ride.on-LV.SBJ   SPEC   taxi
      'He did not ride in the taxi.' (Zorc 1977:151)

In this kind of construction, the actor clitic precedes its predicate in a non-realis construction. However, more steps are required to get from here to the kind of construction illustrated from Lauje in (27). Most importantly, the genitive actor enclitic (*niya* in (38)) has to become a *pro*clitic and thus loses its status as a second position clitic. To the best of my knowledge, the factors and steps involved here are not yet well understood.

    Furthermore, in order to get to the state of affairs illustrated by Makassarese, one needs a construction that allows for the co-occurrence of a pronominal clitic/affix and a coreferential, phonologically independent expression (full noun or pronoun). Constructions that instantiate such a scenario are occasionally attested. The following example illustrates the standard construction in Tajio for expressing volitive modality. Here again, an auxiliary-like element (*seelu*) functions as matrix predicate:

(39) TAJIO (TOMINI)

    sia'u *seelu='u mom-bava*   *te=paku boi* *kua='u*   *mom=bava* *te=gola*
    1S   want=1S AV.NRLS-take ART=nail but   not.want=1S AV.NRLS-take ART =sugar
      'I wanted to take the nail but I did not want to take the sugar.' (Mayani 2013)

The two constructions in (38) and (39) are not identical with regard to the grammatical status of the actor clitic. In (38) we are dealing with a second-position clitic (in Philippine languages, clitics usually occur in second position regardless of the function of the first constituent of the clause), while in (39) we are dealing with a possessive clitic on an auxiliary-like element (there are no second-position clitics in Tajio). Hence, there are two possible source constructions for the prefixal person markers we have reviewed in this chapter, which can be schematically represented as follows:

(40) POSSIBLE SOURCE CONSTRUCTIONS FOR SULAWESI PERSON MARKERS

a)   [(XP$_i$) [predicate/AUX=pron.clitic$_{GENi}$ [verb$_{SBJ}$ YP]]] -> [proclitic$_i$=verb XP$_i$ YP]

b)   [(XP$_i$) [AUX=2nd position clitic$_i$ verb$_{SBJ}$ YP]] -> [proclitic$_i$=verb XP$_i$ YP]

In fact, it is very well possible that both these constructions played a role in the emergence of the proclitic person markers. The great diversity of person-marking systems suggests a scenario in which a number of independent parallel developments occurred across the different Sulawesi

subgroups. The probably most complex outcome of such developments is found in the Bungku-Tolaki subgroup, where a language such as Padoe shows *two* enclitic series alongside one proclitic series plus a phonologically free form immediately preceding the verb, which is used for non-realis and future events (see Mead (2002:161–167) for details). The following examples illustrate one of the two enclitic series (used for transitive actors and intransitive subjects), the proclitic series (also used for arguments in S/A function), and the 'future' pronoun series (on this cp. also Esser & Mead 2011:114 passim). Note that in example (43) it is primarily the form of the pronoun that indicates future time reference.

(41) PADOE (BUNGKU-TOLAKI)
      *Mo-nahu-**aku**-to   inehu.*
      TR1-cook-1S-PERF   vegetables
          'I cooked vegetables.'   (Mead 2002:162)

(42) PADOE (BUNGKU-TOLAKI)
      *Inehu   mbio   **au**-po-nahu.*
      vegetable what   2S- TR1-cook
          'What vegetables are you cooking?'   (Mead 2002:163)

(43) PADOE (BUNGKU-TOLAKI)
      ***Lo'iro**   mo-nahu   inehu.*
      3P   TR1-cook   vegetables
          'They will cook vegetables.'   (Mead 2002:164)

3.4 Applicatives

Two suffixes that are widely attested as integral parts of Philippine-type symmetrical voice systems, *-an* and *-i*, have clearly applicative functions in many of those Sulawesi languages in which the voice systems have been reanalysed and reorganised. A particularly complex case, which possibly shows a system in transition, is found in the Central Sulawesi language Totoli, discussed in detail in Himmelmann & Riesberg (2013). The following two Totoli examples illustrate typical uses of the two applicatives widely attested in Sulawesi, one benefactive/instrumental and the other goal/recipient (cp. also Donohue 2001).

(44) TOTOLI
      i   Rinto   manaipan   aku   taipang
      i   Rinto   moN-taip-an   aku   taipang
      HON   Rinto   AV-peel-APPL1 1S   mango
          'Rinto peels mangos for me.' (Himmelmann & Riesberg 2013:401)

(45) TOTOLI
      Aco   anu   ku-been-i   hadiah
            REL   1S.ACT-give-APPL2   present
          'Aco, who I will give a present to.' (Himmelmann & Riesberg 2013:418)

However, a newly innovated suffix, probably cognate with the extant Malay preposition *akan* 'about, regarding, for', is widely attested throughout western Indonesia, including the southern half of Sulawesi. While also covering benefactive and instrumental applicative functions, this suffix usually covers a very broad range of functions and is often simply characterised as 'transitivising'. Malay *-kan*, for example, is used for causative derivations from adjectives and nouns, as well as instrumentals and benefactive applicatives and a host of other functions. A particularly complex example from Sulawesi is Mori *-ako* discussed in detail by Esser & Mead (2011:482–503, see also Mead 2005:702–705).

It is likely that this applicative suffix arose through a process called 'preposition capture' in the Austronesianist literature, referring to the reanalysis of a preposition first as a postverbal clitic and then a suffix (cp. Sirk 1996 for a discussion relating to Sulawesi languages). Adelaar (2011) convincingly argues that current attestations of this suffix may reflect contact-based diffusion in areas strongly dominated by Malay, rather than reflecting the common heritage of a single proto-language.

3.5 Directionals

A widespread feature in northern Sulawesi languages is the occurrence of directional particles, which tend to be part of almost every verbal construction (cp., for example, Himmelmann & Wolff 1999:72–82, Brickell 2014:258–264, Lobel 2015:423). The indicated directionality is often transparent, as in the following Ratahan example:

(46) RATAHAN
nang-ule **mai** *su Watulinei*
AV.PST-return VEN LOC Watulinei
'(The ones who) returned from over in Watulinei.' (Himmelmann & Wolff 1999:81)

In other cases, it is less clear how the reported eventuality involves directionality. In the following example, the directional possibly indicates that the crying of the baby in the kitchen can be heard by speaker and hearer sitting next door.

(47) TOTOLI
ntonggismai *Bibi dei abu*
no-tonggis =mo=ai Bibi dei abu
AV.RLS-scream=CPL=VEN LOC kitchen
'Bibi is crying in the kitchen' (conversation_2.0929)

The directionals may be used quite subtly to keep track of who is doing something to whom in narratives where participants are not explicitly mentioned for extended sequences of predicates, despite the fact that it is often not quite clear who is actor and who undergoer.

(48) TOTOLI
no-kudut *ni-kket-an=na=**ko***
ST.RLS-break RLS-laugh-UV2=3S.GEN =AND

ita-i *sia* *no-k<um>eket=**ai***
see-APPL2 3S AV.RLS-<SF.MOT>-laugh=VEN
'(she said the sandals are) broken, she laughed at (him), seeing him, she laughed (was shaken by laughter/laughter came to her)' (conv_cl)

The directionals tend to be weakly grammaticised as they may often still be used as main predicates in some languages:

(49) RATAHAN
roku *um-intu-intu* *atau roku* **mai** *nu apa*
NEG.IMP AV-RDP-descend or NEG.IMP come GEN where
'(If the soldiers come) don't go down, don't go anywhere.' (Himmelmann & Wolff 1999:75)

That is, the directionals are often transparently related to words meaning 'come', 'go', 'climb', 'cross' or 'descend'. While usable as main-clause predicates, these words tend to be defective verbs in that they do not show the morphology typical for 'proper' verbs (in the languages of the northern half of Sulawesi, this would be voice morphology in particular).

4. Grammaticisation of complex constructions

The clearest example of subordinate clause constructions in many Sulwesi languages are relative clauses. These quite often involve an initial relative clause marker deriving from the word for 'person', as for example Tajio *to* (< *too* 'person') or Balantak *men* (< *mian* 'person').

(50) BALANTAK
    *mian   [**men**   mang-asok   rombia'] ...*
    person   REL   AV.IRR-plant sago.tree
        'People who plant sago trees ...'   (van den Berg & Busenitz 2012:222)

Alternatively, the relative-clause marker is derived from, or identical to, the word for '(some)thing', as with Totoli *anu* (illustrated in (45) above).

However, other strategies, including simple juxtaposition, are also possible. In south-eastern Sulawesi, use of a 'participial' verb form involving the affixes *-um-* or *-in-/ni-* are widespread, cp. the Tolaki example in (20) (see also van den Berg 1989:231ff, Donohue 1999:367–387). In Makassarese, relative clauses are marked by adding the definite enclitic *=a* to the predicate of the relative clause, which otherwise is not distinguished from a main clause (Jukes 2006:238–242).

Alternatively, constructions that tend to involve subordinate clause constructions, including adverbial or complement clauses, are in many languages often expressed by simple juxtaposition or by the use of nominalised verb forms. Subordinating conjunctions are widely borrowed from Malay, but the clauses thus introduced typically do not show any other signs of subordination.

5. Comparative outlook

Many of the developments discussed in the preceding sections are also found outside of Sulawesi and thus can, to some degree, be deemed representative for the larger Austronesian family. There are certainly other developments not discussed here, in part simply because there is still very little known about grammaticisation phenomena proper in the western (non-Oceanic) half of the family, as mentioned in the introduction. This section is limited to discussing a single development that has occurred outside Sulawesi, as it would appear to be highly unusual also from a wider cross-linguistic perspective.

A quite unusual grammaticisation path has been proposed for the passive prefix *di-* found in many Malayic varieties, which has given rise to a number of different hypotheses conveniently summarised in Adelaar (2005, 2009). The following example illustrates the active/passive alternation marked by this prefix. Note that this is a proper passive alternation where the passive counterpart of the transitive active construction is intransitive, the actor occurring in a prepositional phrase (but see Riesberg 2014b). This differs from the symmetrical voice alternations discussed in earlier sections where both voices involve transitive constructions.

(51) MALAY
 a) *Anak   saya   me-lihat   orang   itu.*
     child   1s   AV-see   person   DIST
        'My child saw that person.'

 b) *Orang itu   **di-**lihat   oleh anak   saya.*
     person   DIST PASS-see by   child   1s
        'That person was seen by my child.'

Adelaar (2005) argues that this prefix derives from the highly general, originally probably locative preposition *di*. The proposed source construction involves a semantically transitive verb immediately preceded by an actor phrase marked by the preposition *di*, as seen in the Salako example (52)a. As (52)b shows, the noun complement of the preposition can actually be omitted in Salako, the 'preposition' then becoming a proclitic to the verb.

(52) SALAKO (KENDAYAN)

a) *Bini-e*   *dah*   *matbi*   ***di*** *kayo*   *munuh.*
    wife-3.POSS   PERF   dead   by   enemy   RLS:kill
       'His wife was killed by the enemy.' (Adelaar 2005:129)

b) *Bini-e*   *dah*   *mati*   ***di=munuh.***
    wife-3.POSS   PERF   dead   PASS=RLS:kill
       'His wife was killed.' (Adelaar 2005:129)

Adelaar (2009) shows that an essentially similar development may have happened in Javanese, where the modern passive prefix *di-* ultimately derives from a noun *de* (< *day/*dai) 'cause, reason, action, way, manner'.

     Importantly, the verb form *munuh* in the above examples[13] is undergoer-oriented in the Salako source construction (52)a. Thus the passive meaning of the overall construction has its origins in the overall construction including, in particular, the verb form, not solely in the preposition. Hence, it would be misleading to declare this an instance of a preposition being the source for a passive construction, as the gram-based grammaticalisation literature would have it. It would not make sense to postulate a grammaticisation path from locative to passive meanings similar to the kind of paths postulated by Bybee et al. (1994) for the tense-aspect-mood domain.

6. Conclusion

The current chapter has reviewed a number of grammaticisation phenomena found in Sulawesi languages which in many ways can be deemed to be representative of grammaticisations widely attested in (western) Austronesian languages. Most of the developments are, in principle, well-known from the general grammaticisation literature. To wit:

- numeral classifiers from words for 'person', 'branch', 'fruit' etc. (sect. 2.1)
- associative plurals from plural pronouns (sect. 2.2)
- articles from demonstratives and third person possessive pronouns (sect. 2.4)
- the development of passive markers from an originally perfective- or realis-marking infix (sect. 3.1)
- imperfectives marked by reduplication (sect. 3.2)
- completive and incompletive markers from particles meaning 'already' and 'still', respectively (sect. 3.2): this is a development that may be more restricted to Sulawesi and the Philippines.
- verbal person markers from clitic pronouns (sect. 3.3)
- applicatives from prepositions (sect. 3.4)
- directionals from verbs meaning 'come', 'go', 'climb', 'descend' (sect 3.5)
- relative-clause markers from words for 'person' or 'thing' (sect. 4)

Still, some of the developments are somewhat unusual from a larger cross-linguistic perspective (though not necessarily from the narrower Austronesian context). While articles derive from demonstratives, they form tightly integrated paradigms with (locative) prepositional elements, resulting in cross-linguistically highly unusual paradigms of noun-phrase markers (sect. 3.3). Furthermore, the late stages in the grammaticisation of articles involve phonological factors to date not widely noted in the literature (also sect. 3.3).

     Similarly, the grammaticisation of personal pronouns from free forms and second position clitics to verbal affixes/clitics, while widely attested in the languages of the world, leads to cross-linguistically unusual results due to the specific context in which it appears to have taken place.

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[13] Adelaar (2005:129) observes with regard to this form: 'note that in this language nasalisation also applies in passive constructions denoting a completed action'. Strictly speaking, the form *munuh* is multiply ambiguous, as it could be the realis form of the verb *bunuh* in either actor or undergoer voice, or the non-realis form in actor voice. This multiple ambiguity may have been a factor in the reanalysis of *di* as a marker for undergoer voice.

Proclitic and prefixed person markers in Sulawesi languages—and more generally in the Austronesian world—are not simply pronominal copies of topicalised constituents as proposed in Givón (1976). Rather, they arise in the context of subordinating constructions conveying non-realis meanings.

A final, somewhat unusual development that has occurred outside of Sulawesi in Malayic and other languages in western Indonesian is the development of a preposition to a passive marker, as briefly discussed in section 5.

Abbreviations

1	FIRST PERSON	LOC	LOCATIVE
2	SECOND PERSON	LV	LOCATIVE VOICE
3	THIRD PERSON	MOT	MOTION BY ACTOR
ACT	ACTOR	N	NASAL PREFIX
AN	ANIMATE	NEG	NEGATION
AND	ANDATIVE (DIRECTIONAL)	NRLS	NON-REALIS
APPL	APPLICATIVE	P / PL	PLURAL
ART	ARTICLE	PASS	PASSIVE
AV	ACTOR VOICE	PAST	PAST
CMP	CENTRAL MALAYO-POLYNESIAN	PERF	PERFECTIVE
CLF	CLASSIFIER	POL	POLITE
COMP	COMPLEMENTISER	POSS	POSSESSIVE
CPL	COMPLETIVE	PRX	PROXIMAL
DAT	DATIVE	RDP	REDUPLICATION
DEF	DEFINITE ARTICLE	REL	RELATIVE
DIST	DISTAL	RLS	REALIS
EPV	EPENTHETIC VOWEL	S / SG	SINGULAR
EX	EXCLUSIVE	SBJ	SUBJUNCTIVE
EXIST	EXISTENTIAL	SF	STEM-FORMING AFFIX
GEN	GENITIVE	SHWNG	SOUTH HALMAHERA-WEST NEW GUINEA
HON	HONORIFIC (ARTICLE)		
ICPL	INCOMPLETIVE	SPEC	SPECIFIC ARTICLE
IMP	IMPERATIVE	ST	STATIVE
IN	INCLUSIVE	TR	TRANSITIVE PREFIX
INAN	INANIMATE	UV	UNDERGOER VOICE
INTR	INTRANSITIVE	VEN	VENITIVE (DIRECTIONAL)
IRR	IRREALIS	WMP	WESTERN MALAYO-POLYNESIAN
LK	LINKER/LINKING NASAL		

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