# Reading notes of A Grammar of Japhug

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The theoretical orientation is already well-documented in my notes about English, Latin and Mandarin Chinese.

## **Grammatical overview**

#### 1.1 Clause structure

**The surface order** We start our discussion on Japhug grammar by first dividing utterances into simple clauses.

Box 1.1: Distinguishing a simple clause

How to break a long sentence into simple clause segments?

Japhug clauses are verb-final: core arguments and adverbials are before the verb. When periphrastic conjugation is used, the copula that carries the main tense, aspect, mood, evidentiality (TAME) information is put at the final position, and the main verb precedes it; when there are several main verbs coordinated in a clause, only one final copula needs to appear (Jacques 2021, pp. 1090-1091).

#### Box 1.2: Periphrastic conjugation and verb phrase coordination

TODO: is this coordination of verb phrase? Note that the subject seems to be changed in the middle (the problem is the meaning of *w-ŋgw* '3sg.poss-inside' and the constituents introduced by it: does it mean 'as three very beautiful girls', and therefore is an adjunct, or is it a new subject? Also verb phrase coordination is related to syntactic ergativity – see the discussion on clause pivot)

## 1.1.1 Alignment

**Syntactic pivot of the core clause, or the subject** Jacques (2021) doesn't mention verb phrase coordination, but Prins (2011, p. 549) mentions coordination of two verb phrases sharing the same subject in Jiaomuzu, a language close to Japhug, and therefore the verb phrase layer should be kept?? (see Box 1.2).

**The direct-inverse system** As is said above, Japhug shows clear nominative-accusative properties. We however can also observe a direct-inverse alignment system.

According to Oxford (2023), what is known as a direct-inverse device may be (a) the change of clausal grammatical function of the arguments, i.e. "deep inverse", in which the patient in a way or another gets some subject-related properties and hence ergativity is observed in inverse configurations, or (b) a "shallow inverse" which is mostly about argument indexation, for example a requirement that only agreement

with a speech act participant is morphologically permissible leading to a direct-inverse system based on the distinction between 1,2 and 3. The deep inverse can be optional and in this case it is essentially a voice construction; the shallow inverse should be obligatory or otherwise verbal agreement is arbitrary.

In the inverse configuration of Japhug, the A argument receives an ergative marker. This falls into the category of deep inverse said above. Properties other than the case marking of the A argument are however not changed: evidence supporting a higher position of the ergative A argument include the fact that it can be separated from the object and the verb by an intransitive clause (Jacques 2021, p. 306) in which a gap coreferential with the ergative argument exists. Therefore, in the inverse configuration, we cannot say that the patient is rendered the syntactic pivot: we should instead analyze the Japhug inverse system as inverse-triggered morphological ergativity, in which the only subject-like property that the A argument gets is the ergative case.

#### Box 1.3: Syntactic pivot and ergativity

List some facts as evidence for morphological ergativity.

In the verb morphology part of the Japhug inverse system, the subject in the direct configuration and the object in the inverse configuration are indexed on the verb. The personal affixes on the verb are neutral: they are only about person and number, and tell us nothing about the argument position of the argument from which they originate.

In the rest of § 1.1, we describe the verb phrase.

**The verb** Verbs can be regularly formed by denominal derivations (Jacques 2021, Ch 20). Since an independent adjective class is absent, the only two kinds of denominal derivations are noun-to-adverb derivations and noun-to-verb derivations, the former being relative marginal (Jacques 2021, p. 1011); thus the term *denominal* can be used specifically to refer to noun-to-verb derivations.

#### **Internal complements**

**Box 1.4: Internal complements** 

Definition of object, alignment, etc.

**TAME categories** Decomposition of TAME categories in the same way English *he* [is playing] football is analyzed as "present (imperfect) progressive" is not necessary if there is no need for cross-linguistic comparison: although we are able to distinguish between e.g. the present tense and the past tense, or the progressive aspectuality v.s.

<sup>&</sup>lt;sup>1</sup>The deep inverse is also known as "syntactic" inverse or "inverse voice", and the shallow inverse is also known as "morphological" inverse, or "inverse alignment"/ This terminology however is sometimes misleading. For example, if we stipulate that in Italian, person clitics are agreement formatives and first/second person clitics belong to an agreement system only targeting speech act participants, while the third person clitic belongs to another agreement system, then the impossibility of co-appearance of a first/second person direct object clitic and a third person indirect object clitic Italian can be argued to be due to locality constraints (Bianchi 2006). The existence of a speech-act only agreement system is comparable to "morphological inverse", but the phenomena related to this system usually will not be called morphology.

On the other hand, "syntactic inverse" covers both syntactic ergativity and morphological ergativity. This confusion is seen in the case of Japhug: in the inverse configuration of Japhug we see morphological ergativity, but this is deep inverse and therefore "syntactic inverse" in Oxford (2023).

the non-progressive one, not every combination of attested tense, aspect, modality and evidentiality values in Japhug can be morphologically realized.

The morphological realization of these categories is remarkable Their main exponents are the alternation of the orientation prefix. Some TAME categories insert a fixed prefix into the orientation prefix slot; others choose one of the four prefixes that have the same directional meaning in Jacques (2021, Table 15.1).

#### Box 1.5: Interaction between TAME and orientation

Does the TAME marking override the lexically determined orientation prefix or the semantically significant orientation prefix of a orientable prefix?

## 1.2 Noun phrase

#### **Counting words**

#### Box 1.6: Counted noun constructions: what's the head?

In Jacques (2021, p. 10), it is mentioned that counted nouns correspond to classifiers in Chinese grammar. An interesting problem is in a counted noun construction in Japhug, which element is the head of the NP. In English, the head of the *one of* construction is likely *one*, because it can undergo modifications: *this specific one of* ..., so the partitive reading is merely semantic.

**Coordination** One interesting feature of the Japhug comitative is it's also considered when deciding the number of an NP (Jacques 2021, p. 332); but it's still not prototypically a conjunction (Jacques 2021, p. 420): the NP following the comitative marker may be omitted, agreeing with the fact that the head noun of an NP can also be dropped (Jacques 2021, p. 425). (In English this is only possible for clauses: in informal writing and speech people may start with a sentence with *and*, i.e. a conjunction construction without the first branch, but they never do so to an NP.) The NP after the comitative marker can also be relativized. Thus the comitative suffix is still recognized as a type of modification.

## 1.3 Ideophones

The category of ideophone occupies mainly manner adverbial positions (Jacques 2021, § 10.1.7). Its main difference with the adverb class is its morphology (Jacques 2021, § 10.1.2) and phonology (Jacques 2021, § 10.1.5).

## 1.4 Analyzed examples

The sentence final stative verb  $\eta u$  be.FACT is listed as a stative verb in the dictionary and seems to take the constituents before it as a finite complement clause (TODO: or report speech? see the condition on p. 1317), which is without any explicit complementizer. But also see pp. 1081,

## The verb

Japhug is a heavily inflected language, and most grammatical categories in the clause have something to do with the verb. The structure of the verb can be divided into the outer prefix chain (Jacques 2021, Table 11.1), the extended stem, and the suffix chain (Jacques 2021, § 11.3); the extended stem contains the stem, which may undergo stem alternation (Jacques 2021, Ch 12), and inner prefixes related to valence alternation (Jacques 2021, § 11.2.2).

Whether this complex is to be regarded as one *morphological* or *phonological* word is discussed in § 11.6 in the reference above. Recognition of wordhood, expectedly, is not self-evident; Prins (2011) provides an analysis of another rGyalrong language, Jiaomuzu, and in this thesis the term *verb phrase* (i.e. verbal complex in this note) is used, skipping the discussion on what is a word. In Jacques (2021, Table 11.3) four domains are defined using various criteria.

Domain A is defined according to both syntactic and morphological reasons. What's shown in Table 11.3 contains all formatives that are relevant to verb inflection, and they have non-adjacent dependencies, so strong dependencies exist between them: these formatives are realized in the same batch in clause building. Now syntactically, the formative -ci in slit +4 is selected by some modal prefixes in slot -6, so the two slots belong to the same system; on the other hand, outside the +4 and -6 slots we only have clitics which clearly belong to systems with higher positions (Jacques 2021, § 11.6.2), and thus all – and only – formatives in Table 11.3 constitute a syntactic word, with the same *syntactic* status of a verb-plus-auxiliary verbal complex or a "verb phrase" in Dixon's definition (i.e. without internal complements). Morphologically, no element is able to intervene between two slots in the template, so we say this batch is realized as a single morphological word instead of a verbal complex.

Domain B is about *obligatoriness*: thus the +4 slot is not included. Domain C is defined according to prosodic reasons.

# Argument indexation and argument structure

### 3.1 Overview

Japhug seems to have a construction comparable to the "passive" construction in Mandarin; in this pseudo-passive construction, the deep, animate A argument does not appear, while the inanimate deep P argument is present, and the verb has an inverse marker despite semantically the event happens from an animate participant to an inanimate participant and is therefore semantically in the direct configuration (Jacques 2021, p. 575). The construction only appears in translation of sentences from Mandarin, and yet a native speaker didn't consider them to be ungrammatical; whether the

# **TAME** marking

**Realizational details** The TAME categories in Japhug are introduced in Jacques (2021, Ch 21). Morphologically speaking, there are three systems (Jacques 2019, p. 516):

- The PRIMARY system, whose main exponents are stem alternation, the orientation preverb, and the modal prefix; all of these happens in the template of the verb (Jacques 2021, Table 21.1). The grammatical categories marked in this system are listed below.
- The SECONDARY system, which also happens in the inflection pattern of the verb but is about aspectual and modal categories largely orthogonal to the grammatical categories marked by the PRIMARY system (Jacques 2021, § 21.6, § 21.7).
- The PERIPHRASTIC system, whose surface form is similar to complement clause constructions with the copula  $\eta u$ . The copula in periphrastic constructions never takes any argument indexation markers (Jacques 2021, p. 1090), and if we are to analyze the constructions as complement clause constructions, then the literal reading will be something like "it's the case that an event happens", with all the contents before the copula being a complement clause of the copula. In the follows however it can be seen that the TAME categories on the copula is complementary with the lexical verb, and hence the periphrastic constructions are to be analyzed as single-clause constructions.

In periphrastic constructions the main verb is often in *finite* forms (Jacques 2021, p. 1081); Japhug periphrastic conjugation thus has a difference with English or Latin periphrastic conjugation, where what are used in periphrastic TAME categories are *non-finite* verb forms. The reason possibly is because the periphrastic TAME categories in Japhug historically comes from finite complement clause constructions.

TODO: is there any constraints on the distribution of participle or infinitive?

The interaction of the three morphological systems makes Japhug TAME system extremely complicated; some periphrastic categories seem to have identical semantics with PRIMARY and SECONDARY TAME marking devices (Jacques 2021, p. 1092); whether there are hidden nuances is still not clear.

Besides the verbal complex, TAME categories are also marked by sentential adverbs and sentence-final particles (Jacques 2019, p. 518; Jacques 2021, § 21.8).

**Interaction with other categories** TAME categories interact strongly with the lexical aspect of the main verb, which can be crudely divided into being stative and being dynamic (e.g. Jacques 2021, § 21.3.1.2), the person of the subject, and TODO: other properties

**Attested categories** The following subcategories can be recognized in Japhug:

- Subjective evaluation: some TAME categories can be used to express the feeling of the speaker (§ 21.3.2.4) but is this a grammatical category?
- Evidentiality. Japhug has a highly complicated evidentiality system (Jacques 2015, Table 31.4). The values of evidentiality attested include the generic, the factual, the sensory, the egophoric, and the inferential.

A three-fold distinction can be observed with the non-past tense (Jacques 2021, § 21.3.4; Jacques 2019, p. 517): the factual or common knowledge (§ 21.3.1.2), the sensory (§ 21.3.2.2), and the egophoric.

Actually there is a fourth, bleached "generic" evidentiality value with the non-past tense. The generic non-past TAME configuration with no other non-trivial TAME marking is known as the IMPERFECTIVE (Jacques 2021, § 21.2). This however seems to be very infrequent in main clauses without periphrastic auxiliaries (p. 1087), indicating a strong preference for Japhug to include a non-trivial evidentiality value in non-past sentences.

The inferential evidentiality value appears only with the past tense, possibly because of semantic reasons: an event happening now usually doesn't need to be "inferred", and this rarity means even this category existed historically, it has long been eroded. With the past tense, we have a dichotomy between the generic evidentiality and the inferential evidentiality. It's impossible to morphologically mark the sensory evidentiality with the past tense, possibly again because of the infrequency of this configuration. It should however be noted that the sensory can still be combined with the past tense by periphrastically attaching a sensory copula to the AORIST (i.e. PAST PERFECTIVE – see below) and the PAST IMPERFECTIVE which have default evidentiality (Jacques 2021, § 21.5.1.8, § 21.5.3.5; Jacques 2019, p. 518). On the other hand, the factual evidentiality and the egophoric evidentiality are never seen together with the past tense.

- Primary tense. The distinction between the past and the non-past can be clearly identified (§ 23.3, § 23.5), partly from the interaction with evidentiality. The meaning of future is regularly expressed in the FACTUAL category (p. 1102), and thus is sometimes recognized as the future tense or "factual evidentiality in the future tense" (Jacques 2019, p. 518). This however seems to be the natural extension of the meaning of the present tense (c.f. English *the next high tide is around 4 this afternoon*; Huddleston and Pullum 2002, p. 131, [20]), and in Jacques (2021), the future tense is not recognized as a grammatical tense in Japhug (Jacques 2021, p. 1102, (46)).
- Modality. In Japhug, once the irrealis situation occurs, it seems other TAME categories are not available. There are four types of irrealis modalities falling in this domain: the IRREALIS, the DUBITATIVE, the IMPERATIVE, and the PROHIBITIVE (Jacques 2021, § 21.4).

- It seems the anterior category (the PERFECT category in English) is absent in Japhug.
- Aspect: the imperfective-perfective distinction. The non-past categories are always inherently imperfective: no perfective aspectuality is seen with non-past tense (Jacques 2019, p. 517), again possibly because of semantic reasons, since the perfective may be semantically identified with the past. The imperative-perfective distinction can only be seen with the past tense (Jacques 2021, Table 21.1, note that the AORIST is also known as the PAST PERFECTIVE; pp. 1135, 1143).
- Aspects TODO: terminative, continuative, etc. TODO: the position of the inchoative aspect The progressive aspect (§ 21.6; note that Table 21.8: compatibility?)

The composition between these categories is not orthogonal, and no independent morphological exponent can be identified for each separate TAME categories mentioned above (but in periphrastic conjugation, distribution of these primitive TAME categories onto the main verb and the auxiliary copula can be observed; Jacques 2021, p. 1089, (7)).

Primary categories By combining these categories and removing unattested combinations, we find the 11 primary TAME categories listed in Jacques (2021, p. 21.1). The realis part is replicated in Table 4.1. Note that the Aorist is just the past perfective in Jacques (2015, Table 31.4), and indeed Jacques (2021, p. 1135) makes it clear that the category expresses past perfective events. It should be noted that the mapping from tense, aspect and evidentiality features to concrete primary categories is only unidirectional: for some categories there are usages that can't be full described by Table 4.1. For example, the imperfective category has hortative meanings sometimes (Jacques 2021, § 21.2.5); and the concrete primary categories also have non-trivial interaction with the lexical aspect of verbs (Jacques 2021, § 21.2.6, § 21.2.7).

Table 4.1: Analysis of Japhug realis TAME categories; the two sensory past cells may be filled by Periphrastic Narrative (Jacques 2021, § 21.5.1.8) and Periphrastic imperfective Narrative (Jacques 2021, p. 1157), although the two constructions are only in use in a part of the population; the meaning of the two constructions are also mostly similar to the inferential and the inferential imperfective.

	aspect	evidentiality				
tense		generic	factual	sensory	egophoric	inferential
non-past	imperfective	IMPERFECTIVE	FACTUAL	SENSORY	EGOPHORIC PRESENT	
past	imperfective	PAST IMPERFECTIVE				INFERENTIAL
	perfective	AORIST				INFERENTIAL IMPERFECTIVE

**Periphrastic conjugations** In a periphrastic construction we have a main verb in one of the non-past forms and one copula carrying tense and aspect information. The most prevalent periphrastic constructions are those formed by combining the copula and the IMPERFECTIVE (Jacques 2021, p. 1089), but constructions with FACTUAL (Jacques 2021, § 21.3.1.4) and SENSORY verb forms are also possible.

# Clause embedding

Manner serial verb construction The term serial verb construction is a cover-all terms for constructions where there are two verbs (or at least words that look like verbs) found in a clause but the clause is clearly not a complement clause construction or an auxiliary verb construction. The underlying structure can be extremely heterogeneous: control construction, coordination on the level of core verb phrase (hence the two verbs share the same TAME marking), manner adverbial construction where the modifier is a core verb phrase, non-prototypical auxiliary clause construction, and even more. In Japhug attested serial verb constructions can all be placed under the category of manner adverbial construction (Jacques 2021, § 25.4.1).

In the Japhug serial verb construction, the modified main verb is the second verb; the modifier precedes the main verb and may be one of the follows:

- A deideophonic verb (Jacques 2021, § 25.4.1.1);
- A similative verb phrase containing *fse* or *stu* and their semi-object, with the meaning of 'do like this';
- A verb phrase describing simultaneous action (Jacques 2021, § 25.4.1.4), possibly followed by the emphasis marker *zo*;
- Other verbs of manner.

In all cases, the first verb (or verb phrase) is the modifier; discourse linker *tce* can appear between the modifier and the main verb (Jacques 2021, p. 1408, (73)), demonstrating that the two verbs are two morphological words.

**Degree serial verb construction** Interestingly, a serial verb construction describing the degree of an action can also be found in Japhug; in this construction the verb describing the degree is the *second* verb. One way to analyze the historical origin of the construction is to treat everything before the stative degree verb as its complement, and thus Jacques (2021, p. 1410, (76)) may be analyzed as 'that the elders who knew [traditional stories] well die is finished.' This however is against the observation that the agreement marker on the second verb agrees with the subject (and therefore is plural in the above case, not singular as expected for an impersonal verb), which clearly says that the construction is indeed monoclausal.

Another possible historical origin of the construction is verb phrase-level coordination, something with the meaning of English ?The elders who knew traditional stories died and they finished. The English example here is awkward, partly because die is a

state-change verb in English and therefore specifying its progress is semantically unacceptable.

## References

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