Mermaid construction : An introduction and summary

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Tasaku Tsunoda
Professor Emeritus, National Institute for Japanese Language and Linguitics

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1. Prototype of the mermaid construction

1.1 Definition and examples

The prototype of the mermaid construction (hereafter, MMC) has the following three properties.

(a) It has the structure shown in (1).
(b) The subject of the 'Clause' and the 'Noun' are not coreferential.
(c) The 'Clause' can be used as a sentence by itself.

(1)   Prototype of the mermaid construction ('MMC'):
      [Clause]   Noun   Copula.[1]

The 'Noun' refers to an independent word (not a clitic) that is a noun.

Examples are cited from Modern Japanese (to be precise, so-called Standard Japanese): (2) to (4). The 'Clause' is indicated by means of preceding and following square brackets.

(2)   [*Hanako=wa   Nagoya=ni   ik-u*]
      Hanako=TOP   Nagoya=DAT/LOC   go-NPST
      yotee=da.
      plan=COP.NPST
      LT: 'Hanako is a plan [such that she] goes/will go to Nagoya.'
      FT: 'Hanako plans to go to Nagoya.'
(3)   [*Hanako=wa   hon=o   yon-de   i-ru*]
      Hanako=TOP   book=ACC   read-GER   be-NPST
      tokoro=da.
      place=COP.NPST
      LT: 'Hanako is a place [such that she] is reading a book.'
      FT: 'Hanako is reading a book.'
(4)   [*Soto=de=wa   ame=ga   hut-te   i-ru*]
      outside=LOC/INS=TOP   rain=NOM   fall-GER   be-NPST
      moyoo=da.
      appearance=COP.NPST
      LT: 'As for the outside, the rain is an appearance [such that it] is
           falling.'
      FT: 'It appears/seems to be raining outside.'

All of (2) to (4) are instances of the prototype of the MMC; they have all of the three properties listed above.

Regarding the property (a), (2) to (4) have the structure shown in (1).

Concerning the property (b), the subject of the 'Clause' (*Hanako*) is not coreferential with the 'Noun': *yotee* 'plan' in (2) and *tokoro* 'place' in (3).

Hanako is a human being. She is not a plan or a place. In (4), the subject of the 'Clause' (*ame* 'rain') is not coreferential with the 'Noun', i.e. *moyoo* 'appearance'. The rain is a meteorological phenomenon, and it is not an appearance.

As for the property (c), the 'Clause' in (2) to (4) can be used as a sentence by itself. Compare (2) with (5); (3) with (6); and (4) with (7).

(5) *Hanako=wa*   *Nagoya=ni*   *ik-u.*
    Hanako=TOP   Nagoya=DAT/LOC   go-NPST
    'Hanako goes/will go to Nagoya.'

(6) *Hanako=wa*   *hon=o*   *yon-de*   *i-ru.*
    Hanako=TOP   book=ACC   read-GER be-NPST
    'Hanako is reading a book.'

(7) *Soto=de=wa*   *ame=ga*   *hut-te*   *i-ru.*
    outside=LOC/INS=TOP   rain=NOM   fall-GER be-NPST
    LT: 'As for the outside, the rain is falling.'
    FT: 'It is raining outside.'

(In the following, I shall often refer to the prototype of the MMC simply as the MMC — unless I am explicitly referring to non-prototypical instances.)

1.2 Unusual characteristics of MMC

The MMC has unusual characteristics, in terms of syntax and semantics. Examples are cited from Modern Japanese.

[1] Syntax

As just seen, the 'Clause' of the MMC can be used by itself as a sentence.

Now, in (2) to (4), the 'Clause' of the MMC is a verb-predicate clause, whose predicate is a verb. However, the MMC ends with 'Noun + Copula'. In this respect, it resembles a noun-predicate sentence. Examples of noun-predicate sentence include (8).

(8) *Hanako=wa*   *gakusee=da.*
    Hanako=TOP   student=COP.NPST
    'Hanako is a student.'

That is, (2) to (4) have an unusual structure. Their first part has the structure of a verb-predicate clause/sentence, while their second part has that of a noun-predicate clause/sentence. They resemble a mermaid in that they exhibit a combination of two different structures: the structure of a verb-predicate clause/sentence and that of a noun-predicate clause/sentence. It is for this reason that I coined the term 'mermaid construction' ('MMC') for them.

The 'Clause' in (2) to (4) is a verb-predicate clause. Alternatively, an adjective-predicate clause can occupy the 'Clause' slot, e.g. (9). This, too, is an instance of the prototypical MMC. First, it has the structure shown in (1). Second, the subject of the 'Clause' (i.e. Hanako) is not coreferential with the

'Noun', i.e. nature. Third, the 'Clause' can be used by itself as a sentence; see (10).

(9)   [*Hanako=wa*   *akaru-i*]   *seekaku=da.*
       Hanako=TOP   be.cheerful-NPST   nature=COP.NPST
       LT: 'Hanako is a nature [such that she] is cheerful.
       FT: 'Hanako has a cheerful nature.'
(10) *Hanako=wa*   *akaru-i.*
       Hanako=TOP   be.cheerful-NPST
       'Hanako is cheerful.'

Similarly, a noun-predicate clause can occupy the 'Clause' slot, and the sentence is a prototypical MMC.

(11) [*Hanako=wa*   *tensai=de*   *ar-u*]
       Hanako=TOP   genius=COP.GER   be-NPST
       tumori=da.
       intention=COP.NPST
       LT: 'Hanako is an intention [such that she] is a genius.'
       FT: 'Hanako considers herself a genius.'
(12) *Hanako=wa*   *tensai=de*   *ar-u.*
       Hanako=TOP   genius=COP.GER   be-NPST
       'Hanako is a genius.'

(In the 'Clause' of (11) and also in (12), the copula is in the periphrastic form, which consists of the gerund form of the copula (=*de*) and the verb *ar-* (here used as an auxiliary verb)). The periphrastic form sounds formal.)

Like (2) to (4), both (11) and (12) are combinations of two structures: an adjective/noun-predicate clause + a noun-predicate sentence.

[2] Semantics
Semantically as well, (2) to (4) are peculiar. When literally interpreted, these sentences do not make sense. A literal translation of (2) is 'Hanako is a plan [such that she] goes/will go to Nagoya'. Obviously, however, Hanako is a human being, and not a plan. A literal translation of (3) is 'Hanako is a place [such that she] is reading a book now'. Again, Hanako is a human being, and not a place. A literal translation of (4) is 'As for the outside, the rain is an appearance [such that it] is falling'. The rain is a meteorological phenomenon, and it is not an appearance.

To sum up, sentences such as (2) to (4) are peculiar, both syntactically and semantically. Syntactically, they are like mermaids. They are each a combination of two different structures. Semantically, when literally interpreted, these sentences do not make sense.

1.3 Constructions that are not MMC

There are constructions that may look similar to the MMC, but that are in fact not. Two selected cases are given. Examples are cited from Modern

Japanese.

[1] Noun-predicate sentences whose predicate contains an adnominal clause ('AC')

These sentences have the structure shown in (13).

(13) Subject   Predicate   Copula
                (AC + noun)

Examples include the following. The AC is shown by a broken line.

(14) *Kore=wa*   *Hanako=ga*   *tukut-ta*   *yotee=da.*
              - - - - - - - - - - - - - - - - - -

      this=TOP   Hanako=NOM   make-PST   plan=COP.NPST
      Subject   Predicate
      'This is the/a plan that Hanako made.'

(15) *Hanako=wa*   *hon=wo*   *yon-de*   *i-ru*
               -

      Hanako=TOP   book=ACC   read-GER   be-NPST
      Subject   Predicate

      gakusee=da.
      student=COP.NPST
      Predicate
      'Hanako is the/a student who is reading a book.'

Indeed, the MMC (e.g. (2) to (4)) and sentences such as (14) and (15) may look similar. Specifically, it may look as if the MMC, too, had the structure shown in (13). (Indeed, many previous studies of Japanese maintain this view.) However, they have different structures. (See Tsunoda, (this volume, 6.4).) (In the following, when a paper in this volume is cited, generally 'this volume' will not be mentioned. That is, 'Tsunoda (this volume, 6.4)' will be cited as 'Tsunoda (6.4)'.)

First, in sentences such as (14) and (15), the AC can be deleted, and the resultant sentence is acceptable. Compare (15) with (8); and (14) with (16).

(16) *Kore=wa*   *yotee=da.*
      this=TOP   plan=COP.NPST
      Subject   Predicate
      'This is a plan.'

In contrast, in the case of the MMC, the deletion of what may look like an AC yields nonsensical sentences. Compare (2) with (17); (3) with (18); and (4) with (19).

(17) ?*Hanako=wa*   *yotee=da.*
      Hanako=TOP   plan=COP.NPST
      LT: 'Hanako is a plan.'

(18)　?*Hanako=wa*　　　*tokoro=da.*
　　　Hanako=TOP　　　place=COP.NPST
　　　LT: 'Hanako is a place.'

(19)　?*Soto=de=wa*　　　　　*ame=ga*　　*moyoo=da.*
　　　outside=LOC/INS=TOP　rain=NOM　appearance=COP.NPST
　　　LT: ?'As for the outside, the rain is an appearance.'

Recall that one of the three properties of the prototype of the MMC is the following (1.1):

(b) The subject of the 'Clause' and the 'Noun' are not coreferential.

We saw in 1.1 that (2) to (4) have this property. In contrast, (14) and (15) lack this property. For example, in (15), *Hanako* and *gakusee* 'student' are coreferential. In contrast, in (3), *Hanako* and *tokoro* 'place' are not coreferential.

Second, sentences such as (14) and (15) have the structure shown in (13), repeated as (20-a). That is, the predicate contains an AC. The AC may have its own subject, as distinct from the subject of the entire sentence. In (14), for example, the subject of the entire sentence is *kore* 'this' and the AC has its own subject: *Hanako*. The structure of (14) can be shown as in (20-b). The AC may not have its own subject. See (15). The subject of the AC, i.e. *gakusee* 'student', is relativized on, and it constitutes a 'gap' (*e*). The structure of (15) may be shown as in (20-c). For the reader's convenience, the structure of the prototype of the MMC, i.e. (1) is repeated in (21).

(20)　Noun-predicate sentences whose predicate contains an AC
　　　a.　Subject　Predicate　　　　　　　Coupla
　　　　　　　　　　(AC + noun)
　　　b.　Subject$_i$　Subject$_j$ ... noun　　Copula
　　　c.　Subject$_i$　e_j ... noun$_j$　　　Copula
(21)　Prototype of the MMC
　　　[Clause]　　Noun　　　　Copula

In contrast, the MMC cannot have two subjects, unlike (20-b) (cf. (14)). Also, it is difficult to set up a 'gap', unlike (20-c).

We have given two pieces of evidence to show that the MMC and sentences such as (14) and (15) have different structures — contrary to the view advanced in many previous studies of Japanese. (This is discussed in Tsunoda (6.4).) This in turn shows that the MMC should be distinguished from noun-predicate sentences whose predicate contains an AC. We shall further discuss the structure of the MMC in 5.4 below.

We have shown that the structure of the MMC differs from that of noun-predicate sentences whose predicate contains an AC. Nonetheless, it is likely that, in Japanese at least, the MMC originated in the latter sentences. See 7.3-[2] below and Miyachi (Sections 5, 6 and 7.6).

[2] Existential/possessive construction

In Modern Japanese, existence/possession can be expressed by means of the existential verb *ar-* and the DAT/LOC-NOM case frame. The DAT/LOC case postposition may be absent. (The verb *ar-* can also be used as an auxiliary verb, e.g. (11), (12).) An example is (22). Now, consider (23).

(22) *Hanako=ni=wa*   (or *Hanako=wa*) *ie=ga*
   Hanako=DAT/LOC=TOP (Hanako=TOP) house=NOM
   ar-u.
   exist-NPST
   LT: 'As for to/at Hanako (or, As for Hanako) a house exists.
   FT: 'Hanako has a house.'

(23) *Hanako=ni=wa*   (or *Hanako=wa*)
   Hanako=DAT/LOC=TOP (Hanako=TOP)
   Nagoya=ni   *ik-u*   *yotee=ga*
   Nagoya=DAT/LOC go-NPST plan=NOM
   ar-u.
   exist-NPST
   LT: 'As for to/at Hanako (or, As for Hanako), a plan to go (or, a
     plan [such that she] goes/will go) to Nagoya exists.'
   FT: 'Hanako has a plan to go to Nagoya.'

(23) may look similar to the MMC. However, I consider it an instance of the existential/possessive construction, and not an instance of the MMC. The reasons are as follows.

First, (23) involves the existential verb *ar-*. In contrast, the MMC involves the copula.

Second, the relevant noun, i.e. *yotee* 'plan', is followed by the nominative case marker. In contrast, the 'Noun' in the MMC is followed by no case marker. It is followed by the 'Copula'.

2. History of research into MMC

In Section 2, I shall use the term 'the noun-concluding construction' ('NCC') in addition to 'the mermaid construction' ('MMC'). As noted in 1.2, the MMC exhibits a combination of two structures: a verb-predicate clause (or some other clause) + a noun-predicate clause. The noun-predicate clause may follow or precede the other clause. The NCC is a type of the MMC in which the noun-predicate follows, not precedes, the other clause.

Probably in all the languages investigated in the present volume, the existence of instances of what I have labelled the MMC was already known. However, they did not seem to attract much attention of linguists, and they did not seem to be recognized as a distinct construction.

To the best of my knowledge, it is Matisoff (1972) who first stated that what I later labelled the MMC is uncommon. He examined one type of MMC (to be specific, one type of NCC) found in Lahu, Jinghpaw, Burmese, Tibetan (all Tibeto-Burman languages), Chinese, and Japanese, and

described it as 'a phenomenon that is quite alien from the point of view of standard average European languages but surprisingly widespread elsewhere'. Matisoff's view is best appreciated in a discussion of the syntactic structure of the MMC, and it will be discussed in 5.4.

For Japanese, it is probably Tsunoda (1994-a, 1994-b, 1994-c, 1996) who first proposed to recognize the peculiarity of sentences such as (2) to (4) and to distinguish them as a distinct construction. Previous studies of Japanese analyzed them as a structute that contain an AC and the head noun (Tsunoda, 6.4). I labelled these sentences as *taigen-jime-bun* 'noun-concluding construction' ('NCC'), since they end with a noun (followed by the copula) even when the sentence starts with what has the structure of a verb-predicate clause/sentence. On the basis of information from relevant specialists, as of 1996, I (tentatively) concluded as follows.

(a) The NCC or something similar was found in the following languages: Ainu, Korean, Mongolian, Turkish, and Tibetan, in addition to Japanese. They are all languages of Asia. Also, they are agglutinating, SOV, and postpositional.

(b) The NCC (or something similar) was not found in Nanay, Yukaghir, Tamil, Kannada, Quechua, Aymara or Eskimo.

(c) The NCC was found in Asia, and it was not found elsewhere.

(d) It was not the case that every SOV, agglutinating and postpositional language had the NCC. (The languages listed in (b) appeared to be SOV, agglutinating and postpositional.) The conditioning factor that favoured the existence of the NCC was not known.

From October 2009 to March 2012, at the National Institute for Japanese Language and Linguistics, where I served as the Director of the Department of Crosslinguistic Studies, I conducted two collaborative research projects, in which I had the good fortune to have forty specialists in individual languages. Slightly more than half of them are specialists in languages of Asia.

One of the two projects aimed to conduct a crosslinguistic research into what was labelled the NCC at that time. Its major outcome is the present volume. This project has produced interesting findings.

Kazuhiro Kawachi reported that this construction occurs in Sidaama, an SOV language of Ethiopia. This is the first report on the existence of this construction outside Asia. (See Kawachi (Section 5).)

Masumi Katagiri reported that a mirror image of this construction occurs in Tagalog of the Philippines, which is a predicate-initial (or verb-initial) language. Tagalog lacks a copula verb, and the construction in question has the following structure. (See Katagiri (Section 5).)

(24) Noun [Clause]

As is obvious, the term 'noun-concluding construction' (NCC) is not applicable to Tagalog. In order to accommodate (24), I coined the label 'mermaid construction' (MMC). This new label can be used as long as the construction is a combination of two different structures. Katagiri's report

has led to the discovery of the MMC in Kapampangan by Hiroaki Kitano (p.c.), another predicate-initial (or verb-initial) language of the Philippines.

Hideki Ono reported that the construction in question occurs in Mandarin Chinese, which is an SVO language. This construction has the following structure shown in (25) or that shown in (26). (See Ono (this volume).)

(25) Subject + Copula + Clause + Noun.
(26) Subject (Clause-1) + Copula + Clause-2 + Noun.

In the structure shown in (25), the 'Clause' does not have its own subject. That is, it is possible to say that the subject of the 'Clause' is separated by the 'Copula' from the other constituents of the 'Clause'. In the structure presented in (26), the first clause (i.e. Clause-1) is the subject of the entire sentence. (25) and (26) end with the 'Noun', and therefore they are perfect examples of the noun-concluding construction. (In (1), the prototype of the MMC, strictly speaking the 'Noun' does not conclude the sentence. It is followed by the 'Copula'.)

Other findings obtained in this project are mentioned in the following sections, and more fully in other chapters in the present volume.

3. Geographical distribution of MMC

A survey conducted among the participants of the two collaborative research projects yielded the following results.

The MMC or something similar is found in the following languages — twenty-one in all. Except for Kapampangan (Hiroaki Kitano, p.c.) and Central Tibetan (Izumi Hoshi, p.c.), these languages are discussed in separate chapters in the present volume, and the author's name is given after the name of the language.

Tagalog (Masumi Katagiri); Kapampangan; Irabu Ryukyuan (Michinori Shimoji); Japanese: Old and Early Middle Japanese (Asako Miyachi), Modern Japanese (to be precise, the so-called Standard Japanese of Modern Japanese) (Tasaku Tsunoda), Mitsukaido dialect of Japanese (Kan Sasaki); Ainu (Anna Bugaeva); Korean (Joungmin Kim); Kolyma Yukagir (Fubito Endo); Koryak (Megumi Kurebito); Sakha (Fuyuki Ebata); Mandarin Chinese (Hideki Ono); Mongolian (Hiroyuki Umetani); Sive (Tomoyuki Kubo and Norikazu Kogura); Amdo Tibetan (Shiho Ebihara); Central Tibetan; nDrapa (Satoko Shirai); Newar (Kazuyuki Kiryu); Burmese (Atsuhiko Kato); Thai (Kiyoko Takahashi); Hindi (Yasunari Imamura); Kurux (Masato Kobayashi); and Sidaama (Kazuhiro Kawachi)

In addition, Lahu and Jinghpaw (Matisoff 1972) have the MMC.

Among the languages listed above, the MMC is very close to, or identical with, its prototype (cf. Section 1) in some languages, while it deviates from the prototype in other languages, to varying degrees.

Among the instances of the MMC, that in Thai is the farthest away from

the prototype. Nonetheless, the paper on it written by Kiyoko Takahashi is included in the present volume. It exhibits a feature that is shared by the MMC in many other languages (see Takahashi, 5.5.3.1).

Anna Bugaeva on Ainu, Hideki Ono on Mandarin Chinese, and Tomoyuki Kubo and Norikazu Kogura on Sive have been unable to prepare a full paper for the present volume. Nonetheless, they have prepared a brief summary of the MMC in the respective languages, and these summaries are included at the end of the present volume.

As noted in Section 2, as of 1996, I concluded that Yukaghir did not have the NCC (i.e. a type of what was later labelled 'MMC'). However, Fubito Endo's subsequent research has uncovered two types of MMC in this language. Also, as of 1996, I concluded that Turkish had the NCC. However, according to Shinji Ido, Turkish does not really have the MMC.

According to the survey mentioned above, the MMC is not found in the languages listed below — more than forty languages. There are cases where it is difficult to decide whether a given construction is an instance of the MMC. At least the prototyope or something close to it does not seem to be found in these languages. The name of a language is followed by the name of the person who provided the information.

Iñupiaq (Tadataka Nagai); Coast Tsimshian (Fumiko Sasama); Mayan languages (Yishiho Yasugi); Hawaiian (Toru Shionoya); Tinrin, Neku (Midori Osumi); 'Ôrôê (Emiko Tsuji); Kove (Hiroko Sato); Warrongo, Djaru, Wanyjirra (Tasaku Tsunoda); Dom, Tok Pisin, Esperanto (Syuntaro Tida); Indonesian, Lamaholot (Naonori Nagaya); Amis (Kazuhiro Imanishi); Nanay, Udhie, Ulcha (Shinjiro Kazama); Turkish, Uzbek (Shinji Ido); Avar (Hisanari Yamada); Georgian, Armenian (Yasuhiro Kojima); Hmyo (Yoshihisa Taguchi); Meche (Kazuyuki Kiryu); Pwo Karen, Sgaw Karen (Atsuhiko Kato); Tidim Chin (Kosei Otsuka); Marathi (Prashant Pardeshi); Malto (Masato Kobayashi); Swahili, Matengo (Nobuko Yoneda); German, Dutch, French, Portuguese, Leggbo, Saramaccan (Heiko Narrog); and English (Timothy J. Vance, John B. Whitman).

(I should note, however, that Toru Shionoya on Hawaiian (a V-initial language; cf. Tagalog), Yasuhiro Kojima on Georgian, Kosei Otsuka on Tidim Chin, and Nobuko Yoneda on Swahili report that it may be possible to say that something similar to the MMC exists in the language in question.)

Keren Rice (p.c.) and Bjarke Frellesvig (p.c.) report that the MMC is not found in Slavey (a verb-final language) and Danish, respectively.

Most of the languages that have the MMC (or something close to its prototype) have the SOV order. The exceptions are Mandarin Chinese (SVO), Tagalog and Kapampangan (both verb-initial).

Among the languages that do not have the MMC, at least the following have the verb-initial order: Coast Tsimshian, many Mayan languages, Hawaiian, Tinrin, Neku, 'Ôrôê, Kove, and Amis. Furthermore, Thomas Payne (p.c.), who has been extensively working on V-initial languages in North America and Africa (including Nilotic languages of the Nilo-Saharan language family), stated that he had never seen anything like the MMC in

these languages. This suggests that the MMC is very uncommon among V-initial languages. Tagalog and Kapampangan are exceptions; both have the MMC, although they are V-initial languages. (If Hawaiian turns out to have the MMC, it will be another V-initial language that has the MMC.)

On the basis of the above, it seems safe to say that the MMC is uncommon crosslinguistically, that it is in the main confined to Asia, and that it is generally found in SOV languages.

Furthermore, there are two groups of languages in which the MMC is common: (i) languages of East Asia: Irabu Rykyuan, Japanese, Ainu, Korean, Mandarin Chinese, and also Sive (originally from Manchuria), and (ii) Tibeto-Burman languages. We shall return to this in 7.4.

4. Deviations from the prototype of MMC

The examples (2) to (4) are instances of the prototypical MMC, as seen in 1.1. However, there are also deviations from the prototype, as shown below. In the relevant chapters in the present volume, those instances which deviate from the prototype are often referred to as 'quasi-MMC'.

4.1 'Noun' slot

The prototype of the MMC has the 'Noun' slot; see (1). The 'Noun' refers to an independent word (not a clitic) that is a noun. To sum up in advance, the 'Noun' slot may be occupied by the following.

(a) An independent word: a noun — the prototype.
(b) A clitic.
(c) An affix.
(d) Zero.

A note on (c) is in order. In this context, by affixes I mean (i) those which derived from nouns, e.g. Japanese (Tsunoda, 7.7 to 7.10) and (ii) nominalizing affixes, e.g. Koryak (Kurebito, 5.4). In many languages, translations of sentences like (2) ('plan to'), (3) ('be V-ing') and (4) ('It appears/seems') involve verbal inflectional suffixes. However, verbal inflectional suffixes are not considered as instances of (c) — unless they are shown to have derived from nouns. Irabu Ryukyuan (Shimoji, 5.4) does have a verbal inflectional suffix that derived from a noun. This forms the MMC. (This suffix is further discussed in 6.2.1-[3] below.)

In the prototype of the MMC, i.e. (a), the 'Noun' slot is occupied by an independent word: a noun (Section 1). Examples from Japanese are (2) to (4). In contrast, (b), (c) and (d) are not prototypical. Regarding (d), it is useful and indeed important to set up the zero-type MMC for Old and Early Middle Japansee. See Miyachi (7.4).

In the prototype, the 'Noun' slot is occupied by a noun. In the quasi-MMC in Mongolian (Umetani, 6.2) and in the quasi-MMC in Sakha

(Ebata, 5.3), this slot is occupied by a noun combined with the derivational suffix 'having, with'.

See Table 1, which shows very roughly the number of the words (nouns), clitics, and affixes that are attested in the 'Noun' slot of the MMC (including the quasi-MMC). In the data available, clitics are all enlitics, and affixes are all suffixes. (The sources of information were listed in Section 3.)

Table 1. Number of nouns, clitics and affixes in the 'Noun' slot

language	(a) word	(b) clitic	(c) affix
Modern Japanese	106	4 and probably more	5 and probably more
Old and Early Middle Japanese	27 and probably more	2	2 and probably more
Mitsukaido dialect of Japanese	5 and many more	1 and probably more	0
Irabu Ryukyuan	2 and many more	2 and more	1
Korean	more than 70	0	0
Ainu	10	0	0
Amdo Tibetan	6	4	0
Tagalog	6	0	0
Burmese	4	possibly 5	possibly 10
nDrapa	2	2	1
Thai	2	0	0
Mongolian	2 and many nouns with the 'having' suffix	0	0
Kurux	1	2	0
Newar	1	1	0
Sidaama	1	1	1
Sive	1	1	0
Kolyma Yukaghir	0	1	1
Hindi	0	1	0
Koryak	0	0	1
Sakha	many nouns with the 'having' suffix	0	0

Sasaki (5.2) on the Mitsukaido dialect of Japanese focuses on those nouns which do not occur in the 'Noun' slot in Modern Japanese (Tsunoda, 5.4) (to be precise, the so-called Standard Japanese). No doubt the number of words (and also the enclitics and suffixes) that can occupy the 'Noun' slot in the Mitsukaido dialect is much larger than is shown in Table 1.

For Korean (Kim, 5.5), no enclitics and suffixes are reported. This is due to time constraints. There may actually be enclitics and suffixes that can occupy the 'Noun' slot. The same may apply to some other languages.

For Amdo Tibetan (Ebihara, 5.2) to Sakha (Ebata, Section 5) in Table 1, scrutinizing search by the author has uncovered only a very small number of words (as against enclitics and suffixes) or no word at all. It is unlikely for further search in these languages to find many words in the 'Noun' slot.

In the present volume, the chapters on the individual languages are arranged in the following order.

Modern Japanese, Mitsukaido dialect of Japanese, Old and Early Middle Japanese, Irabu Ryukyuan, Korean, Amdo Tibetan, nDrapa, Newar, Burmese, Tagalog, Thai, Mongolian, Sakha, Kurux, Sidaama, Kolyma Yukaghir, Hindi, Koryak, Ainu, Mandarin Chinese, and Sive.

This order roughly follows that shown in Table 1, except for the following changes. The chapter on Irabu Ryukyuan follows the three chapters on Japanese, for Irabu Ryukyuan is genetically and also typologically close to Japanese. Amdo Tibetan, nDrapa, Newar and Burmese are Tibeto-Burman languages. They — in particular, Amdo Tibetan, nDrapa and Newar — are typologically similar. Therefore, they are grouped together. Sakha follows Mongolian, for both have many nouns with the 'having, with' suffix in the 'Noun' slot. As mentioned in Section 3, the chapters on Ainu, Mandarin Chinese and Sive are not full papers, but brief summaries, and consequently they are placed after the other chapters, which are full papers.

Words, clitics and affixes in the 'Noun' slot of the MMC will be further discussed in 6.2.

4.2 'Copula'

The prototype of the MMC contains the 'Copula'; see (1).

There are languages that lack a copula verb or the like, e.g. Tagalog (Katagiri, Section 1) and Koryak (Kurebito, Section 1), and the MMC in these languages cannot contain the 'Copula'.

In the MMC of languages that have a copula, the 'Copula' may be absent. Its absence appears to be optional in some instances. However, it is not optional in other instances. For example, in Modern Japanese (Tsunoda, 5.4.3-[10]), the noun *yosi* 'means, clue' can be used in the 'Noun' slot of the MMC, and this MMC indicates reported evidence (an evidential meaning). In this MMC, the 'Copula' is always absent (in my idiolect, at least). Consider:

(27)　[*Hanako=ga*　　*gookaku-si-ta*]　　*yosi/*yosi=da.*
　　　　Hanako=NOM　　passing-do-PST　　clue/clue=COP.NPST
　　　　LT: 'Hanako is a clue [such that she] passed [an examination].'
　　　　FT: 'I heard that Hanako had passed [an examination].'

As another example from Modern Japanese (Tsunoda, 5.4.3-[4]), when the

noun *mono* 'thing' is used in the 'Noun' slot of the MMC, this MMC may indicate express strong emotion, wish, or hope — of the speaker —, and the 'Copula' is often absent.

(28) [*Uma-i*   *sake=o*   *nom-i-ta-i*]
      nice-NPST   rice.wine=ACC drink-LINK-DESID-NPST
      mono(=da).
      thing(=COP.NPST)
      LT: '[I] am a thing [such that I] want to drink nice *sake*.'
      FT: '[I] would love to drink nice *sake*.'

4.3 Sentencehood of 'Clause'

One of the properties of the prototype of the MMC is the following (Section 1):

(c) The 'Clause' can be used as a sentence by itself.

In some of the languages, to be precise, in some of the instances of the MMC in a given language, the 'Clause' has this property. For example, in the Modern Japanese examples (2) to (4), the predicate of the 'Clause' is in the nonpast form, i.e. one of the finite forms, and the 'Clause' can be used by itself as a sentence. Compare (2) with (5); (3) with (6); and (4) with (7).

In other languages, to be precise, in other instances of the MMC in a given language, the 'Clause' does not have this property. For example, in Modern Japanese, *na*-adjectives (or adjectival nominal) have a distinct adnominal form. They have to be in the adnominal form when they occur as the predicate of the 'Clause'. The adnominal form is a non-finite form, and consequently the 'Clause' in question cannot occur on its own as a sentence (Tsunoda, 5.3.2.2). Compare:

(29) [*Hanako=wa*   *genki=na*]   *moyoo=da.*
      Hanako=TOP   healthy=ADN   appearance=COP.NPST
      LT: 'Hanako is an appearance [such that she] is well.'
      FT: 'It seems that Hanako appears is well.'
(30) **Hanako=wa*   *genki=na.*
      Hanako=TOP   healthy=ADN
      Intended meaning: 'Hanako is well.'

As another example, in Korean (Kim, 4.2.1.1, 5.1), which has an elaborate set of adnominal forms, the predicate of the 'Clause' has to be in an adnominal form. (In this respect, the predicate of the 'Clause' behaves like that of ACs.) The adnominal forms are non-finite, and the 'Clause' cannot be used by itself as a sentence.

As we noted above, there are instances of the MMC in which the predicate can occur in a finite form and the 'Clause' can be used by itself as a sentence. However, probably in all the languages examined in the present

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volume, the 'Clause' has a lower degree of sentencehood than independent sentences — even where the predicate of the 'Clause' can occur in a finite form. In particular, the illocutionary possibilities of the 'Clause' are limited. For example, in Modern Japanese (Tsunoda, 5.3.2.2-[1]) and Amdo Tibetan (Ebihara, 6.2.2), the predicate cannot occur in the imperative form. Compare (31) with (2) (both, Modern Japanse). As another example, in Modern Japanese (Tsunoda, 5.3.2.3-[2]), Amdo Tibetan (Ebihara, 5.4.1, 6.2.9), and nDrapa (Shirai, 5.4.2), among others, sentence-final particles (e.g. a question particle) cannot occur in the 'Clause'. Compare (32) with (2) (both, Modern Japanse).

(31)   *[*Hanako=wa*   *Nagoya=ni*   *ik-e*]
       Hanako=TOP   Nagoya=DAT/LOC   go-IMP
       yotee=da.
       plan=COP.NPST
       (Untranslatable)

(32)   *[*Hanako=wa*   *Nagoya=ni*   *ik-u=ka*]
       Hanako=TOP   Nagoya=DAT/LOC   go-NPST=Q
       yotee=da.
       plan=COP.NPST
       (Untranslatable)

We have seen some instances of the deviation from the prototype of the MMC. We shall now look at other aspects of the MMC.

5. Other properties of MMC

5.1 Predicate of 'Clause'

As alluded to in 4.3, the morphological possibilities of the predicate of the 'Clause' are limited, in comparison with that of independent sentences.

For example, in Korean (Kim, 5.3), the predicate of the 'Clause' has to occur in an adnominal forms. It cannot occur in any other non-finite form or in any finite form.

Even in the cases where the predicate can occur in a finite form, its morphological possibilities are limited. For example, as noted in 4.3, it cannot occur in the imperative form in Japanese (Tsunoda, 5.3.2.2-[4-2]), Amdo Tibetan (Ebihara, 6.2.2), and nDrapa (Shirai, 5.2.3), among others.

5.2 'Noun'

5.2.1 Morphology: affixation to 'Noun'
This issue has not been investigated for all the languages reported in the present volume, but there are instances in which a noun in the 'Noun' slot is combined with an affix. (In this respect, the noun concerned has the status of a noun.) For example, Modern Japanese (Tsunoda, 5.5) has at least two

derivational prefixes that can be added to the 'Noun' of the MMC, e.g. *go-* 'polite', e.g. (33), and *o-* 'polite'.

(33)   [*Tanaka-sensee=wa*   *Nagoya=ni*
        Tanaka-professor=TOP   Nagoya=DAT/LOC
        irassyar-u]   *go-yotee=da.*
        go.SUBJ.RESP-NPST   POL-plan=COP.NPST
        LT: 'Professor Tanaka is a plan (polite) [such that he] goes/will
            go (subject respect) to Nagoya.'
        FT: 'Professor Tanaka plans to go to Nagoya.'

Old and Early Middle Japanese (Miyachi, 7.5.3-[1]) has at least two prefixes and one suffix that can be added to the 'Noun' of the MMC.

5.2.2 Syntax: modification of 'Noun'
This issue has not been investigated for all the languages reported in the present volume, and it has proved difficult to find instances in which a noun in the 'Noun' slot is modified by some other word. This modification is probably impossible in Modern Japanese (Tsunoda, 5.6.4). However, Kiryu (5.2.6) has found three examples of this modification in Newar. The 'Noun' is modified by an adjective in two examples, e.g. (34), and by a pronoun in the genitive case in the third example. (34), cited from Kiryu, has been modified and simplified for the purpose of exposition.

(34)   [*ji*   *nã:*   *duja:*   *taka*   *ju-i*   *du*]*=gu*
       1SG.ABS   too   member upto   become-INF get.to=NMLZ
       ta:dhã:=gu   *bhāgya*   *kha:.*
       big=NMLZ   luck   COP.NFND
       LT: 'I am big luck [such that I] got to become a member [of this
            group].'
       FT: 'Very luckily I got to become a member [of this group].'

Miyachi (7.5.3-[2] gives one example of this modification in Old and Early Middle Japanese.

5.3 Subject of 'Clause'

5.3.1 Absence of the subject
In languages such as Japanese, words in sentences are often elliptical, provided that their referents are recoverable. Furthermore, in the case of the MMC, there are instances in which the subject of the 'Clause' has to be absent or is generally absent. For example, in Modern Japanese (5.4.3-[4]), the MMC may contain the noun *mono* 'thing' and express strong emotion, wish, hope or the like, e.g. (28). The emotion or the like is always that of the speaker. The subject (referring to the speaker) has to be absent. That is, (28) cannot contain the subject.

5.3.2 Case of the subject

Generally, the subject of the 'Clause' has the same case as that of independent sentences. Consider the Japanese examples: (4) (MMC) and (7) (an independent sentence), where the subject is consistently marked by the nominative case. There are, however, a small number of exceptions. All of them are shown below. For sentential examples, see the relevant chapters.

[1] Newar

In Newar (Kiryu, 5.2.4), the transitive subject ('A') is generally in the ergative case and the intransitive subject ('S') in the absolutive case. However, in one of the two types of the MMC, in which the 'Noun' slot is occupied by a noun, both the A and the S generally occur in the genitive case when the subject is expressed by a plural noun and the sentence describes a generic situation. (In the other type of the Newar MMC, in which the 'Noun' slot is occupied by an enclitic, the A and the S occur in the ergative case and the absolutive case, as in independent sentenecs.)

[2] Hindi　　　　　　　　　　．

In Hindi (Imamura, Section 3, 5.1.3-(c)), the A occurs in the ergative case in the perfective and in the direct (i.e. absolutive) case in the imperfective. The S is in the direct case consistently. In the MMC, in which the predicate is in an infinitive form (i.e. a non-finite form), the A is in the direct case, like the S.

[3] Mitsukaido dialect of Japanese

In this dialect (Sasaki, 5.3.3), three cases are observed for the subject in independent sentences: the nominative, the locative and the experiencer cases. In the variety of the MMC that means 'It looks/appears/seems', the erstwhile nominative subject occurs in the experiencer case (in the nonpast tense only) or in the nominative case (in the past tense, the nonpast tense, the progressive aspect, etc.). The erstwhile locative subject occurs in the experiencer case (again in the nonpast tense only) or in the locative case (at least in the past and the nonpast).

5.3.3 Person of the subject

There are certain tendencies regarding the person of the subject of the 'Clause'. For example, when the MMC expresses strong emotion, wish or hope, the subject appears to be always the first person, e.g. (28) (Modern Japanese) (Tsunoda, 5.4.3-[4], 5.6.3.1-(a)). When the MMC describes advice, instruction or the like, the subject is often the second person, e.g. Modern Japanese (Tsunoda, 5.4.3-[9], 5.6.3.1-(b)). When the MMC has the evidential meaning of reported evidence, the subject appears to be always the third person, e.g. (27) (Modern Japanese) (Tsunoda, 5.4.3-[10]).

When the MMC has an evidential meaning of inference or conjecture, the subject is generally the third person, e.g. (4) (Modern Japanese) (Tsunoda, 5.4.2-[4]), (47) (Tagalog) (Katagiri, 5.2.2), (52) (Old and Early Middle Japanese) (Miyachi, 7.1-[3]), and (54) (Modern Japanese). It has to be the third person (and cannot be the first person or the second person) in the MMC in Sidaama (Kawachi, 5.1). In contrast, in the MMC of the Mitsukaido dialect of Japanese (Sasaki, 5.3.5), the subject is often the first

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person, although it may also be the second person or the third person.

5.4 Syntactic structure of MMC

We shall consider the following two questions, which are closely related.

(a) Does the MMC contain an AC?
(b) Is the MMC bi-clausal or mono-clausal?

In most (though not all) instances of the MMC, the predicate of the 'Clause' of the MMC behaves like that of ACs. For example, in Korean (Kim, 5.1), the predicate of the 'Clause' has to be in an adnominal form, like that of ACs. In Modern Japanese (Tsunoda, 5.3.2.2), *na*-adjectives (or so-called adjectival nouns) have a distinct adnominal form. When used as the predicate of the 'Clause', they cannot occur in the nonpast form and they have to be in the adnominal form, e.g. (29), like that of ACs. In Newar (Kiryu, 5.2.2-[2]), the predicate of the 'Clause' has to be followed by a nominalizer enclitic, like that of ACs. In such instances of the MMC, it may look as if the MMC contains an AC. This concerns the morphology of the predicate of the 'Clause'. Virtually all the previous studies of what I have labeled the MMC in Modern Japanese regard it as involving an AC (Tsunoda, 6.4).

However, syntactically is it justified to say that the MMC contains an AC? It has not been possible to investigate this issue in all the individual chapters in the present volume. At least, a tentative summary is offered.

Previous studies have produced at least five analyses.

[1] Nominalization analysis

As noted in Section 2, to the best of my knowledge, it is Matisoff (1972) who first stated that what I later labeled the MMC is uncommon. He examined one type of the MMC found in Lahu, Jinghpaw, Burmese, Tibetan (all Tibeto-Burman languages), Chinese, and Japanese, and states that this construction is 'a phenomenon that is quite alien from the point of view of standard average European languages but surprisingly widespread elsewhere' (p. 246).

In all the instances Matisoff examines, the 'Noun' slot of what I call the MMC is occupied by what he terms 'nominalizer' (and these nominalizers are said to be particles). In his view, this construction involves nominalization, and consists of a clause and a nominalizer. Specifically, 'It is standing on its own, and is not a constituent of any sentence higher than the one to which it belongs itself' (p. 247). He (p. 247) suggests that literally these sentences mean, for example, 'It is the case that he will come' or 'It is a he-will-come case'.

The Japanese examples that Matisoff (pp. 254-255) gives involve =*no*. (In my view, it is an enclitic. It may be considered a nominalizer, a complementizer, a non-content noun or the genitive case marker.) As noted in Tsunoda (5.4.4), sentences with =*no* have various meanings/functions, such as explanation, reason, cause, summary, conclusion, and realization.

An example from Modern Japanese, cited from Tsunoda (5.4.4), is (35-b).

(35) a. *Gakusee=ga*   *issyokenmee*   *benkyoo-si-te*   *i-ru.*
     student=NOM   very.hard   study-do-GER   be-NPST
     'The students are studying very hard.'
   b. [*Siken=ga*   *ar-u*]*=no=da.*
     examination=NOM   be-NPST=*no*=COP.NPST
     'This is because there will be an examination.'

According to Matisoff's view, the structure of (35-b) can be shown as follows. (See Matisoff (1972: 247).)

(36) *Siken=ga*   *ar-u*   =*no*   =*da.*
    ----
           clause   NMLZ   COP

          NP   COP

That is, in Matisoff's view, (35-b) in effect consists of an NP and the copula.

Matisoff stated that what I later labelled the MMC is uncommon on the grounds that the entire sentence is a nominalized clause. In 1.2 above, I stated that the MMC has unusual characteristics on the grounds that syntactically it is a combination of two different structures and semantically it makes no sense when literally interpreted. That is, both Matisoff and I realized that there is something unusual with what I have termed the MMC, but we were focusing on different aspects of the same construction.

(In passing I note the following. In the Burmese examples, Matisoff (1972: 250, 256) uses the particle *te* for the nominalizer. However, Atsuhiko Kato (p.c.) points out that *te* (=*tè* in his notation) does not function as a nominalizer and that instead =*tà* can be used as a nominalizer. In passing, =*tà* can be used in one type of the MMC in Burmese (Atsuhiko Kato, 5.4).)

For Japanese specifically, previous studies have presented the analyses shown below. We shall use the following sentence for an example.

(37) [*Asita*   *Hanako=ga*   *hon=o*   *ka-u*]
     tomorrow   Hanako=NOM   hon=ACC   buy-NPST
     yotee=da.
     plan=COP.NPST
     LT: 'Hanako is a plan [such that she] buys/will buy a book
         tomorrow.'
     FT: 'Hanako plans to buy a book tomorrow.'

[2] Adnominal clause analysis
According to studies such as Taro Takahashi (1960), Okutsu (1974), and Teramura (1992), what I have termed the MMC contains an adnominal clause ('AC'). For example, in their view, (37) will be analyzed as follows.

(38) Adnominal clause analysis:
Asita   Hanako=ga   hon=o   ka-u   yotee   =da.
--   ------
adnominal clause   head noun   COP

                        NP   COP

[3] Complementation analysis
Nakau (1973) regards what I have labeled the MMC as a construction that involves complementation. In his view, (37) will be analyzed as follows.

(39) Complementation analysis:
Asita   Hanako=ga   hon=o   ka-u   yotee   =da.
----
complement   head noun   COP

                        NP   COP

According to the three analyses shown above, what I have termed the MMC consists of an NP and the copula. Note that the NP is a heavy NP, consisting of a clause and a noun. The MMC will be considered bi-clausal, and not mono-clausal, since the NP contains a clause (an AC).

[4] Compound predicate analysis
Regarding certain instances of what I have labeled the MMC, Taro Takahashi (1979: 157) states in effect that the predicate of the 'Clause' and the following 'Noun' constitute an *awase-zyutugo* (my translation: compound predicate). I propose to include the 'Copula' in the predicate. According to this modified view, (37) will be analyzed as follows.

(40) *Asita   Hanako=ga   hon=o   ka-u   yotee=da.*
                                            ----
      adjunct   subject   object   predicate

According to this view, (37) is mono-clausal, and not bi-clausal. It does not contain any clause.
[5] Bridge construction analysis
This analysis is in effect a combination of [3] Complementation analysis and [4] Compound predicate analysis. Yasuhiko Kato (1994: 110) examines a number of sentence types, including two instances of what I call the MMC, and refers to them as the 'bridge construction'. He states that this construction has the following characteristics.

(a) Complement selection: the bridge nominals select a complement structure in overt syntax.
(b) Bridge nominals as predicates: ..., the nominal may constitute a complex predicate with adjacent verbal elements.

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In this view, the 'Clause' of the MMC appears to be a complement and the predicate of the 'Clause' seems to form a complex predicate jointly with the 'Noun' of the MMC. Then, (37) will be analyzed as follows.

(41) *Asita Hanako=ga hon=o ka-u yotee=da.*

                                   ----

                                   predicate

----

complement

According to this analysis, the MMC is bi-clausal, since it contains a clause (i.e. the complement clause).

We have seen five syntactic analyses of the MMC of Modern Japanese. Now, which analysis will be suitable for the MMC in the languages investigated in the present volume?

As noted above, in most (though not all) instances of the MMC, morphologically the predicate of the 'Clause' of the MMC behaves like that of ACs. In such instances, it may look as if the MMC contains an AC, as shown in (38), and as if the MMC is bi-clausal. However, an investigation of the syntactic behaviour of the AC and the entire MMC does not always support this view. The languages under investigation can be classified into four groups. For the examination of the syntactic behaviour, the criteria employed included the following: clefting, relativization, negation, topic marker, and case marking of the subject. For some of the languages, only one or two creiteria were examined, while for some others, more than five were considered.

Group 1. For some of the languages, syntactic evidence indicates that the 'Clause' does not behave like ACs, and that the entire MMC is mono-clausal, and not bi-clausal.

For example, in Korean (Kim, 5.3, Section 6), the predicate of the 'Clause' has to be in an adnominal form (and it looks as if the MMC contained an AC). However, syntactically, the 'Clause' behaves differently from ACs, and the entire MMC behaves like independent sentences. That is, syntactically the MMC does not contain an AC, and it is mono-clausal.

As another example, in Modern Japanese (Tsunoda, 5.3.2.1-[2], 6.3), a certain type of predicate (a *na*-adjective) has to occur in the adnominal form. However, syntactically the conclusion stated for Korean applies to all the types of the MMC in Modern Japanese, including the MMC that involves a *na*-adjective.

Available syntactic evidence indicates that roughly the same or a similar conclusion applies to the following languages: Irabu Ryukyuan (Shimoji, 5.6), the Mitsukaido dialect of Japanese (Sasaki, 5.2.2.3, 5.3.6), Old and Early Middle Japanese (Miyachi, 7.5.8), Koryak (Kurebito, 5.5), Mongolian (Umetani, 5.3), Newar (Kiryu, Section 8), Burmese (Atsuhiko Kato, Section 6), and Hindi (Imamura, 6.2).

In these languages, syntactically the MMC is (or probably is) mono-clausal. And for their syntactic analysis, only [4] Compound predicate

analysis is suitable. The other analyses are not suitable, for they present a bi-clausal structure.

For the Hindi MMC, Imamura (6.2) gives syntactic evidence (concerning negation) that it has a compound predicate. This in turn shows that the Hindi MMC is mono-clausal. Imamura argues that this compound predicate was created by reanalysis.

Group 2. In Kolyma Yukaghir (Endo, Section 6), in the two types of the MMC, not only regarding the predicate morphology but also syntactically, the 'Clause' is more similar to ACs than to independent sentences. That is, the MMC in Kolyma Yukaghir will be considered bi-clausal. Probably [2] Adnominal clause analysis is suitable for it.

Group 3. For the languages listed below, syntactic evidence is not decisive, and the 'Clause' of the MMC is more similar to neither ACs nor independent sentences: Amdo Tibetan (Ebihara, 6.3), nDrapa (Shirai, 5.4.3, 5.4.5), and Kurux (Kobayashi, Section 6). It is not known whether the MMC is mono-clausal or bi-clausal. It is not known which analysis is suitable for them.

Group 4. No relevant information is available for the following languages: Tagalog (Katagiri), Sakha (Ebata), Thai (Kiyoko Takahashi), and Sidaama (Kawachi). It may be that this issue is not applicable (or not significant) to the MMC in these languages.

We have examined whether the MMC in a given language contains an AC or not. In this connection, I should mention that Koryak (Kurebito, 5.5) provides fascinating data. Koryak has a nominalizing suffix that Kurebito presents with '-JQ'. The verbs to which -JQ is added ('JQ-words') can be used in:

(a) complement clauses (use as the S or the O, but not the A),
(b) ACs, and;
(c) the MMC (to be precise quasi-MMC).

Furthermore, from (a) to (c), the JQ-words exhibit a decreasing degree of noun-ness, and conversely an increasing degree of verb-ness. (It is not known whether the suffix -JQ derived from a noun. Nor is it known whether the direction of change is from (a) to (c) or the opposite.)

5.5 'Noun' and the meanings/functions of MMC

5.5.1 Introductory notes
We saw in 4.1 that the 'Noun' slot may be occupied by (a) an independent word: a noun (in the prototype of the MMC), (b) a clitic, (c) an affix, or (d) exceptionally zero (in Old and Early Middle Japanese) (Miyachi, 7.4).

More than 100 nouns (independent words) are attested in the 'Noun' slot of the MMC in Modern Japanese (Tsunoda, 5.4.1), and more than 70 (independent words) in that in Korean (Kim, 5.5). In contrast, their number is much smaller in other languages. See Table 1. As can be seen, the number of the forms that are attested in the 'Noun' slot ranges from more than 100

in Japanese to one in Hindi (Imamura, 5.1) and Koryak (Kurebito, 5.4).

5.5.2 Meanings and functions of MMC
First consider the Japanese examples (2) to (4). (2) means 'X plans to do', i.e. it has a modal meaning. (3) means 'X is doing', i.e. it has an aspectual meaning. (5) means It appears/seems ...', i.e. it has an evidential meaning. A wide range of meanings/functions are reported in the present volume. They are difficult to classify neatly, but very roughly they can be classified as follows.

[1] Modal
[2] Evidential
[3] Aspectual
[4] Temporal
[5] Stylistic
[6] Discourse-related
[7] Other

We shall look at the meanings/functions in each of the seven groups. Modal, evidential and aspectual meanings/functions are frequently observed, but discourse-related meanings/functions are much less frequent. Temporal and stylistic meanings/functions are the least frequent. It is intriguing that aspectual meanings/functions are fairly common, while on the other hand temporal ones are uncommon, although, broadly speaking, both tense and aspect are concerned with the relationship between a situation and time.

[1] Modal
A wide range of modal meanings/functions are attested. Very roughly they can be classified as follows. For specific details, see the chapter on the language concerned — except that there is no chapter on Central Tibeten. The information on it was provided by Izumi Hoshi (p.c.).

(a) 'Intend to do', 'plan to do', 'have decided to do', 'want to':
Ainu (Bugaeva), Amdo Tibetan (Ebihara, 7.2), Korean (Kim, 5.5.2-[1], 5.6), Modern Japanese (Tsunoda, 5.4.2-[1], 7.12), nDrapa (Shirai, 5.2.5), Sakha (Ebata, 5.5), Tagalog (Katagiri, 5.4), e.g. (2), (28), (33) (all Modern Japanese).
(b) 'Be expected to do', 'be scheduled to', 'be supposed to', 'be forecasted to do':
Irabu Ryukyuan (Shimoji, Table 2), Korean (Kim, 5.5.2-[2]), Kurux (Kobayashi, 5.5), Modern Japanese (Tsunoda, 5.4.2-[2], 7.12), nDrapa (Shirai, 5.2.5).
(c) 'Be destined to do', 'be bound to':
Amdo Tibetan (7.2), Korean (Kim, 5.5.2-[4]), Modern Japanese (Tsunoda, 5.4.2-[8]), Newar (Kiryu, 5.2.1, Section 7), Old and Early Middle Japanese (Miyachi, Table 3), Tagalog (Katagiri, 5.4).
(d) Obligation, duty, role, instruction, advice:

Ainu (Bugaeva), Burmese (Atsuhiko Kato, Table 10), Irabu Ryukyuan (Shimoji, Table 2), Korean (Kim, 5.5.2-[8], 5.6), Koryak (Kurebito, 5.4-(g)), Modern Japanese (Tsunoda, 5.4.2-[8], 7.12), Old and Early Middle Japanese (Miyachi, Table 3), Sakha (Ebata, 5.5).

(e) The right to do something:
Mitsukaido dialect of Japanese (Sasaki, Table 5).

(f) 'Need to do', 'should' (deontic):
Ainu (Bugaea), Amdo Tibetan (Ebihara, 5.2-[F-3]).

(g) Ability, talent:
Old and Early Middle Japanese (Miyachi, Table 3), Sakha (Ebata, 5.5).

(h) Strong emotion
(h-1) Blame, displeasure, surprise:
Old and Early Middle Japanese (Miyachi, 7.1-[1]-(b)), Korean (Kim, Table 4).

(h-2) Wish, hope:
Modern Japanese (Tsunoda, 5.4.3-[4]).

(h-3) Strong assertion:
Ainu (Bugaeva), Kolyma Yukaghir (Endo, 5.2.2), Newar (Kiryu, 5.3.7.1), Old and Early Middle Japanese (Miyachi, 7.1-[1]-(b)), Sive (Kubo and Kogura).

(i) 'X feels that ...':
Amdo Tibetan (Ebihara, 5.3-[E-1]), Korean (Kim, 5.5.2-[3]), Modern Japanese (Tsunoda, 5.4.2-[3]).

(j) 'X considers oneself ...' (evaluation):
Central Tibetan (Izumi Hoshi, p.c.), Modern Japanese (Tsunoda, 7.12), e.g. (11).

(k) Guess, conjecture, uncertain conclusion, subjective assumption (epistemic modal flavour):
Irabu Ryukyuan (Shimoji, Table 2), Korean (Kim, Tables 3, 4), Old and Early Middle Japanese (Miyachi, Table 4), Thai (Kiyoko Takahashi, 5.7).

(l) 'Luckily X does':
Newar (Kiryu, 5.2.1), e.g. (33).

(m) Undesirable situation
(m-1) 'I did not want X to happen':
Korean (Kim, Table 3).

(m-2) 'X does not want to do, but has to do':
Korean (Kim, 5.5.3-[4]).

(m-3) 'The situation is unpleasant, but it is out of control':
Korean (5.5.4-[3]).

(m-4) 'Something undesirable may happen':
Korean (Kim, 5.5.2-[4], 5.5.4-[3]), Sakha (Ebata, 5.4.3).

(n) Tag question:
Irabu Ryukyuan (Shimoji, Table 2).

(o) 'Not ordinary':
Mitsukaido dialect of Japanese (Sasaki, Table 5).

(p) Purpose:
Old and Early Middle Japanese (Miyachi, Table 3).

Note that the modal meanings listed above include deontic modality, e.g. (d) and (e), and epistemic modality, e.g. (k).

[2] Evidential
Again, a wide range of evidential meanings/functions are attested. Very roughly they can be classified as follows.

(a) Visual or direct evidence:
Ainu (Bugaeva), (Shimoji, Table 2), Kurux (Kobayashi, 5.4.1), Mandarin Chinese (Ono), Modern Japanese (Tsunoda, 5.4.2-[4]), nDrapa (Shirai, 5.2.5), Old and Early Middle Japanese (Miyachi, Tables 3, 4), Tagalog (Katagiri, 5.4), e.g. (29) (Modern Japanese).
(b) Counterfactual ('It appears/looks, but actually not'):
Amdo Tibetan (Ebihara, 5.2-[F-1]), Burmese (Atsuhiko Kato, 5.3), Kurux (Kobayashi, 5.4.1).
(c) Reported evidence:
Ainu (Bugaeva), Amdo Tibetan (5.3-[E-2]), Central Tibetan (Izumi Hoshi, p.c.), Modern Japanese (Tsunoda, 5.4.3-[10], 7.8-[2], 7.10-[2]), e.g. (27) (Modern Japanese).
(d) Inference or conjecture (based on some evidence):
Ainu (Bugaeva), Amdo Tibetan (5.3-[E-2]), Irabu Ryukyuan (Shimoji, Table 2), Korean (Kim, Table 3), Modern Japanese (Tsunoda, 7.8-[3], 7.9-[3], 7.10-[2], -[3]), Mitsukaido dialect of Japanese (Sasaki, Table 5), Sakha (Ebata, 5.5), Sidaama (Kawachi, 5.2.1), Sive (Kubo and Kogura), Tagalog (Katagiri, 5.4), e.g. (4) (Modern Japanese).
(e) Probably 'inference':
Burmese (Kato, 5.2).
(f) Non-visual evidence:
Ainu (Bugaeva).
(f) 'X gives the impression that ...':
Modern Japanese (Tsunoda, 5.4.2-[5]), Old and Early Middle Japanese (Miyachi, Table 3).
(g) 'Be suspected to have done':
Modern Japanese (Tsunoda, 5.4.2-[12]), Korean (Kim, 5.5.2-[12]).

[3] Aspectual
Very roughly aspectual meanings/functions can be classified as follows.

(a) 'Have finished doing', 'have just done':
Burmese (Kato, 5.5), Modern Japanese (Tsunoda, 5.4.3-[8]).
(b) 'Have started doing, but have not finished':
Burmese (Kato, 5.5).
(c) Experiential:
Sakha (5.4.6).
(d) Progressive, 'in the middle of doing':
Ainu (Bugaeva), Burmese (Kato, 5.5), Korean (Kim, Tables 3, 4), Modern

Japanese (Tsunoda, 5.4.2-[10], 5.4.3-[8]), e.g. (3) (Modern Japanese).

(e) 'Be becoming more and more ...':
Korean (Kim, 5.5.2-[6]), Modern Japanese (Tsunoda, 5.4.3-[7], 7.12).

(f) 'Be about to':
Burmese (Kato, 5.2, 5.4), Modern Japanese (Tsunoda, 5.4.3-[8]), Old and Early Middle Japanese (Miyachi, Table 3), Sidaama (Kawachi, 5.3).

(g) 'Be ready to do (the preparation has been done)':
nDrapa (Shirai, 5.2.5).

(h) 'Be kept in a certain state', 'be in such and such a state/situation':
Korean (Kim, 5.5.2-[4]), Old and Early Middle Japanese (Miyachi, Table 3).

(i) Habit (i.e. habitual), tendency ('tend to'), practice, custom, nature, personality, propensity, attitude:
Amdo Tibetan (Ebihara, 5.2-[F-2], -[F-3]), Burmese (Kato, 5.5), Korean (Kim, Table 3), Mandarin Chinese (Ono), Modern Japanese (Tsunoda, 5.4.2-[6], -[7], 7.7), Mitsukaido dialect of Japanese (Sasaki, Table 5), Old and Early Middle Japanese (Miyachi, Table 3), Sakha (Ebata, 5.4.7), Tagalog (Katagiri, 5.4), e.g. (9) (Modern Japanese).

(j) 'Have a property/physique/structure to do':
Korean (Kim, 5.5.2-[9]), Kurux (Kobayashi, 5.5), Modern Japanese (Tsunoda, 5.4.2-[10]).

(k) 'Have such and such a relationship':
Old and Early Middle Japanese (Miyachi, Table 3).

[4] Temporal

(a) Past:
Kolyma Yukaghir (Endo, 5.2.2, 5.3).

(b) Future:
Amdo Tibetan (Ebihara, 5.2-[F-4]), Irabu Ryukyuan (Shimoji, Table 2).

(c) 'It is time for X to do':
Korean (Kim, 5.5.2-[11]), Modern Japanese (Tsunoda, 5.4.2-[11]), Mitsukaido dialect of Japanese (Sasaki 5.2.2.2), Old and Early Middle Japanese (Miyachi, 7.1-[5]), e.g. (41) (Modern Japanese).

(d) 'This is the season of the year to do ...':
Old and Early Middle Japanese (Miyachi, Table 3).

(e) Universal truth, common knowledge: Korean (Kim, Table 3).

(42) [*Watasi=wa   moo   gakkoo=e   ik-u*]
      1SG=TOP   already   school=ALL go-NPST
      zikan=da.
      time=COP.NPST
      LT: 'I am already a time [such that I] go to school.'
      FT: 'It is already time for me to go to school.'

[5] Stylistic

(a) Formal:
Korean (Kim, Table 4), Modern Japanese (Tsunoda, 5.4.3-[4], -[5], -[8]), e.g.
(43) (Modern Japanese).
(b) Humble:
Amdo Tibetan (Ebihara, 5.3-[E-2]).

(43) [*Wareware=wa   kokoro=kara   owabi-su-ru*]
      1PL=TOP   heart=ABL   apology-do-NPST
      sidai=des-u.
      circumstance=COP.POL-NPST
      LT: 'We are the circumstance [such that we] apologize from the
          bottom of [our] heart.'
      FT: 'We apologize sincerely.'

In Modern Japanese, the noun *sidai* can be used outside the MMC, with the
meaning 'circumstance, procedure, program, process', etc. When used in the
MMC, it has a stylistic effect: it makes the sentence sound formal, as in
(43).

[6] Discourse-related
It is very difficult to generalize about the proposed analyses. They are
tentatively grouped as follows.

(a) Explanation, reason, cause, grounds for judgement:
Amdo Tibetan (Ebihara, 5.3-[E-3]), Burmese (Kato, 5.4), Irabu Ryukyuan
(Shimoji, Table 2), Korean (Kim, Table 4), Kurux (Kobayashi, 5.5),
Mandarin Chinese (Ono), Newar (Kiryu, 5.3.7.2-[1]), Modern Japanese
(Tsunoda, 5.4.3-[3], 5.4.4), Old and Early Middle Japanese (Miyachi, Table
3), e.g. (35-b) (Modern Japanese).
(b) Summary, conclusion:
Modern Japanese (Tsunoda, 5.4.4), Mongolian (Umetani, Table 5).
(c) Realization, e.g. 'I see!', 'No wonder (or It is natural that) ...':
Korean (Kim, Table 4), Modern Japanese (5.4.3-[2], -[3]), e.g. (44) (Modern
Japanese).
(d) Presupposed fact or presupposition:
Sive (Norikazu Kogura, p.c.), Newar (Kiryu, 5.3.7.2-[2], Section 7).

(44) ('I did not know that Hanako will have an examination
      tomorrow.')
      [*Doori=de   Hanako=wa   issyokenmee   benkyoo-si-te*
      no.wonder   Hanako=TOP   very.hard   study-do-GER
      i-ru]   *hazu=da.*
      be-NPST   realization=COP.NPST
      'No wonder (or, It is natural that) Hanako is studying very hard.'

Etymologically the noun *hazu* means 'arrowhead' (see 6.5-[2]). It may be
used outside the MMC, with the meaning 'expectation' or 'schedule,

realization'. When it is used in the MMC, the sentence may expresss realization, as in (44).

[7] Other
This group is heterogeneous.

(a) Degree (e.g. 'hardly, scarcely'), extent, limit:
Burmese (Kato, 5.3, 5.4)
(b) 'People are affected' (passive-like):
Thai (Kiyoko Takahashi, Section 8).

Now, consider (2). The 'Noun' means 'plan', and therefore the meaning of the MMC 'Hanako plans to go to Nagoya' may be said to be predictable. In (42), the 'Noun' means 'time', and again the meaning of the MMC 'It is already time for me to go to school' may be said to be predictable. The same applies to (4), where the 'Noun' means 'appearance' and the MMC means 'It appears to be raining outside'. And also to (9), where the 'Noun' means 'nature' and the MMC means 'Hanako has a cheerful nature'. That is, there are many instances in which the meaning of the MMC is predictable — to varying degrees, though — on the basis of the meaning of the 'Noun'.

However, there also are many instances in which the meaning of the MMC is unpredictable (or at least extremely difficult to predict). For example, in (11), the 'Noun' means 'intention' and the MMC means 'Hanako considers herself a genious'. One would expect this MMC to mean 'Hanako intends/wants to be a genius'. The meaning of this MMC is unpredictable (or at least extremely difficult to predict). The same applies to (43), in which the 'Noun' means 'circumstance' and the MMC has a stylistic effect: formal.

The above shows that, in terms of meaning, some of the nouns in the 'Noun' slot of the MMC have undergone grammaticalization. We have mainly looked at Modern Japanese examples, but the same applies to many nouns in the 'Noun' slot of many (or all the?) languages concerned. We shall examine the grammaticalization of nouns in the 'Noun' slot in Section 6.

5.5.3 Semantic types of the 'Noun'
Two types of nouns are recurrent in the 'Noun' slot of the MMC: those which may be called generic nouns (5.5.3.1) and evidential nouns (5.5.3.2). Also, it is convenient to mention the frequent use of loan words in the 'Noun' slot (5.5.3.3) and the use of nominalizers for discourse-related functions (5.5.3.4).

5.5.3.1 Generic nouns. Nouns that have a generic, rather than a specific meaning, are often found in the 'Noun' slot. They include nouns for 'thing', 'fact', 'place', and 'time'. See Table 2. (Tables 2 and 3 contain enclitics, preceded by an equal symbol. Sometimes there are nouns that are best regarded as clitics rather than as words.)

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Table 2. Generic nouns

language	form	meaning of noun outside MMC	meaning of MMC
Irabu Ryukyuan	*ku*	'fact'	(a) deontic: 'should', be supposed to'
			(b) anticipated future
	munu	'thing'	causal: 'because'
	=su(u)	'person, thing'	(a) tag question
			(b) epistemic or evidential: 'I think', 'It seems' (visual/ auditory evidence'
Old and Early Middle Japanese	*mono*	'thing, person'	(a) 'be bound to'
			(b) obligation, suggestion
			(c) tendency
	koto	'thing'	(a) tendency
			(b) strong emotion
	reu	'matter, material, means, tool'	(a) purpose
			(b) grounds for judgement
	tokoro	'place'	'be about to'
	koro	'time'	'It is time to do'
	mi	'body'	'be in such ad such a state'
	kokoro	'heart, mind'	'X feels that ...'
Modern Japanese	*mono*	'thing'	(a) obligation, advice
			(b) explanation
			(c) past habitual, e.g. (45)
			(d) surprise, wish, hope
			(e) stylistic: formal
	tokoro	'place'	(a) progressive, e.g. (3)
			(b) formal
	koto	'fact'	advice, instruction, obligation, e.g. (46)
	zikan	'time'	temporal: 'It is time to do', e.g. (42)
Mitsukaido diakect of Japanese	*zigan*	'time'	temporal: 'It is time to do'
Ainu	*pe/p*	'thing'	assertive, pragmatic imperative
	ruwe	'the trace of'	inference
	hawe	'the voice of'	reported evidence
	siri	'the sight of'	visual evidence
	humi	'the sound of'	non-visual evidence
	kusu	'the reason/intention	'intend to'

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		of'	
	usi(ke)	'the place of'	progressive
	hi	'fact'	assertive
	katu	'the appearance/ reason/cause of'	assertive
Korean	*hyengthay*	'form'	evidential: 'It appears that'
	kil	'path, road'	progressive
	the	'ground, place'	(a) strong intention
			(b) conjecture, guess
	kes	'thing'	(a) background explanation, reason,
			(b) self-awareness, realization,
			(c) advice
			(d) blame, displeasrure, surprise,
			(e) guess, conjecture
			(f) speaker's intention
	pa	'thing, ways'	formal
	chan, cha	'time, moment'	progressive
Sakha	*kem*	'time'	experiential
Mongolian	*xereg*	'occurrence, event, fact'	'I mean that ...'
Amdo Tibetan	*bkopa*	'way, manner'	(a) 'have decied to do', 'plan to do'
			(b) future
Central Tibetan	*ˈkhüü*	'appearance'	evaluation
	ˈkäca	'talk'	reported evidence
Sidaama	*gara*	'manner, way'	conjecture: 'It seems that'

It should be added that, in the quasi-MMC of Thai, the 'Noun' slot is occupied by the nominalizer *thîi* or *kaan*. The nominalizer *kaan* can be used as a noun that means 'activity, affair' or 'matter', and *thîi* can be used as a noun that means 'place' or 'entity (thing, instrument, person, etc.)'. Note that these nouns, too, have a generic meaning.

Examples of nouns with a generic meaning include (3) (Modern Japanese: *tokoro* 'place') and the following (Modern Japanese): (45) (past habitual) and (46) (advice, instruction, obligation).

(45) [*Hanako=wa* *yoku* *Nagoya=e* *it-ta*]
Hanako=TOP often Nagoya=ALL go-PST
mono=da.
thing=COP.NPST
'Hanako used to go to Nagoya often.'

(46) [*Gakusee=wa* *issyokenmee* *benkyoo-su-ru*]
student=TOP very.hard study-do-NPST
koto=da.
fact=COP.NPST
'Students should study very hard.'

In their discussion of the sources of complementizers, Heine and Kuteva (2007: 230-231) state that 'One major source for complementizers consists of generic nouns' such as 'thing', 'matter', 'place', 'time', 'kind', and 'way'. (They concern superordinate categories, rather than subordinate-level categories (Heine, Claudi and Hünnemeyer 1991: 33).) Note that they — except for 'kind' — are included in the nouns listed in Table 2, i.e. the generic nouns that recurrently occupy the 'Noun' slot of the MMC.

5.5.3.2 Evidential nouns. In the instances of the MMC that have an evidential meaning, the 'Noun' slot is often (though not always) occupied by a noun which refers to (i) appearance, situation, shape or the like or (ii) the surface of a person, e.g. 'face'. They will be referred to as evidential nouns (adopted from Anna Bugaeva, p.c.). See Table 3.

Table 3. Evidential nouns

language	form	meaning of noun outside MMC	meaning of MMC
Tagalog	*mukha*	'face'	inference, visual evidence, e.g. (47)
Kapampangan	*lupa*	'face'	inference (not necessarily based on visual evidence)
	lasa	'taste'	inference (not necessarily based on taste)
	babau	'smell'	inference (not necessarily based on smell)
Modern Japanese	*moyoo*	'appearance'	'It appears/seems that', e.g. (4)
	yoosu	'appearance'	'It appears/seems that'
	kehai	'appearance'	'It appears/seems that'
	huu	'appearance'	'It appears/seems that'
Mitsukaido dialect of Japanese	*=jo:*	'state, situation'	inference

Old and Early Middle Japanese	*sama*	'situation'	'It appears/seems that', e.g. (52)
	arisama	'situation'	'It appears/seems that'
	kesiki	'situation, appearance'	'It appears/seems that'
	kewai	'situation, appearance'	'It appears/seems that'
Ainu	*ruwe*	'the trace of'	inference
	hawe	'the voice of'	reported evidence
	siri	'the sight/ appearance of'	visual evidence
	humi	'the sound of'	non-visual evidence
Korean (a)	*hyengthay*	'form'	'It appears that'
	moyang, mosup, kisayk	'appearance, looks'	'It appears/seems that'
(b)	*sangthay, sanghwang, hyengphyeng*	'situation'	unpleasant situation
(c)	*kkol*	'look, sight', 'unpleasant state or result'	unpleasant situation or result
Sakha	*bɯhɯɯ*	'appearance'	inference, direct observation
	keriŋ	'appearance'	inference, direct observation
	kœryŋ	'appearance'	inference, direct observation
	žyhyn	'looking'	inference, direct observation
	činči	'sign'	inference, direct observation
Mandarin Chinese	*yàngzi*	'appearance, expression'	'X seems/looks ...' (observation)
Amdo Tibetan	*tsʰəkka*	'appearance'	(a) sensory evidence, reported evidence, inference (b) counterfactual
	=kʰa	'surface'	(a) inference (b) stylistic: humble
	=kʰawo	'mood, appearance'	(a) sensory evidence, reported evidence, inference (b) stylistic: humble

| Central Tibetan | ʾkhüü | 'appearance' | evaluation |
	ʾkäca	'talk'	reported evidence
nDrapa	nkheil (word)/	'appearance'	superficial observation:
	=nkhei (enclitic)		'It appears/looks'
Burmese	pòuɴ	'shape'	'It seems that'
	hàɴ	'appearance'	'It seems that'
	lò	'like, as'	'It seems that'
	lòlò	'rather like, as if' (counterfactual)	'It looks as if'

An examplefrom Tagalog, cited from Katagiri (Section 1), is the following. The literal translation has been changed and the square brackets have been added, in comformity with other examples in this chapter.

(47) *Mukha-ng* [*sa-sabog=na*   *ang   bulkan*].
      face-LK   AF:CONT-erupt=already TOP volcano
      LT: 'The volcano [is] the face [such that it] will erupt already.'
      FT: 'It seems the volcano will erupt soon.'

This example has the structure shown in (24). Recall that Tagalog does not have a copula.

As noted above, in the instances of the MMC that have an evidential meaning, the 'Noun' slot is often occupied by a noun which refers to (i) appearance, situation, shape or the like or (ii) the surface of a person. However, there is one exception. In Sidaama (Kawachi, 5.2.1), the noun *gara* 'manner, way' can occupy the 'Noun' slot, and this MMC has an evidential meaning: the speaker's conjecture on the truthfulness of the proposition expressed by the 'Clause' based on his/her own observation of the subject's action or state or on the information on it that s/he has obtained from someone else.

Also, conversely, when a noun which refers to appearance, situation, shape or the like occupies the 'Noun' slot, this MMC generally has an evidential meaning. Korean, Amdo Tibetan and Central Tibetan provide exceptions. See Table 3. In Korean (Kim, 5.5.2-[4]), the MMC with a noun from the group (a) has an evidential meaning ('It appears/seems that'), as expected. However, when a noun from the groups (b) and (c) is used, this MMC describes an unpleasant situation or result. It is a modal meaning, and not an evidential meaning. In Amdo Tibetan (Ebihara, 5.3-[E-1], -[E-2]), the MMC that has the enclitic noun =kʰa 'surface' in the 'Noun' slot may have an evidential meaning ((a) inference), but it may also have a stylistice effect: (b) stylistic: humble. Similarly, the MMC that involves the enclitic noun =kʰawo 'mood, appearance' may have an evidential meaning ((a) sensory evidence, reported evidence, inference), but it may also have a stylistic effect: (b) stylistic: humble. In Central Tibetan (Izumi Hoshi, p.c.), the

MMC with the noun ˈküü 'appearance' expresses evaluation, and it does not have an evidential meanings.

5.5.3.3 Loan words. The use of loan words in the 'Noun' slot is noticeable at least in Tagalog and Japanese — both Old and Early Middle Japanese and Modern Japanese.

In Tagalog (Katagiri, Section 1), six nouns are attested in the 'Noun' slot. Among them, two are native Tagalog words, one (*mukha* 'face'; see (47)) is a loan from Sanskrit, and three are loans from Spanish. That is, more than half of the six words are loans. Katagiri explicitly states as follows.

> The use of the word *mukha* is not limited to educated people. The Philippines has been trading with India since as far back as the 7th century, and this trade has influence in language. According to Panganiban (1972), of the 30000 root words in Tagalog, close to 300 are loans from Sanskrit

In Early Middle Japanese (Miyachi, Section 1) (from 800 to 1200), twentyseven nouns are attested in the 'Noun' slot. Most of them are native Japanese words, although three are loans from Chinese. In contrast, in Modern Japanese (Tsunoda, Section 1), where at least 106 nouns are found in the 'Noun' slot, about seventy are native Japanese words, about forty are loans from Chinese and three are loans from English. That is, about 40% are loans. (It should be added, however, Modern Japanese on the whole abounds with loans from Chinese and those from English.) Regarding the increase of Chinese loans in the 'Noun' slot, Miyachi (7.6-[3]) notes as follows.

> Often, they [Chinese loans used in the 'Noun' slot — TT] can express somewhat abstract concepts that native Japanese words cannot express precisely. This in turn facilitates the expression of various meanings/functions, including modal, evidential, aspectual, temporal, and stylistic. It is surely convenient to have a construction that has such a wide range of meanings/functions.

Furthermore, in Korean (Kim, 5.5), too, many nouns that occupy the 'Noun' slot appear to be loans from Chinese.

5.5.3.4 Use of nominalizers for discourse-related functions. The MMC may have discourse-related functions (5.4.2-[6]), such as (i) explanation, reason, cause, (ii) summary, conclusion, (iii) realization, and (iv) presupposition. In the data available, if a nominalizer is used in the 'Noun' slot, this MMC generally has a discourse-related function, e.g. the Modern Japanese (Tsunoda, 5.4.4) =*no*, e.g. (35-b), the Amdo Tibetan (Ebihara, 5.3-[E-3])) =*nə*, and the Newar (Kiryu, 5.3) =*gu*, although this is not always the case; see Thai (Kiyoko Takahashi, Section 5).

6. Grammaticalization of the 'Noun'

6.1 Introductory notes

The nouns that occupy the 'Noun' slot have undergone grammaticalization to varying degrees and in different aspects. We shall look at their grammaticalization, paying attention to its phonological, morphological, syntactic and semantic aspects. First, recall that we need to distinguish the following (5.4.1): (independent) word, clitic, and affix.

Now, Hopper and Traugott (2003: 7) (first edition 1993) propose 'a cline of grammaticality'.

(48) A cline of grammaticality
content item > grammatical word > clitic > inflectional affix

Similarly, Bybee, Perkins and Pagliuca (1994: 40) put forward 'Grammaticalization scale' and 'Degree of fusion'.

(49) Grammaticalization scale
phrases
or
words   non-bound grams   inflection
————————————————————————>
more grammaticalized

(50) Degree of fusion
syntactic non-bound grams inflection derivation lexical
————————————————————————>
greater fusion

(The term 'gram' refers to 'grammatical morphemes' (Bybee, Perkins and Pagliuca (1994: 2).)

6.2 Word -> clitic -> affix

6.2.1 Morphological and word-class status of 'Noun'
As we saw in 1.1 and 4.1, in the prototype of the MMC, the 'Noun' slot is occupied by an independent word (or simply 'word') that is a noun. It may also be occupied by a clitic, an affix or — exceptionally in the case of Old and Early Middle Japanese — zero. The latter three types of the MMC are not prototypical ones.

Regarding clitics and affixes, we only deal with those that are etymologically nouns and those that appear to be etymologically nouns. In the data available, all the clitics are enclitics, not proclitics, and all the affixes are suffixes, not prefixes.

[1] (Independent) words
By definition, the words that occupy the 'Noun' slot of the prototype of the

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MMC are nouns. There are also words attested in the 'Noun' slot that are etymologically nouns but that are no longer nouns. All of these words seem to function as sentence-final particles. These instances deviate from the prototype of the MMC.

For example, Irabu Ryukyuan (Shimoji, 5.2.2) has the word *munu*. When used outside the MMC, it is a noun with the meaning 'thing'. When used in the MMC, it is used as a sentence-final particle, not as a noun. This MMC has a discourse-related meaning: causal. (This is shown in 5.5.2-[6]-(a) and Table 2 above.) In both uses, *munu* is an independent word. Modern Japanese (Tsunoda, 7.4), too, has what may be called sentence-final particles that are etymologically nouns.

[2] Clitics

It is not easy to ascertain the word-class status of the clitics that occupy the 'Noun' slot.

There is at least one clitic that functions as a noun. nDrapa (Shirai, 5.2.3) has the noun *nkheil/=nkhei*, which is tentatively translated as 'appearance'. It tends to be an independent word (*nkheil*) if the preceding word is disyllabic or longer, and an enclitic if the preceding word is monosyllabic. (The number '1' indicates the tone of this word. Enclitics do not carry their own tone, and their tone is not indicated.) It is used in the MMC only and this MMC has an evidential meaning of superficial observation: 'It appears/looks ...'. (The noun *nkheil/=nkhei* is listed in Table 2 above.)

Irabu Ryukyuan (Shimoji, 5.3.2) has the enclitic *=paz*, although the noun from which *=paz* is derived is not used. (It has a cognate noun in Japanese: *hazu* 'arrowhead'. This noun can be used in the MMC, e.g. (44). See 6.5-[2] below.) *=paz* can occupy the 'Noun' slot and functions as a sentence-final particle. This MMC has an epistemic meaning: guess.

Modern Japanese (Tsunoda, 7.6) has what may be called modal particles that are etymologically nouns, that occupy the 'Noun' slot and that are enclitics, e.g. *=bakari* 'only' (etymology: the noun *hakari* 'instrument for measurement') and *=dake* 'only' (etymology: the noun *take* 'extent, limit'). (These nouns do not occupy the 'Noun' slot, in Modern Japanese at least.)

[3] Affixes

Most of the affixes that occupy the 'Noun' slot are derivational affixes. For example, Modern Japanese (Tsunoda, 7.7) has the independent word (a noun) *kimi* 'appearance, tendency' and the derivational suffix *-gimi*. (Note the voicing of the stop.) Both can occupy the 'Noun' slot, and each of these two types of MMC has a habitual meaning or an evidential meaning (visual evidence?). However, there is at least one inflectional suffix that is etymologically a noun. Irabu Ryukyuan (Shimoji, 5.2.1, 5.4.1) has the independent word (a noun) *kutu* 'fact', and this noun can be used in the MMC. Furthermore, this language has the suffix *-kutu*, which is derived from this noun. The suffix *-kutu* is attached to verb stems, occupying the slot that some other inflectional suffixes occupy and consequently it is best analyzed as an inflectional suffix. This suffix, too, occupies the 'Noun' slot of the MMC. The MMC with the noun *kutu* and the MMC with the suffix

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-kutu express the same meanings: (i) a deontic modal meaning 'should; be supposed to', and (ii) anticipated future 'will'.

6.2.2 Diachronic changes

On the basis of works such as Heine, Claudi and Hünnemeyer (1991: 15, 213), Bybee, Perkins and Pagliuca (1994: 40) and Hopper and Traugott (2003: 7, 110, 111) among others, grammaticalization may be hypothesized to proceed as shown below.

(51) (independent) word -> clitic -> affix

It has not been possible to investigate this issue in all the langauges reported in the present volume. Relevant data are shown in Table 4. 'Words' refer to independent nouns, rather than sentence-final particles and clitic nouns. For specific examples, see the individual chapters. A few examples will be given below. In the data available on the MMC, clitics are enclitics, rather than proclitics, and affixes are suffixes, rather than prefixes. There is no example which shows the chain of changes of 'word -> proclitic -> prefix'.

Table 4. Word -> clitic -> affix

	word (noun)	clitic	affix
Irabu Ryukyuan	*kutu* 'fact' (MMC) (a) deontic: 'should', 'be supposed to' (b) anticipated future ('will')		*-kutu* (MMC) (a) deontic: 'should', 'be supposed to' (b) anticipated future ('will')
Japanese	*sama* (OEMJ; MMC) (MJ), e.g. (52) 'It appears'	*=soo* (MJ; MMC), e.g. (53) 'reported evicence'	*-soo* (MJ; MMC), e.g. (54) 'inference'
	yau (OEMJ) 'manner, example'	*=yau* (OEMJ; MMC) 'looks like' *=yoo* (MJ; MMC) 'inference'	*-yoo* (MJ) 'manner, way'
	ke (OEMJ)	*=ge* (MJ, dialectal; MMC)	*-ge* (MJ; MMC)

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	'appearance'	'inference; reported evidence'	'It appears'
	kao (OEMJ; MMC) 'face, surface, situation'		*-gao* (OEMJ; MMC) '(elegant/refined) feeling, atmosphere, taste'
	kimi (MJ; MMC) 'tendency'		*-gimi* (MJ; MMC) 'tendency'
Kolyma Yukaghir	*pen* 'supernatural thing'	*=ben* (MMC) (a) past (b) strong assertion	
nDrapa	*nkheil* (MMC) 'It appears/looks'	*=nkhei* (MMC) 'It appears/looks'	
Hindi	*paalaka* (Sanskrit, Hindi) 'guardian, protector'	*=vaalaa* (MMC) (a) 'be about to' (b) schedule, intention (c) firm belief about the occurrence/non-occurrence of a situation	

It has proved to be very difficult to find examples that show that one and the same item has undergone the changes shown in (51).

For example, the form in each of Kolyma Yukaghir (Endo, 5.2.3), nDrapa (Shirai, 5.2.3) and Hindi (Imamura, 6.1) has the use as a word and also as an enclitic, but its use as a suffix is not attested. As another example, the word *kao* and the suffix *-gao* are attested in Old and Early Middle Japanese ('OEMJ') (Miyachi, 7.3), but the enclitic form *=kao/=gao* is not attested in OEMJ (or in Modern Japanese ('MJ')). The same applies to the word *kimi* and the suffix *-gimi* in MJ (Tsunoda, 7.7).

We have seen that it has proved to be very difficult to find examples that show that one and the same item has undergone the changes shown in (51). Now it is even more difficult to find examples that show that the changes presented in (51) have taken place within the MMC. For example, the following set of forms are attested (Miyachi, 7.2-[1]; Tsunoda, 7.9): (i) the word *yau* (a loan from Chinese) in OEMJ, (ii) the enclitic *=yau* in Old and

OEMJ, (iii) the enclitic =*yoo* in MJ, and (iv) the suffix -*yoo* in MJ. Among these four forms, the enclitics =*yau* and =*yoo* are attested in the MMC, but the word *yau* and the suffix -*yoo* are not. As another set of examples, among the word *ke* (OEMJ), the enclitic =*ge* (MJ, dialectal; MMC) and the suffix -*ge* (MJ; MMC), the enclitic =*ge* and the suffix -*ge* are attested in the MMC (Tsunoda, 7.10). However, the word *ke* is not attested in the MMC in MJ. In OEMJ, at least there is no unequivocal example of the MMC involving the word *ke* (Asako Miyachi, p.c.).

The only set of an independent word (a noun), a clitic and an affix that may possibly have undergone the three phases shown in (51) within the MMC are the noun *sama*, the enclitic =*soo* and the suffix -*soo* (Miyachi, 7.1-[3]; Tsunoda, 7.8). *Nihon Kokugo Daiziten* 'Large Japanese Dictionary' (second edition, second printing; Tokyo: Shogakukan 2009), Vol. 8: 290 indicates that the etymology of =*soo* and -*soo* is not certain, but that one possibility is the noun *sama* 'appearance, situation'. According to this etymology, the noun *sama*, the enclitic =*soo* and the suffix -*soo* constitute the only set of an independent word (a noun), a clitic and an affix that have undergone the three phases shown in (51) within the MMC. Examples follow. (i) Noun: (52) (OEMJ, cited from Miyachi, 7.1-[3]), (ii) enclitic: (53) (MJ, cited from Tsunoda, 7.8), and (iii) suffix: (54) (MJ, cited from Tsunoda, 7.8). The example (52) is taken from the *Taketori Story* ('Tale of a Bamoo Cutter'), in which Princess Kaguya came from the moon to the earth and now she wishes to return to the moon.

(52) (Princess Kaguya is looking at the moon.)
    [*tune=yori=mo*   *mono-omowi-taru*]
    usual=ABL=ETOP   thing-think-STAT.ADN
    sama=nari.
    appearance=COP.CONCL
    LT: '[Princess Kaguya] is an appearance to think about things
        more than usual.'
    FT: 'Princess Kaguya seems to be in deeper thought than usual.'

(53) [*Hanako=ga*   *Nagoya=ni*
    Nagoya=NOM   Nagoya=DAT/LOC
    it-ta]=soo=da.
    go-PST=*soo*=NPST
    'I heard that Hanako went to Nagoya.'

(54) [*Hanako=ga*   *Nagoya=ni*
    Hanako=NOM   Nagoya=DAT/LOC
    ik-i]-soo=da.
    go-INF-NPST-*soo*=COP.NPST
    'It seems that Hanako will go to Nagoya.'

In OEMJ (Miyachi, 7.1-[3]), the noun *sama* means 'situation, appearance'. The MMC with it has an evidential meaning: 'It seems/appears', e.g. (52). In MJ (Tsunoda, 7.8), the MMC with the enclitic =*soo* have an evidential meaning, to be precise, reported evidence, e.g. (53),

and the MMC with the suffix *-soo* has an evidential meaning, to be precise, inference, e.g. (54). (Morphologically, these forms probably changed as follows: Word -> clitic -> affix. However, semantically the path of changes may not have been as follows: 'It seems/appears' -> reported evidence -> inference.)

Note that the forms listed in Table 4 exhibit phonological changes, such as the following.

(a) Voicing of a stop, cf. Kolyma Yukaghir.
(b) Fricativization (followed by voicing) of a stop, cf. Hindi.
(c) Vowel change, cf. Japanese.
(d) Loss of inherent tone, cf. nDrapa.

I note in this connection that there is an instance in Japanese in which the 'Noun' and the 'Copula' have merged. See Tsunoda (this volume, 7.11).

Hopper and Traugott (2003: 154) state that most of the changes that occur in grammaticalization 'are characterizable as reductions'. As the parameter that concerns the phonetic/phonological aspects of grammaticalization, Heine and Kuteva (2007: 34) give erosion ("phonetic reduction"), i.e. loss in phonetic substance. Now, most of the phonological changes observed in Table 4 and also the merger of the 'Noun' and the 'Copula' are instances of reduction. However, this does not seem to apply to (a) Voicing of a stop or (b) Fricativization (followed by voicing) of a stop. This suggests that the inventory of phonological changes in grammaticalization needs to be expaned to include (a) and (b).

6.3 Affixes: derivational and inflectional

On the basis of 'Degree of fusion', shown in (50) (Bybee, Perkins and Pagliuca 1994: 40), the order of changes shown in (55) would be expected. In contrast, Heine, Claudi and Hünnemeyer (1991: 213) suggest the opposite order, shown in (56).

(55) Relative order of changes (1)
    inflectional affix > derivational affix
(56) Relative order of changes (2)
    derivational affix > inflectional affix

In Japanese, both in OEMJ (Miyachi, 7.3) and MJ (Tsunoda, 7.7 to 7.10), there are derivational suffixes that derived from nouns. For examples, see Table 4. However, there is no inflectional suffix which is derived from a noun.

Among the languages reported in the present volume, Irabu Ryukyuan (Shomoji) is the only language that has yielded an inflectional suffix that is derived from a noun: the noun *kutu* 'fact' and the verbal inflectional suffix *-kutu*. See 6.2.1-[3].

Grammaticalization of a noun into a verbal inflectional affix seems

extremely uncommon crosslinguistically. A cursory examination of the relevant literature, such as Heine, Claudi and Hünnemeyer (1991), Bybee, Perkins and Pagliuca (1994), Lehmann (1995), Hopper and Traugott (2003), and Heine and Kuteva (2007) indicates that no such instance seems to have been reported previously. (Aikhenvald (2011: 609) lists five languages in which evidential markers derive from nouns, but she does not say whether or not these markers are verbal inflectional affixes.) In contrast, grammaticalization of a noun into a derivational suffix is well attested. See Table 4 for examples in Japanese.

The above suggests that (57) and (58) have opposite orderings.

(57) Crosslinguistic frequency of grammaticalization of a noun:
     derivational > inflectional
(58) Degree of fusion (as proposed by Bybee, Perkins and Pagliuca; cf. (50)):
     inflectional > derivational

And that, if the relative order of changes is as shown in (56), and not that shown in (55), then (56) and (57) on the one hand and (58) on the other have opposite orderings.

As noted above, the evidence is not conclusive. At least, when investigating grammaticalization, it is important to distinguish (i) relative order of changes, (ii) degree of fusion, and (iii) crosslinguistic frequency.

6.4 Morphosyntax of the 'Noun'

[1] Affixation to the 'Noun'
As noted in 5.2.1, there are instances in which a noun in the 'Noun' slot is combined with an affix. In this respect at least, the noun concerned behaves like any other noun.

[2] Modification of the 'Noun'
As seen in 5.2.2, other chapters in the present volume have generally yielded no example in which a noun in the 'Noun' slot is modified by some other word. This modification is probably impossible in Modern Japanese (Tsunoda, 5.6.4). It seems that in this respect the nouns have lost their status as nouns and have been grammaticalzed. Newar (Kiryu, 5.2.6) and Old and Early Middle Japanese (Miyachi, 7.5.3-[2]) are exceptions. Kiryu has found three such examples of the modification of a noun by some other word, and Miyachi gives one example. In this respect, the nouns in the 'Noun' slot of the MMC in Newar and in Old and Early Middle Japanese may be less grammaticalized than those in other languages.

6.5 Semantic aspects of the 'Noun'

In 5.4.3.1 and 5.4.3.2, we looked at the synchronic aspects of meaning of the 'Noun' and noted that there are two groups of nouns that recurrently occupy the 'Noun' slot: generic nouns (Table 2) and evidential nouns (Table

3). We turn now to the diachronic aspects of the 'Noun'. It is far beyond the scope of the present chapter to discuss every noun reported in the present volume, and we shall look at perhaps the most spectacular semantic changes.

[1] Non-ordinary entities: Kolyma Yukaghir and Hindi
Kolyma Yukaghir (Endo, 5.2.2, 5.2.3) has the enclitic =ben, and the MMC with it expresses (i) past situation, or (ii) a modal meaning, such as strong assetion. The etymology of this enclitic is suggested to be the noun *pen* 'thing', or more precisely, 'supernatural thing'.

Hindi (Imamura, 5.1.3, 6.1) has the enclitic =*vaalaa*. Etymologically, this enclitic is said to have derived from the Sanskrit noun *paalaka* 'guardian, protector; one who maintains or observes'. The MMC with it indicates (i) 'be about to' (an aspectual meaning), (ii) schedule, intention (a modal meaning), or (iii) the speaker's firm belief about the occurrence/non-occurrence of a situation (a modal meaning).

It is not known how the Kolyma Yukaghir MMC, whose 'Noun' is suggested to have derived from *pen* 'supernatural thing', came to express (i) events in the reasonably distant past or (ii) a modal meaning, such as strong assertion. Similarly, it is not known how the Hindi MMC, whose 'Noun' is suggested to have derived from the Sanskrit noun *paalaka* 'guardian, protector; one who maintains or observes', came to indicate (i) 'be about to' (an aspectual meaning), (ii) schedule, intention (a modal meaning), or (iii) the speaker's firm belief about the occurrence/non-occurrence of a situation (a modal meaning). It is truly intriguing how these MMCs acquired the meanings they have.

[2] Japanese *hazu*
There is a large literature that investigates the history of the Japanese language, and there are numerous works that deal with grammaticalization in Japanese, although they may not employ the term 'grammaticalization'. They provide fascinating accounts of the grammaticalization in Japanese. One such example is *hazu*.

In Modern Japanese (Tsunoda, 5.4.3-[2]), the noun *hazu* may be used outside the MMC (under very limited syntactic environments), with the meaning 'expectation' or 'schedule, realization'. However, it is generally used in the MMC, and this MMC has two uses: (i) 'expectation, schedule', e.g. (59), and (ii) realization, e.g. (44). Both uses are modal.

(59)　[*Hanako=wa asita*　*Nagoya=e*　*ik-u*]
　　　Hanako=TOP tomorrow　Nagoya=ALL　go-NPST
　　　hazu=da.
　　　expectation=COP.NPST
　　　LT: 'Hanako is an expectation [such that she] goes/will go to
　　　　　Nagoya.'
　　　FT: 'Hanako is expected to go to Tokyo tomorrow.'

Now, how did this MMC acquire this meaning? According to *Nihon Kokugo Daiziten* 'Large Japanese Dictionary' (Tokyo: Shogakukan 2009), Vol. 10:

1123, *hazu* refers to an arrowhead. It fits in the bowstring nicely. Consequently the word *hazu* acquired the meaning 'It is naturally the case that ...', 'X stands to reason', 'reason (not in the sense of cause), logic', and subsequently 'plan, promise'.

Regarding the sources for grammaticalization, Heine, Claudi and Hünnemeyer (1991: 35) state as follows: 'Despite the many attempts that have been made so far, it is not yet possible to define, in a non-circular way, the range of items serving as a source for grammatical concepts'. They (1991: 33) add as follows. 'If there is a more general observation that can be made at the present stage of research, it is that categories of the subordinate level are unlikely to serve as source concepts, ...'. The data presented in the volume in the main support their view. Indeed, most of the nouns listed in Table 2 (generic nouns) and Table 3 (evidential nouns) concern superordinate categories, rather than subordinate-level categories. However, there are also many nouns referring to subordinate-level categories that are used in the 'Noun' slot of the MMC and are grammaticalized. Three such examples were given in [1] (Kolyma Yukaghir and Hindi) and [2] (Japanese).

6.6 Grammaticalization of a noun into a part of the predicate

As seen in 5.3, syntactically the MMC in Modern Japanese should be analayzed as containing a compound predicate that consists of three parts: (i) the predicate of the 'Clause', (ii) the 'Noun', and (iii) the 'Copula'. This analysis applies to at least seven other (and possibly more) languages. That is, in the MMC of these languages, the 'Noun' has become a part of the predicate of the clause/sentence. This applies irrespective of whether the 'Noun' slot is occupied by a noun (an indepednet word), a clitic or an affix.

Now, works such as Bybee, Perkins and Pagliuca (1994), Heine, Claudi and Hünnemeyer (1991), Heine and Kuteva (2007), Hopper and Traugott (2003) and Lehmann (1995) indicate that there are numerous works that examine the grammaticalization of verbs, but that those which investigate the grammaticalization of nouns are relatively few. Among those few that look at nouns, almost all deal with the grammaticalization of nouns into adpositions (i.e. prepositions or popstpositions). In addition, the grammaticalization of nouns into adverbial clause markers is discussed by Heine, Claudi and Hünnemeyer (1991: 45), and that into complementizers by Heine and Kuteva (2007: 230-236).

The present volume is unqiue in that it extensively examines the grammaticalization of nouns. It is even more unique in that it examines the grammaticalization of a noun into a part of the predicate of a clause/sentence.

Bybee, Perkins and Pagliuca (1994) list lexical sources of various verbal categories: modal, evidential, aspectual, and temporal. However, they do not give a noun as a lexical source for any of the categories discussed. (Recall that these meanings can be expressed by the MMC. See 5.4.2.)

Furthermore, one paper in the present volume, i.e. that on Irabu

Ryukyuan by Shimoji, shows that there is an instance in which a noun has been grammaticalized into a verbal inflectional suffix. (Aikhenvald (2011: 609) lists five languages in which evidential markers derive from nouns, but she does not say whether or not these markers are verbal inflectional affixes.)

7. Presence/absence of the MMC

7.1 Introductory notes. As seen in Sections 2 and 3, the MMC seems uncommon crosslinguistically. At this stage of investigation it is impossible to predict which language will or will not have the MMC.

Even languages that are genetically and typologically — and often geographically as well — close to each other may differ regarding the presence/absence of the MMC. Examples follow. (i) Hindi (Imamura) possesses the MMC, but Marathi (Prashant Pardeshi, p.c.) does not. Both are Indo-Aryan languages with SOV order. (ii) Sive (Tomoyuki Kubo and Norikazu Kogura) possesses the MMC, but Manchu (Haibo Wang, p.c.) does not. Both are Tungusic languages with SOV order.

The MMC is most frequently attested in agglutinating languages with the SOV order and postpositions. However, not every language with these properties has the MMC. Such languages include Marathi (Prashant Pardeshi, p.c.) and Nanay (Shinjiro Kazama, p.c.). Furthermore, the MMC is found in at least two V-initial (or predicate-initial) languages, namely, Tagalog (Katagiri) and Kapampangan (Hiroaki Kitano, p.c.), and two SVO languages, i.e. Thai (Kiyoko Takahashi) and Mandarin Chinese (Ono).

The MMC is generally found in language of Asia. However, it is found outside Asia as well, i.e. Sidaama of Ethiopia (Kawachi).

7.2 External adnominal clauses

It is only natural to enquire whether the presence of the MMC can be predicted on the basis of the presence of some other property in a given language. That is, is there any correlation between the MMC and some other property?

When the collaborative research project mentioned in Section 2 started, it was hypothesized that the presence of external adnominal clauses is a prequisite to the presence of the MMC. We shall first outline these adnominal clauses.

Teramura (1969, 1992) devides the adnominal clauses ('ACs') of Japanese into two types: (i) ACs of *uti no kankee* 'internal relationship' and (ii) ACs of *soto no kankee* 'external relastionship'. I have labeled them 'internal ACs' and 'external ACs', respectively.

Roughly speaking, with internal ACs, the head noun corresponds to an argument or an adjunct of the AC. In contrast, with external ACs, the head noun is, so to speak, added from outside the underlying clause. It does not correspond to an argument or an adjunct of the AC.

As examples of internal ACs, compare (61) to (63) (involving an AC) with (60), the 'underlying' sentence to which (61) to (63) correspond. (The AC is shown with a broken line.)

(60) *Gakusee=ga   sensee=ni   syukudai=o*
     student=NOM professor=DAT/LOC homework=ACC
     okut-ta.
     send-PST
     'A student sent [his/her] homework to a professor.'

(61) *sensee=ni   syukudai=o   okut-ta*
     ----
     professor=DAT/LOC homework=ACC   send-PST
     gakusee
     student
     'the student who sent [his/her] homework to a professor'

(62) *gakusee=ga   sensee=ni   okut-ta*
     ----
     student=NOM professor=DAT/LOC send-PST
     syukudai
     homework
     'the homework that a student sent to [his/her] professor'

(63) *gakusee=ga   syukudai=o   okut-ta*
     ----
     student=NOM   homework=ACC   send-PST
     sensee
     professor
     'the professor to whom a student sent [his/her] homework'

As an additional example of internal AC, compare (65) (involving an AC) with (64), the 'underlying' sentence to which (65) corresponds.

(64) *Gakusee=ga   pen=de   tegami=o   kai-ta.*
     student=NOM pen=LOC/INS letter=ACC write-PST
     'A student wrote a letter with a pen.'

(65) *gakusee=ga   tegami=o   kai-ta   pen*
     ----
     student=NOM letter=ACC   write-PST   pen
     'the pen with which a student wrote a letter'

In (61), the head noun ('student) corresponds to the subject in (60). In (62), the head noun ('homework') corresponds to the direct object in (60). In (63), the head noun ('professor') corresponds to the indirect object in (60). Similarly, in (65), the head noun ('pen') corresponds to the adjunct in (64). As can be seen, with internal ACs, the head noun corresponds to an argument or an adjunct of the 'underlying' clause/sentence.

In contrast, with external ACs, the head noun is, so to speak, added from outside the underlying clause. It does not correspond to an argument or an

adjunct of the AC. For example, compare:

(66) *Hanako=ga*   *sakana=o*   *yak-u.*
     Hanako=NOM   fish=ACC   grill-NPST
     'Hanako grills a fish.'

(67) *Hanako=ga*   *sakana=o*   *yak-u*   *nioi*

     Hanako=NOM   fish=ACC   grill-NPST   smell
     LT: 'the smell with which Hanako grills a fish'
     Intended meaning: 'the smell emitted when Hanako grills a fish'

(68) **Hanako=ga*   *sakana=o*   *nioi=de*   *yak-u.*
     Hanako=NOM   fish=ACC   smell=LOC/INS   grill-NPST
     Intended meaning: 'Hanako grills a fish with a smell.'

In (67), the head noun is 'smell'. It might be thought that (67) was derived from (68). However, (68) is not acceptable. Rather, (67) may be said to be formed by adding the noun *nioi* 'smell' to (66), placing it in the position for the head noun. That is, the head noun 'smell' is, so to speak, added from outside the underlying clause. It does not correspond to an argument or an adjunct of the AC. Another set of examples involving an external AC:

(69) *Doroboo=ga*   *aruk-u.*
     burglar=NOM   walk-NPST
     'A burglar walks.'

(70) *Doroboo=ga*   *aruk-u*   *oto*
     ----
     burglar=NOM   walk-NPST   noise
     LT: 'the noise with which a burglar walks'
     Intetended meaning: 'the noise emitted when a burglar walks'

(71) **Doroboo=ga*   *oto=de*   *aruk-u.*
     something=NOM   noise=LOC/INS   walk-NPST
     Intended meaning: 'A burglar walks with a noise.'

External ACs are similar to the MMC as follows. In external ACs, the head noun is not coreferential with any argument or any adjunct of the AC. In the MMC, the 'Noun' is not coreferential with the subject of the 'Clause'; see the property (c) of the prototype of the MMC listed in Section 1.

Now, as noted above, at the beginning of this collaborative research project, it was hypothesized that the presence of external ACs is a prequisite to the presence of the MMC. For this reason, the chapters on specific languages in the present volume each contain a section that describes the external ACs in that language.

However, this hypothesis has turned out to be untenable. First, Sidaama (Kawachi, 4.2.1) does not have external ACs, and yet it has the MMC. Second, in Tagalog (Katagiri, 4.2.1.3), generally external ACs are not acceptable (although there are marginally acceptable instances), and yet this language has the MMC.

7.3 Language-specific factors

[1] Sidaama
There may be language-specific factors that lie behind the rise of the MMC in a given language. For example, Kawachi (Section 7) points out the existence of two constructions in Sidaama that may have led to the birth of the MMCs in this language.

[2] Japanese
As noted in 1.3-[1], in Japanese at least, it is likely that the MMC originated in noun-predicate sentences whose predicate contains an adnominal clause. See Miyachi (Sections 5, 6 and 7.6).

There may be language-specific factors that lie behind the abundance of the MMC in a language. For example, Miyachi (7.6-[1]) notes that, as Yamada (1908: 818-827, 1217-1289) points out, since the time of the oldest written records of Japanese (around 700), sentences that end with a noun (often followed by the copula) have been very common. (Still now in Modern Japanese, there are many sentences that end with a noun (followed by the copula) even when they describe actions, and not states. See Tsunoda (4.1-(d)).) This may possibly be one factor that has caused the abundance of the MMC in Japanese.

7.4 Diffusion and areal features

There are two groups of languages in which the MMC is frequently found.

[1] Tibeto-Burman languages
The MMC is found in a fair number of languages of the Tibeto-Burman branch of the Sino-Tibetan family of languages: Amdo Tibetan (Ebihara), Central Tibetan (Izumi Hoshi, p.c.), nDrapa (Shirai), Newar (Kiryu), Burmese (Kato), and Lahu, Jinghpaw (Matisoff 1972). However, there are also Tibeto-Burman languages in which the MMC is not found, e.g. Meche (Kazuyuki Kiryu, p.c.), and Pwo Karen, Sgaw Karen (Atsuhiko Kato, p.c.). Mandarin Chinese (Ono) (a member of the Sinitic branch of the same family), too, has the MMC. It is not known whether the MMC is genetically inherited from the protolanguage or has been diffused among these languages.

As noted in 7.1-[1], the MMC is generaly found in SOV languages, except for Thai (Kiyoko Takahashi) and Mandarin Chinese (Ono) (SVO), and Tagalog (Katagiri) and Kapampangan (Hiroaki Kitano, p.c.) (V-initial). Now, regarding the absence of the MMC in Pwo Karen and Sgaw Karen, Atsuhiko Kato (p.c.) notes as follows. They have been in intensive contact with Burmese, from which they have borrowed a large number of words — even function words. Despite this, unlike Burmese, they do not have the MMC. One factor that has hindered the borrowing of the MMC may be word order: they have the SVO order, whereas Burmese has the SOV order.

[2] Languages in East Asia
The MMC clusters in East Asia.

(a) Irabu Rykyuan (Shimoji) and Japanese (Miyachi, Tsunoda, Sasaki) (both Japonic languages).
(b) Ainu (Bugaeva) (genetic affiliation unkown).
(c) Korean (Kim) (genetic affiliation unkown).
(d) Mandarin Chinese (Ono) (a Sino-Tibetan language).
(e) Sive (Tomoyuki Kubo and Norikazu Kogura) (a Tungusic language, originally from Manchuria).

Typologically, these languages have the SOV order, except for Mandarin Chinse (SVO). Genetically, they do not belong to one single language family. The MMC may be an areal feature of these languages, having diffused across genetic borders.

There appears to be no specific evidence to show that the MMC diffused among the two groups of languages mentioned. In this connection, Kurux (Kobayashi, 5.3.4, 5.4.2, Section 7), a Dravidian language, provides fascinating data. According to Kobayashi, Kurux has the MMC, which is uncommon among Dravidian languages. There are two enclitics that can occupy the 'Noun' slot of the MMC, and they may be loans from Indo-Aryan languages. Hindi (Imamura) has a parallel construction, and the MMC in Kurux may possibly have risen due to structural borrowing. If the scenario that Kobayashi suggests is correct, the two enclitics and the MMC have diffused and crossed the genetic border. It is relevant to note that both Kurux and Hindi are SOV languages.

8. Summary and concluding remarks

The MMC has unique characteristics. In terms of structure, it is a combination of two structures: that of a verb-predicate clause, etc. and that of a noun-predicate structure. In terms of meaning, its literal translation does not make sense.

The MMC abounds in Modern Japanese and Korean. So far it has been found in close to twenty languages — mainly in languages of Asia (except for Sidaama of Ethiopia), in particular, in (i) those of East Asia and (ii) Tibeto-Burman languages. It may be an areal feature of each of these two groups. Also, it is generally found in SOV languages, except for two SVO languages (Mandarin Chinese and Thai) and two predicate/V-initial languages (Tagalog and Kapampangan).

The predicate of the 'Clause' of the MMC often behaves like that of ACs, and it may look as if the MMC contained an AC. (Indeed, many previous studies of Japanese in effect adopt this view). However, syntactically in langauges such as Japanese and Korean, the MMC behaves like independent sentences. That is, syntactically the MMC is mono-clausal, and not bi-clausal.

These unique features of the MMC have not been recognized — not even in Japanese or Korean. In the other languages, the MMC has attracted little or no attention.

The MMC has been found to have various meanings/functions, such as modal, evidential, aspectual, temporal, stylistic and discourse-related. The nouns in the 'Noun' slot are grammaticalized, to varying degrees, in terms of semantics, phonology, morphology, and syntax.

Among the studies of grammaticalization, the present volume appears to be unprecedented in that it extensively examines the grammaticalization of nouns, and in particular, the grammaticalization of a noun into a part of the predicate of a clause/sentence.

Note

1. Kazuhiro Kawachi (p.c.) points out that there is another property that needs to be attributed to the prototype of the MMC.

(d) The 'Clause' is not the subject of the 'Noun'.

This is in order to exclude sentences such as the following. (For exemplification, I use English words.)

(i) [*He won*] *a surprise is.*
     'That he won is a surprise'.
(ii) [*He lost*] *a shame is.*
     'That he lost is a shame.'

Indeed, sentences such as (i) and (ii) have the structure of (1). However, as the following discussion will show, they are not intended to be instances of the MMC. As Kawachi points out, the condition (d) is necessary to exclude sentences such as (i) and (ii) from the MMC.

Abbreviations

ABL - ablative; AC - adnominal clause; ACC - accusative; ADN - adnominal; AF - actor focus; ALL - allative; CONCL - conclusive; CONT - contemplated; COP - copula; DAT/LOC - dative/locative; DESID - desiderative; ETOP - emphatic topic; FT - free translation; GER - gerund; IMP - imperative; INF - infinitive; LK - linker; LOC/INS - locative/instrumental; LT - literal translation; MJ - Modern Japanese; MMC - mermaid construction; NCC - noun-concluding construction; NFND - nonfuture neutral disjunct; NMLZ - nominalizer; NOM - nominative; NPST - nonpast; OEMJ - Old and Early Middle Japanese; p.c. - personal communication; PL - plural; POL - polite; PST - past; Q - question; RESP - respect; SG - singular; STAT - stative; SUBJ - subject; TOP - topic; 1 - first person.

Acknowledgements

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