SWAHILI AS A TENSE PROMINENT LANGUAGE.

PROPOSAL FOR A SYSTEMATIC GRAMMAR OF TENSE, ASPECT AND MOOD IN SWAHILI

DOROTHEE RIEGER

"Numquam ponenda est pluralitas sine necessitate."

attributed to William of Ockham

Swahili ist keineswegs eine besonders „exotische" Sprache, aber dennoch fällt es schwer, eine gute moderne Grammatik des Standard-Swahili (Kiswahili sanifu) zu finden. Insbesondere die Interpretation der vorkommenden Tempora, Aspekte oder Modi des Verbs sind in den erhältlichen Grammatiken diskrepant bis widersprüchlich. Der Artikel versucht, einen systematischen Ansatz für eine strukturelle Matrix des TAM-Systems im Swahili herauszuarbeiten. Dabei beziehe ich mich auf die von Shankara Bhat in *The Prominence of Tense, Aspect and Mood* (1999) vorgeschlagene typologische Methode. Bhat legt dar, dass nicht jede Sprache jede Dimension von TAM gleich gewichtet, sondern dass jeweils eine davon vorherrscht. Eine Analyse von TAM in einer bestimmten Sprache muss sich daher an der prominenten Dimension orientieren. Im Artikel wird herausgearbeitet, dass das Tempus die strukturierende Dimension im Swahili darstellt und dass im Gegensatz dazu der Aspekt nicht systematisch grammatikalisiert ist. Dabei war es nötig, die im Swahili vorkommenden TAM-Formen funktional zu interpretieren und zu benennen, da diese in der aktuellen Literatur teilweise sehr unterschiedlich analysiert werden.

1. The Scope of this Paper

What Derek Nurse says in general about diverse publications on TAM (tense, aspect and mood) in Bantu languages also holds true for what may be found in current literature on TAM in Swahili:

> At the risk of overgeneralization, most of this work has been concerned with the structures, and, more recently, with the tones, of aspects, tenses and moods. It has dealt much less well with the semantics of these verbal categories, and with how they fit together in a coherent morphosemantic system for each language. [...] While there are some notable exceptions, many treatments of Bantu languages have tended to treat individual tense-aspect forms as self-standing, which are listed, have labels attached and meanings given, with little or no reference to the other members of the system. (Nurse 2003: 90)

This paper was originally conceived to be given at a general linguistics seminar on tense, aspect and mood, where participants specialized in languages as diverse as Vedic Sanskrit and Chinese. As I was casting around for a topic for my presentation on Swahili, I fully expected for a language this well documented and researched to find a long-standing and accepted grammatical canon of the verb forms. For my own paper, I was thinking to introduce to the other participants something like a discussion of the full paradigm of negative forms, which might seem unusual and be of interest to speakers of Indo-Germanic languages. However, to

my surprise, the readily available literature showed some very diverse and even contradictory interpretations of the TAM morphemes. I realized that for my paper the task would be to propose my own systematic interpretation to the participants of the seminar.

For my attempt at a systematic analysis in Swahili, I am suggesting as a basis D. N. Shankara Bhat's method which will be briefly introduced below. I will argue that tense is the prominent and orienting feature for Swahili verbal markers. Since in the available literature modal markers are discussed but it is nowhere claimed that those might play an important role in orienting the verb system, my argument will focus on the role of tense and aspect in Swahili. I will present as complete a table as possible of Swahili TAM markers and my own interpretation of their functions. The temporal or aspectual interpretations of the morphemes and their functional analysis are quite inconsistent, even contradictory, in current available literature. I hope to make clear the functions of the morphemes and consequently the nomenclature chosen by me.

I have tried to give a representative impression of the diverse interpretations on Swahili TAM in literature readily available to the average student. Taking these viewpoints as a basis, I have argued my own interpretations. In addition to a modern Swahili teaching textbook for German students (Heuser-Ece, Rabien & Madete), I also chose a student reader with a selection of modern Swahili newspaper texts including the editor's explanations on TAM morphemes, as well as two grammars, an older but well-respected one by the Belgian linguist Edgar Polomé (1967) and a modern one by the Kenyan scholar Mohamed Abdulla Mohammed (2001). The Institute of Swahili Research at the University of Dar-es-Salaam, and the National Swahili Council both were instituted in Tanzania to standardize and cultivate the Swahili language, but their publications consist mostly of dictionaries, specialized lexicons, lists of neologisms, collections of sayings and aphorisms, etc. In 2009, the Institute of Swahili research published a two-volume *Sarufi*[1]*,* which unfortunately was not available to me and may or may not be considered a standardized grammar. According to Mohamed (2001:xviii), the Standard Swahili Committee of East Africa[2] recognizes the 1982 edition of the Ashton Grammar (originally published in 1944), which unfortunately was also not available to me for this paper. However, both the Polomé and the Mohamed grammars are based on Ashton, and they diverge significantly in some points.

A more specialized essay on Swahili TAM on average student level is Göbelsmann's essay in the Swahili Handbuch (Miehe & Möhlig 1995), which was one of the first resources I turned to. For all its erudition and carefully expounded arguments, this essay could not give a clear and systematic explanation but left a confusing impression of Swahili TAM being convoluted and complex. Working with Bhat's methodology, I came to realize that this is a result of Göbelsmann's spending a lot of effort on analyzing things like "the combination of ante-

---

[1] http://www.tataki.udsm.ac.tz/index.php?option=com_content&view=article&id=95&Itemid=61
[2] Internet research did not reveal any currently active committee of that name and nature.

riority and the perfective aspect" and "combination of simultaneity and the imperfective aspect"[3] - which of course are correct and valid points, but these combinations of information are inherent in the concepts of tense and aspect and are by no means unique to li.[4]Bhat's methodology helped me to resolve such redundancies and find an effective methodical approach to a coherent TAM system. It seems to me that grammar must function according to Occam's razor: *Numquam ponenda est pluralitas sine necessitate* (Plurality must never be posited without necessity) – and the typology of Bhat follows just this logic. Bhat's method has also been very effective for the interpretation of the relative (non-deictic) tenses which are a common feature of Swahili.

A weakness of Bhat's approach (which holds true for most linguistic models, though) shows up in the analysis of details. Of course there are nuances of meaning that a model of global scope cannot cover. Any model attempts, as it were, to digitalize language: when zooming in too closely on a detail, the individual pixels start showing up and their demarcations begin to seem rather arbitrary. And though grammatical categories tend to be much more stable over time than vocabulary, languages do change their grammar – and a global model usually is inadequate to describe a language just in the state of change from one category to the other, especially when it is only a part of the system that is changing. This is possibly the case with the Swahili *–me-* marker, and my resulting analysis may not be as convincing in this instance (please refer to the discussion in 4.2. below).

When stringently applying Bhat's methodology, an impression may also arise that tense-prominent languages "have no aspect", or vice versa. This is definitely not the case. All languages serve their speaker communities to express the full range of human experience. But a key criterion for a systematic approach must be the degree of grammaticalization. Nurse observes that

> .... verbal categories do not directly reflect the events or objects of this world but [...] rather human organization, human categorization of these objects and events. There is a strong cognitive component to these categories. That is why the categories themselves tend to be relatively stable over time and they tend to reoccur across languages (Nurse 2003: 95).

It is justifiable to regard grammatical categories as semantically relevant. Bhat also argues (Bhat 1999: 6) that the relevance of the orienting TAM dimension may be established by looking, among other factors, at the degree of its grammaticalization in the respective language. So for a language such as Swahili, which is so prototypically agglutinative, it seems reasonable to only admit such morphemes for analysis of TAM which insert in the TAM posi-

---

[3] "Noch zwingender [als die Kombination der Information 'Vorzeitigkeit' und der Aspekt 'Perfektiv' bei *li-*] scheint die Kombination von Gleichzeitigkeit und imperfektivem Aspekt zu sein, wie sie das TAM-Präfix **–na-** darstellt." (Göbelsmann 1995: 112, 113)

[4] Nurse, who for his description of tense and aspect in Bantu languages bases himself on models by Bybee (1994), Comrie (1985) and Dahl (1985), also agrees with the assumption that "…tense and aspect form an interlocking system, in which most tenses co-occur with most aspects…" (Nurse 2003: 95)

tion of the conjugated verb (fourth slot, marked T(A) in Table 1 below). This means especially dismissing analytical verb forms, which do frequently occur in Swahili and often do carry strong aspectual coloring, as secondary to the system. At the risk of repeating myself I would like to stress that I am not claiming Swahili "has no aspect". Of course, a Swahili speaker may express aspect just as a German speaker may express evidentiality – but it is optional and not imperative to the grammatical system.

2. The Method: Typology of Tense, Aspect and Mood as proposed by Bhat

D. N. Shankara Bhat in his monograph *The Prominence of Tense, Aspect and Mood* proposes a typology of languages oriented by the grammaticalization of tense, aspect and mood. He asserts that languages may be classified according to the priority they give to the relevant dimension of TAM; he says there are tense prominent, aspect prominent and mood prominent languages (Bhat 1999: 7). He does not thereby mean that, for example, a tense prominent language "has no aspect". Quite to the contrary – the dimensions of TAM intersect and overlap: an action which is described as (temporally) being in the past is usually also (aspectually) perfective and (modally) real (see Bhat 1999: 93ff). Consequently, it makes sense that for reasons of economy – i.e. to avoid redundancy – not every dimension of TAM must be grammatically marked on every utterance in a given language. One dimension is sufficient as the primary marker and is preferred for systematic grammaticalization. The other dimensions may be systematized partially or may optionally be expressed lexically (for example by adverbs).

When analyzing a language, the scholar often encounters problems if he or she is operating with the wrong priority of TAM dimensions. For a German speaker, for example, it is often difficult to understand the differentiation of Spanish *indefinido, perfecto compuesto* and *imperfecto*. This is because German is a tense prominent language and the German speaker interprets these forms as past tenses, attempting to define criteria for the use of the markers by locating them on a time line. However, the temporal categorization is only a side effect of the Spanish *aspect* marking of the utterance. Spanish, as an aspect prominent language, is interested in describing facets like relevance of the action for the present, actions as punctual or ongoing or background events, etc. When trying to describe Spanish as tense oriented, the resulting grammar is highly complex and redundant and comprises little logic and many exceptions. However, once the right viewpoint through the TAM 'prism' is found for the analysis, usually the grammatical elements seem to fall into place almost of their own accord.

2.1. Tense

This category describes an event according to its localization on a time line (cf. Bhat 1999: 14ff), i. e.: At what time is this taking place? Time is not inherently portioned; it needs a point of reference to which the utterance can relate. Usually this is the time of the speech act: the event referred to happens before, during or after the speaker speaks. This matrix of reference

is often called "absolute tense" (though Bhat suggests the term "deictic") and the terms PAST, PRESENT, FUTURE are used to indicate, respectively, events that happen before, during and after the speech act. It is also possible to use a different point of reference previously established between the speakers, this method is usually called "relative tense" (with Bhat suggesting the term "non-deictic"). Bhat urges the consistent use of the terms PRIOR, SIMULTANEOUS and POSTERIOR for markers referring, respectively, to events happening before, during or after the established point of reference.

It is worth noting that often, strictly speaking, there is no real simultaneity. The use of the present tense is oftentimes questionable. If the event actually coincides exactly with the speech act, then at the end of it the event is already the past. In contrast, the present tense is often used to indicate events that are going to take place in the near future. Many languages therefore only differentiate PAST/NON-PAST or NON-FUTURE/FUTURE and incorporate the present in NON-PAST or NON-FUTURE, respectively.

Another quality of tense which may be grammaticalized to a high level is the relative distance of the event to the point of reference on the time line. Bantu languages especially are known to differentiate this category finely, there are languages with up to four markers defining events nearer or farther in the past or future (Nurse 2003: 100).

2.2. Aspect

For the purposes of this paper, it is important to note as a basic principle of aspect the distinction between the "inner" and the "outer" perspective on an event (Bhat 1999: 43ff), other approximations would be a "bird's eye"/"worm's eye" view or foreground/background opposition. The speaker describes an event as currently ongoing or unfolding, as himself being in the middle of it without overseeing its beginning or end (the "inner" perspective, "worm's eye", background aspect, that is: the IMPERFECTIVE) or he describes an event in its totality with defined margins (the "outer" perspective, "bird's eye view" or foreground aspect, that is: the PERFECTIVE).

Hence, aspect describes the structure of an event depending on the speaker's perspective of it or on the *aktionsart* (lexical aspect) of the verb. The event is structured into a foreground and a background (and possibly defined by other secondary features such as being in progress, being frequent or repetitive, being concluded, being a common occurrence, etc.). Consequently, aspectuality may be assessed by a so called "incidence matrix": if by opposition of two verbal markers an event is structured into a foreground and a background, then we may speak of aspect markers and of grammatical aspectuality in a given language.

3. Background: Swahili Verb Structure

The finite verb is built around a verbal root. As an abstract model, a fixed number of slots may be imagined preceding and following the verbal root. These may be filled by different

morphemes of defined function. The morphemes normally consist of a single syllable (there are special two-syllable forms that occur in the T(A) slot). Only one morpheme may be inserted in a slot at any time, with exception of the slot for derivations. Not all slots need to be, and some (notably, the initial and negative slots) may not be, filled at the same time.

INITIAL	SUBJECT	NEGATIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
negative 1 (indicative mood)	pronouns (person or class)	negative 2 (conjuctive or subjunctive mood)	tense (aspect, mood)	object or relative pronoun	verbal root	verbal derivations (valency derivations, derivations of *aktionsart*)	mood (indicative, subjunctive, negative of the present)	reserved for suffix *-ni* of the plural imperative

Table 1: Slot Matrix (cf. Nurse 2003: 90)

Examples:

	INITIAL	SUBJECT	NEGATIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
1.		ni-		li-	m-	fung-	u-li-	a	
2. si- (< *ha-		*ni-)		ku-	m-	fung-	u-li-	a	
3.		u-	si-		m-	fung-	u-li-	e	
4.						fung-		e-	ni

Table 2: Word formation of the Swahili verb

1. Ni- li-   m-   fung- u-   li-   a   mlango.
  1.SG-PST.REMOTE-OBJ.CL1-close-REVERS-APPL-INDIC door
  "I opened the door for him/her."

2. Si-   ku-   m-   fung- u-   li-   a   mlango.
  1.SG.NEG-PST.NEG-OBJ.CL1-close -REVERS-APPL-INDIC   door
  "I didn't open the door for him/her."

3. U- si- m-   fung- u-   li-   e   mlango.
  2.SG- NEG-OBJ.CL1-close-REVERS-APPL-SUBJUNCT   door
  "Don't open the door for him/her!"

4. Fung- e-   ni   mlango.
   close- SUBJUNCT-3.PL.IMP   door
   "Close the door!"

As is typical for a strongly agglutinative language, Swahili has a clear correlation of a single function with a single morpheme. Portmanteau morphemes are rare, and where they occur they are usually a phonetic contraction of two morphemes (see example no. 2: *si-* < **ha-ni-*). There is also a remarkable productivity in verbal derivations such as applicative, passive, causative, stative, reciprocative, etc. The reversive, however, shown in the examples above and formed with the morpheme *-u-,* is largely lexicalized (for example, *–inua* "raise up, stand up, straighten up" is a common verb, but the respective non-reversive **-ina* is not (or rather, no longer) in use). Another specialty is a separate paradigm for the negative forms, which have their own T(A)-markers and additional negative markers for INITIAL, NEGATIVE and/or FINAL slots.

4. Analysis of TAM Forms in Swahili

In the following, I will refer to the interpretations of Arne Ambros' reader (A), Claus Göbelsmann's essay on tense, aspect and mood in Miehe and Möhlig's Swahili handbook (G), M. A. Mohammed's grammar (M), Appendix C of the *Karibu Swahili* textbook by Katharina Heuser-Ece, Dirk Rabien and Richard Madete (H), and Edgar Polomé's grammar (P). These references may serve as a starting point for my own explanations. In my tables, I show formation examples for the 3rd person singular (except for the imperative, here I show both the singular and the plural), each form shown in a) affirmative and b) negative. In the overviews, I give the T(A)-markers of the 4th slot. Their grouping in "present", "non-present" and "modal" markers is to be understood as no more than a very rough structural aid.

4.1. Markers for the Present

I a) *–na-* and b) *–Ø-* DEFINITE PRESENT (A: Aktuelles Präsens [actual present], G: Präsens [present], M: present tense, H: Gegenwart [present], P: actual present)

II *–a-* (negative as in I) INDEFINITE PRESENT (A: Allgemeines Präsens [general present], M: dialectal variant of present tense, H: einfache (zeitlose) Gegenwart [simple, tenseless present], P: indefinite present)

III *–hu-* (no negative) GNOMIC PRESENT (A: Habitual-Form [habitual], M: habitual, H: Gewohnheitsform [habitual], P: habitual)

IV a) *–ki-* and b) as in I and *–sipo-* SIMULTANEOUS (A: Koinzidenz- und Konditionalform [coinciding and conditional form], G: Gleichzeitigkeit [simultaneous], M: conditional and present participle function, H: Mittelwort der Gegenwart und Bedingungsform III des Futur [referring to the present and conditional III of the future], P: imperfective/continuous).

	INITIAL	SUBJECT	NEGATIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
I a)		a-		na-		som-		a	
I b) h-		a-		Ø-		som-		i	
II		a-				som-		a	
III				hu-		som-		a	
IV a)		a-		ki-		som-		a	
IV b)		a-		sipo-		som-		a	

Table 3: Markers for the present

The use of the first three present tenses may become clearer by some examples. I have tried to differentiate the Swahili tenses by translating them into English aspects. These hopefully give an approximation of the meaning, but they are only an illustration - please note again that these Swahili verb forms are not aspects!

5. Watu hapa wa-   na- lima   mahindi.
People here SUBJ.CL2-PRS-cultivate corn
"These people are cultivating corn."
(It is happening at this very moment, someone is working in the fields.)

6. Watu hapa w-   a-   lima   mahindi.
People here SUBJ.CL2-PRS.INDEF-cultivate corn.
"The people of this area cultivate corn."
(People around here cultivate corn (as opposed to yams), even though maybe you can't see anything growing at the moment.)

7. Watu hapa hu- lima   mahindi.
People here GNOM-cultivate corn.
"The people of this area have always been cultivating corn."
(General information: the people around here are corn farmers)

Again, this is not to suggest that English simple present should regularly be translated by Swahili indefinite present. Both the English present progressive and simple present are rendered by the definite present in modern Swahili. In fact, the indefinite present is becoming

obsolete in modern day usage. Most speakers perceive it as semantically redundant and prefer the definite present. They may even, understandably when you consider the similarity of the paradigm, interpret it as an elliptical form of the definite (Mohammed 2001: 126, Nurse 2003: 95). The indefinite is mostly still used for headings in the media, because it is eye-catching for terseness (Ambros 2008: 14).

The gnomic present is unusual, because it functions like an infinitive[5] and has no paradigm (cf. Polomé 1967: 118). It may be used impersonally, or an explicit subject must precede it. Nowadays it mostly occurs in proverbs.

8. Haba kwa haba hu-   jaza kibaba.
Little for little GNOM-fill measure.
(Something like "Every little bit helps" or "A penny saved is a penny got.")

This is the typical impersonal use, the agent is not expressed. The measure may be filled by one or many persons, by magical, natural or divine agency, and the sentence may alternatively be understood as a reflexive or a passive.

Now *ki-* as marker for the simultaneous is hard to pin down analytically, and the five works chosen as a representative cross section of the grammatical standard provide extremely divergent interpretations and nomenclature for it.

First, it must be established that according to Bhat's definition, *na-* is a deictic (absolute) and *ki-* a non-deictic (relative) marker. Consequently, the temporal location of *ki-* depends on the preceding deictic tense marker. It could be asserted, then, that the event marked with *ki-* is structurally and temporally subordinate to the previous event, and hence, an aspectual structure may be postulated. Polomé, for one, has *ki-* as a marker for imperfective aspect (Polomé 1967: 116), contrary to Göbelsmann (1995: 112), who sees a combination of perfective aspect and temporal simultaneity in *ki-*. For Göbelsmann, the main function of *ki-* is the tense marking for simultaneity. Additionally, he contrasts a secondary perfective aspect of *ki-* with a secondary imperfective aspect of *na-*, reasoning that there must be a secondary level contrast because *na-* may also be used as a marker for simultaneity.[6]

Here Göbelsmann addresses a problem that Nurse has also brought up:

> A form derives its basic meaning by contrast with other forms within the verbal paradigm, although that meaning is flexible and can be modified in use and discourse. [...] while there can be some overlap between forms, there is never total overlap, because that would make a form redundant. Some speakers of [Standard Swahili] would claim that

---

[5] It seems that historically, it probably evolved from an infinitive with preceding copula *ni* ("to be", impersonal): *hu < ni + ku*

[6] For Polomé, imperfective *ki-* is contrasted by a perfective aspect marker *me-,* which I discuss below in the section on Non-Present Markers.

[9.] Tulikuwa tu- ki   ≠zungumza and [10.] Tulikuwa tu-   na≠ zungumza
We.were 1.Pl-Simul-chat   We.were 1.Pl-Prs- chat
"We were chatting."

[are always or often semantically identical....]. Either the many speakers are wrong, because they have overlooked certain subtle semantic differences which they have trouble articulating, or they are right, in which case one member of each pair above can probably look forward to a short life, as language does not usually tolerate absolute redundancy for long. (Nurse 2003: 95, Nurse has the symbol ≠ precede the morpheme of the verbal root; my own gloss and sentence numbering.)

Both the sentences 9 and 10 are marked with *li-* for the REMOTE PAST on the first verb ("*tu-li-kuwa*"), followed by the description of the event that takes place simultaneously (namely, the "chatting"), first marked with *ki-,* the second time with *na-.* Göbelsmann interprets the "subtle semantic difference" as an aspect, as cited above[7]. However, both sentence 9 and 10 above are constructed using the verb *–wa* "to be" as a carrier for imperfective aspect. Göbelsmann's differentiation between perfective *ki-* and imperfective *na-* then becomes either redundant or paradoxical. The aspectual function of this *–wa*-construction is corroborated by most authors and Göbelsmann himself confirms that

[...formal...] der imperfektive Aspekt im Swahili mit einer Hilfsverbkonstruktion gebildet [wird]. Sowohl am Hilfsverb kuwa ‚sein' als auch am Hauptverb wird das Subjekt markiert und ein TAM-Präfix gesetzt. [...] Das Hilfsverb dient sozusagen dem Hauptverb als zeitlicher Referenzpunkt, [...] Ein Bedeutungsunterschied zwischen dem TAM-Präfix –ki- und dem wesentlich selteneren –na- am Hauptverb ist schwierig zu erfassen. [...] Auch der aspektuelle Unterschied im Gebrauch zwischen –ki- und –na- [...] läßt sich nicht ohne weiteres auf den Gebrauch in komplexen Hilfsverbkonstruktionen übertragen. (Göbelsmann 1995: 114)[8]

---

[7] "Noch zwingender [als die Kombination der Information ‚Vorzeitigkeit' und der Aspekt ‚Perfektiv' bei *li-*] scheint die Kombination von Gleichzeitigkeit und imperfektivem Aspekt zu sein, wie sie das TAM-Präfix **–na-** darstellt. Das, was gleichzeitig zum Sprechakt passiert, kann immer auch in seiner inneren zeitlichen Struktur wahrgenommen werden. Der perfektive Aspekt verbietet sich hier aus logischen Gründen, da er einer Verleumdung des tatsächlich außersprachlich Erlebten gleichkäme. Anders verhält es sich beim relativen Gebrauch der Gleichzeitigkeit. [...] Wenn der temporale Referenzpunkt nicht die Sprechzeit ist, steht einer Kombination von Gleichzeitigkeit und Perfektiv nichts entgegen. In diesem Fall wird im Swahili das Formativ **–ki-** verwendet, welches aus den genannten logischen Gründen immer als relatives Tempus verstanden werden muß [...] Zwischen den Tempora **–ki-** und **–na-** besteht also eine aspektueller Unterschied, während sie beide das gleiche Tempus, die Gleichzeitigkeit kodieren." (Göbelsmann 1995: 112, 113)

[8] "Formally, the imperfective aspect is constructed with auxiliary verbs in Swahili. Both the auxiliary verb kuwa ‚to be' and the main verb are marked with a subject marker and a TAM prefix. The auxiliary verb is the temporal reference, so to speak, of the main verb. It is difficult to pin down a semantic difference between the TAM prefix -ki- and the much less frequently occurring –na-. The aspectual difference in the use of –ki- and –na- may not unreservedly be inferred in analogy for complex constructions with auxiliary verbs" (my translation).

In his argument, I have trouble understanding why Göbelsmann finds this such a "complex" construction, why *–wa* must be defined as an auxiliary verb[9] and why it is the temporal reference for the main verb only "so to speak". In fact, this construction works because it follows the regular pattern of temporal structuring by non-deictic tense following deictic tense. It is neither a complex construction, nor is *–wa* used in any anomalous function, rather, it is very regularly meant to be the temporal reference point for the verb that follows. It is no different from the sentence

11. A-   li-   tu-   ona tu-   ki-   zungumza.
    Subj.Cl1-Pst.Remote-Obj.Cl2-see Subj.Cl2-Simul-chat
    "He/she saw us when we were chatting."

Incidentally, the regular auxiliaries such as *–weza* "may", *-pata* "be enabled to", *-taka* "want" take an infinitive construction, like in English (cf. Mohammed 2001: 80ff). In fact, the (analytically formed) imperfective aspect of 9. and 10. results from the lexical aspect (*Aktionsart*) of *–wa.* But the difference between the usage of *na-* and *ki-* is one of style or discursive marking. *Ki-* is temporally dependent and hence subordinate, its regular use is for marking temporal simultaneity. The use of *na-* as a marker for simultaneity, on the other hand, is uncommon and so it is marked. By its use, the speaker may indicate his or her subjectively felt relevance of the event.

12. *Sadiki aliingiwa   hamu ya   kujua   zaidi, na kabla hajafika   kwake*
    Sadiki was.filled.with wish GEN to.know more and before he.had.not.yet.come his.place

    a-   li-   i-   fungua [barua] na   kuisoma huku
    subj.1cl-pst.remote-obj.cl9-open   [letter]   and to.read.it right.there

    a-   na- tembea.[10]
    subj.1cl-**PRS**-walk

    "Sadiki was filled with the wish to know more and before he had even reached his home,
    he opened the letter and read it right where he was walking" (literally: 'to read it right
    where he **is walking'**).

It is grammatically possible and correct to use *–ki* in this sentence: "*...na kuisoma huku akitembea.*" But stylistically, this phrase is bland and insipid compared to the original *na-*phrase, which carries undertones of urgency and immediacy.

This is in fact a very subtle semantic difference, and by itself it would not warrant the "survival" of the *ki-* marker for simultaneity (as Nurse above has observed). But because *ki-*receives its temporal location dependent on a coinciding deictic tense marker, it lends itself to

---

[9] Not only by Göbelsmann, but by many authors, cf. Mohammed 2001: 81. Ambros (2007: 14) says that in this construction, *-wa* is used as a "quasi" auxiliary verb.
[10] by Shaaban bin Robert, cited in Göbelsmann 1995: 110

the framing of a <u>temporal condition</u>. This is possible as long as the temporal point of reference lies in the future[11]. Because *ki-* indicates a simultaneously occurring event, this event can become a condition: only if there is X, then there is Y simultaneously. In a regular conditional sentence in Swahili, the conditional act marked with *ki-* usually precedes the deictic event. Where this is not the case, it is accompanied by a conjunction such as *kama* ("if, as if") or *laiti* ("if only, would that").

13. *Kwa mfano wewe u- ki- nunu-a   nguo kwa Sh. 10/-   h-   u-   Ø-*
    For   example you 2.Sg-SIMUL-buy- INDIC clothes for   10 shillings NEG-2.Sg-Prs.NEG-

    wez- i   ku- m-   wuz- i- a   mtu kwa Sh. 5/-   u- ta- pata hasara.[12]
    be.able-NEG INF-OBJ.CL1-sell-APPL-INDIC person for   5 shillings 2.Sg-FUT-get   deficit

    "If, for example, you were to buy clothes for 10 shillings, you couldn't sell them to anyone for 5 shillings, you will make a deficit."

The resulting event is marked with the future marker *ta-*, showing that this is in fact a temporally real condition: as soon as X is true, so is Y. Swahili also has a TAM morpheme for expressing epistemic modality or the *irrealis* (see XI below), but this is not the case here. This construction uses *ki-* as a marker for deontic modality. The additional modal component of *ki-* has led a number of authors to postulate two homonymous *ki-* markers with divergent functions. Their argument is supported by the fact that there are actually two distinct negative markers. For the purely simultaneous function, the negative is constructed as the definite present negative. But the negative marker IV b) *sipo-* serves solely for the negative conditional use of *ki-*. So depending on the context, IV a) translates as "while he/she read/is reading" or "if he/she reads", while IV b) can only translate as "if he/she is not reading". However, the conditional function of *ki-* very logically derives from the function as a marker for simultaneity, namely in the case of simultaneity with a future event. It is therefore not necessary to postulate two homonymous *ki-* markers of distinct function.

4.2. Markers for the Non-Present

V a) *–li-* and b) *–ku-* Remote PAST (A and G: Präteritum [preterite], M: simple past tense, H: Vergangenheitsform des Imperfekt [past tense of the imperfective], P: past)

VI *–me-* (negative as V) PROXIMATE PAST (A and G: Perfekt [perfective], M: present perfect tense, H: Vollendete Gegenwart/Perfekt [present perfect/perfective], P: perfective/resultative).

---

[11] An explicit future marking with *ta-* (see below no. VIII) is not necessary. It is sufficient for the interlocutor to understand an implied event that is not yet realized, but is possible or expected in the future.
[12] Göbelsmann's example (1995: 114)

VII –*ka*- (negative as V) CONSECUTIVE (A: Konsekutiv-Form [consecutive], G: Nachzeitigkeit [subsecutive tense], M: narrative and emotional tense, H: konnektiv-erzählende Form im Imperfekt [connective-narrative of the imperfective], P: subsecutive)

VIII a) –*ta*- and b) –ta- FUTURE

	INITIAL	SUB-JECT	NEGATIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
V a)	a-		li-		som-		a	
V b) h-	a-		ku-		som-		a	
VI	a-		me-		som-		a	
VII	a-		ka-		som-		a	
VIII a)	a-		ta-		som-		a	
VIII b) h-	a-		ta-		som-		a	

Table 4: Markers for the non-present

The future, happily, is an entirely uncontroversial form and its use is no different than the standard use of the future in English and many other Indo-European languages. Hence there is no need to discuss it here.

The consecutive marker *ka*- usually appears in narratives, where the temporal point of reference has previously been established. Most authors agree on this. It is often dubbed a "narrative" tense and serves to move along the story line:

14. ...*aka*sema bwana maneno haya *aka*sikia mtumishi *aka*fahamu maana   yake
    said   master words these heard   servant   knew   meaning their

    *aka*ogopa   *aka*ruddi [sic!] nyuma   *aka*fungua mlango *aka*toka nyumbani.[13]
    became.frightened returned   backwards opened   door   left   from.the.house

    "…then the master said these words, the servant heard them and knew what they meant,
    he became frightened and turned around, then he opened the door and left the house."

---

[13] from Seidel 1941: 13, my gloss and translation

However, Mohammed (2001: 159, 160) points out that the temporal reference does not necessarily precede the *ka-* forms explicitly. He cites the initial sentence of a novel as well as newspaper headings. The stylistic effect is of immediacy, the reader finds him- or herself directly in the midst of the plot. Nonetheless, the temporal reference point is unequivocal, it is in the past events about which the journalist or author of the novel report.

Ka- also takes on a modal component when it is used in conjunction with a future event[14]. This function also derives logically from its meaning "marker of events consecutive to a future event": X will/shall happen so that Y can then take place (where Y is the event marked with *ka-*). The convergence on deontic modality in this construction becomes very explicit formally by an unusual amalgamation with the subjunctive. Regularly, the subjunctive (see X below) is formed with a null morpheme in the T(A) slot and a final *–e.* In the construction described here, *ka-* fills the space of the null morpheme.

15. *Nenda sokoni   u-   ka-   nunu-e   ndizi.*
    Go   to.market 2.SG-CONS-buy -SUBJUNCT bananas.
    "Go to the market to buy bananas."

16. *Nitakwenda ni-   ka-   l- e   chakula.*[15]
    I.will.go   1.SG-CONS-eat-SUBJUNCT food
    "I will go to eat food."

17. *Ondoka   sasa.hivi u-   si- j-   e   u-   ka-   chelew- a.*[16]
    Go.away right.now 2.SG-NEG-come-SUBJUNCT 2.SG-CONS-run.late-INDIC
    "Get going right away so that you don't run late."

In 15, the first event (the prerequisite condition) is an imperative, in 16 it is explicitly marked as future. The negative in 17 carries the modal negative marker *si-* which may not be combined with *ka-* (*usikachelewe is not a correct form). In this construction, *–ja* "arrive, come" serves as a carrier for the negative subjunctive, and takes on the meaning "to happen". *Usije* (literally "so that it may not happen to you") may then be translated as a conjuction "so that not" (or "lest", as Mohammed puts it charmingly oldfashioned).

The two past markers *li-* and *me-* deserve special attention, as they are analyzed divergently. Mohammed uses concepts and terms from the English grammar, implying that the Swahili markers are used *mutatis mutandi* like the English simple past and present perfect and are hence aspects. Heuser-Ece, Rabien and Madete as well as Ambros also make an aspectual

---

[14] Note that when using the consecutive marker *ka-*to speak about the future, it does not function like the Future Perfect of Germanic languages. On the imaginary time line, the Future Perfect goes "backwards", closer to the Present than the Future. But *ka-* designates events that go "forward" from the point of reference marked with the Future marker.

[15] from Mohammed 2001: 160, my gloss.

[16] from Mohammed 2001: 83, my gloss and translation. Mohamed translates more formally, "Go right away lest you be late."

differentiation, usually translating *li-* with the German preterite (formerly also dubbed "imperfective") and *me-* with a German perfect form, though these translations do not really render a very meaningful differentiation for the German reader, as German no longer uses verb forms to indicate aspect. Polomé (1967: 116) sees an aspect only in *me-* and here agrees with Göbelsmann, who describes the function of *me-* as definitely aspectual without explicitly using the term aspect. "Das PERFEKT [...] verbindet zwei Zeitpunkte miteinander, indem es einen Zustand als das Resultat einer vorhergehenden Situation darstellt." Consequently it is a „Aussage über die Gegenwart und ersetzt *auf keinen Fall* eine Vergangenheitsform."[17]. Both Göbelsmann and Polomé see a perfective aspect, which Polomé contrasts with imperfective *ki-*; Göbelsmann on the other hand has not contrasting imperfective marker, instead he postulates another secondary perfective aspect for his preterite *li-* (Göbelsmann 1995: 112) and, as discussed above, he contrasts an imperfective aspect of the definite present marker *na-* with a perfective aspect of *ki-* where it is used as a marker for simultaneity.

It is noteworthy in this context that Derek Nurse defines PERFECTIVE or IMPERFECTIVE as the main aspectual categories of Bantu languages, and besides these two, he allows for a common Bantu aspect he terms ANTERIOR: it "refers to an earlier action which produced a state which either lives on, or whose consequences or relevance live on" (Nurse 2003: 96). So Nurse's definition of the ANTERIOR coincides precisely with Göbelsmann's definition of a *me-*PERFECTIVE. According to Nurse, ANTERIOR "easily shades over into past… It becomes past by loosening and then losing the requirement that it have present relevance.…[S]ince the kinds of past event that have present relevance are often recent events, ANT[ERIOR] first becomes near or middle past…" His analysis seems to corroborate my own reflections on the -*me-*tense. It would also mean that if –*me-* were interpreted as an ANTERIOR (or a diachronic derivative of it), it could definitely not be PERFECTIVE or IMPERFECTIVE.[18]

I would now like to show that both *li-* and *me-* are in fact primarily past tense markers, with *li-* denoting the remote past and *me-* the proximate. As mentioned above, many Bantu languages have extremely DIFFERENTIATED tense marking, they distinguish between "past of today", "past of yesterday", "more remote past", etc. Swahili only has two past tense markers, the relative "distance" to the time of the speech act may be more loosely defined and so they may comprise an assessment of the speaker about the current relevance of the event. The *me-*past is closer to the present and hence has more impact on it, it has a resultative relevance for the present. But in most cases, the postulated "perfective aspect" is inherent in the lexical aspect of the verb.

---

[17] "The PERFECTIVE makes a connection between two points of time by defining a state as the result of a preceding situation." Consequently it is a "statement about the present and *cannot by any account* substitute for a past tense" (Göbelsmann 1995: 116, 117, my translation).

[18] Nurse also observes that "where [the Proto-Bantu marker for ANTERIOR] has been replaced.…, it is most often replaced by grammaticalized forms of verbs meaning 'finish'" (Nurse 2003: 96). There is in Swahili obviously a common T(A) morpheme consisting of the grammaticalized form of the verb meaning "finish", namely –*mesha-* (or even –*mekwisha-*). In the synchronic analysis, I regard this form as the affirmative of the COUNTEREXPECTATIVE (refer to 4.3 below).

18. A-   li-   keti   kitanda-ni.
   Subj.Cl1-pst.remote-sit.down bed-   loc
   "He/she sat down on the bed." or "He/she was sitting on the bed."
   (E. g. context: the grandchild was visiting with the infirm grandmother. The visit is over and the grandchild has left.)

19. A-   me-   keti   kitanda-ni.
   Subj.Cl1-pst.Prox-sit.down bed-   loc
   "He/she has sat down on the bed." or "He/she is sitting on the bed."
   (The grandchild is visiting with the grandmother. He/she is still there.)

-Keti "to sit down" is a telic verb. Someone who has sat down in the proximate past will still be sitting in the present. This may naturally be interpreted as an aspect, but it is an aspect inherent in the semantics of the verb and not in its marking.

If one wishes to interpret *me-* as the perfective and *li-* as the imperfective (as Mohammed and the two German authors imply), then the contrast of the two markers within a sentence should create an incidence structure with the imperfective as the background and the perfective as the "incidence", i. e. the setting on of the main event:

*20. *Mtoto a-   li-   ogelea a-   me- ona samaki.*
   *Child Subj.Cl1-impfv-swim   Subj.cl1-pfv-see   fish.
   "The child was swimming, he/she saw a fish."

This sentence is not actually grammatically incorrect. It just does not create any significant correlation between the two events of "swimming" and "seeing". To create an explicit incidence structure with a background and a foreground activity, a non-deictic marker would be used:

21. Mtoto a-   me-   ogelea a-   ki-   ona samaki.
   Child Subj.Cl1-pst.prox-swim   Subj.1cl-simul-see fish.
   "The child was swimming and saw a fish."

This sentence may indeed be interpreted as having an aspectual incidence structure, like Polomé does. However, Polomé sees a perfective aspect in *me-*, which here serves to denote the background event (and hence indicates an imperfective event in progress) and he has an imperfective aspect for *ki-*, which here is used to indicate the "incident" in the foreground (by definition the perfective). An interpretation on the basis of temporal simultaneity seems more sensible on all accounts. If a Swahili speaker wishes to use aspect, there is always the possibility of employing the analytically formed progressive aspect with *–wa* "to be":

22. Mtoto a-   li-   kuwa a-   na- ogelea a-   ki-   ona samaki.
   Child Subj.Cl1-pst.remote-be   subj.1cl-prs-swim   subj.1cl-simul-see fish.
   "The child was swimming when he/she saw a fish."

4.3. Markers for Modals and other Forms without Tense

IX –Ø- Imperative (only for 3rd person singular and plural in the affirmative)

X a) –Ø- and b) –Ø- SUBJUNCTIVE (A: Konjunktiv [conditional], G: Subjunktiv [subjunctive], M: subjunctive, H: indirekter Imperativ [indirect imperative])

XI a) –nge-/-ngali- and b) –nge-/-ngali- CONDITIONAL (A: Potential-Irreal, G: Konditionalis (aff.) and Irrealis (neg.), M: conditional, H: Bedingungsform I des Präsens, Bedingungsform II des Imperfekt [conditional I of the present tense, conditional II of the imperfective])

XII a) –mesha- and b) –ja- COUNTEREXPECTATIVE (A: Alternativform des Perfekt (aff.) und Imminenz-Form (neg.) [alternative form of the perfect (affirmative) and "imminence" (negative)], G: Konterexpektativ [counterexpectative], M: (only neg.) alternative marker of past negative tenses, H: (only neg.) Verneinung des Perfekt [negative of the perfective], P: (only neg.) ‚not yet' tense)

XIII –nga-, -japo- (negative as for IV with *sipo*-) CONCESSIVE

IXX a) and b) INFINITIVE

INITIAL	SUBJECT	NEGA-TIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
IX sg					som-		a	
IX pl					som-		e-	ni
X a)	a-				som-		e	
X b)	a-	si-			som-		e	
XI a)	a-		nge-ngali-		som-		a	
XI b)	a-	si-	nge-ngali-		som-		a	
XII a)	a-		me-sha-		som-		a	

INITIAL	SUBJECT	NEGA-TIVE	T(A)	INFIX	ROOT	EXTENSION(S)	FINAL	SUFFIX
XII b) h-	a-		ja-		som-		a	
XIII	i- SUBJ.CL9		nga- CONC		w- "sein"		a INDIC	
XIII	a-		japo-		som-		a	
IXX a)	ku-				som-		a	
IXX b)	ku-	to-			som-		a	

Table 5: Modals and other forms

Finally, I would like to briefly discuss the modal markers, for the sake of completeness but also because the COUNTEREXPECTATIVE can be controversial: some authors interpret this marker as a negative of the perfect or perfective.

The subjunctive indicates deontic modality: a desire or wish. It may be translated as, "He should read, may he read, would that he read." The subjunctive also serves as the negative of the imperative and as a polite, weak form of the imperative. The role it plays in the modal use of *ka-* has already been described above.

The conditional marker is used for the *irrealis* mood. There are two alternative forms that are phonetically related and may be shown to derive from each other (see Göbelsmann 1995: 116). Grammar authors have take some pains to differentiate between *nge-* as a form of the present (XI a) *angesoma* would then mean "if he read") and *ngali-* as a past form ("if he had read"), Polomé and Heuser-Ece, Rabien and Madete, for example, follow this lead. This practice has lead to a normative effect, namely that such a difference is now taught in language textbooks and may even be applied by a linguistically educated class of speakers. In general, most speakers will consider the two forms as free variants of the same morpheme (see Mohammed 2001: 168) and will be understood as present or past forms depending on the context.

In Polomé's 1967 grammar, the concessive still appears as a regular form, *nga-* as ‚actual concessive' ("though he reads"), *japo-* als ‚suppositional concessive' ("though he were to read"). In modern daily language, the concessive has fallen quite out of use (cf. the modern text examples in Ambros' reader and Mohammed's grammar which is strongly oriented by

modern daily language – neither of them discusses the concessive). Most speakers will be familiar with both forms from written language, especially from the well-known standard bible translation. A very pretty example for the use of *japo-* may be found in the well-known passage from 1 Corinthians 13:

23. *Ni-   japo- sema kwa lugha   kufanana   na   malaika kama sina   upendo....*
    1.SG-CONC-speak by   language to.be.alike with angels   if   I.have.not love...
    "Though I speak with the tongues of men and of angels, but have not charity…"

A frequently recurring form of the *nga-* concessive is the impersonal of *–wa* "to be": *inga-wa* ("though it be"), which is regularly used as a conjunction meaning "though, although" (see example XII in table 6 above).

Finally, the marker *ja-* needs to be discussed a bit more in detail. Often this marker is not analyzed as part of the modal spectrum but either disjointedly on its own (as Polomé and Ambros do) or as an alternative negative of *me-* (see for example Mohammed and Heuser-Ece, Rabien & Madete). Göbelsmann (1995: 119) gives an interesting example from a text by Shaaban Robert to show that the latter is not the case. Here, *me-* is negated regularly using *ku-*:

24. *Mungu ha-   ku-   taka ushuria ya rasilmali, a-   me-   taka ushuria*
    God   SUBJ.CL1.NEG-PST.NEG-want tax   of capital,   3SG-PST.PROX-want tax
    ya   halasa ya rasilmali...
    of profit of capital...
    "God did not want a capital tax, he wanted a profit tax..."

If this sentence were to be negated using *ja-* (‚*Mungu hajataka ushuria ya rasilmali...*'), it would have to be translated with "God did not yet want a capital tax, but for the time being he wanted a profit tax." The meaning of the statement is then reversed! In the first statement, profit tax is proposed to be the ideal system instituted by God. The second statement makes tax on capital the future ideal, and profit tax the provisional system (implying that it will be changed later).

The two-syllable form *mesha-,* which has become frequently used, is only discussed by Ambros. He interprets it as a variant of his perfective *me-* with an incorporation of the verb *–kwisha* "to end"; incorporation being a rather common occurrence, compare for example the future marker *ta-* from *–taka* "to want, wish" or the negative of the infinitive *to-* from *–toa* "to remove, withdraw". A commonly used variant is *–mekwisha* or an analytical formation with an infinitive (*amekwisha kusoma*). However, in Ambros' analysis, the information inherent in *–kwisha* would be redundant – according to him, *me-* already implies a complete, finalized activity. In fact, -*kwisha* does not give an information about the completion of the event but has "die Funktion KONTEREXPEKTATIV, die im Bereich der Affirmation [...] mit Hilfe des

Modalverbs **kwisha** ausgedrückt wird" (Göbelsmann 1995: 119).[19] It should not come as a surprise that the negative of this form seems to be the simpler, less marked form. It is a consequence of the function of the counterexpectative: an expectation is negated.

The following examples will corroborate that *ja-* is in fact a true counterexpectative with a corresponding affirmative *mesha-*.

25. *Je,   amefika?*
    INTERROG he.has.come
    "Has he come?"

26. *Hapana, ha-   ja-   fika,   bado namsubiri.*
    No,   SUBJ.CL1.NEG-COUNTEREXP-come, still   I.am.waiting.for.him
    "No, he hasn't come, I'm still waiting for him" (implied: he should already have been here).

27. *Je,   unamsubiri   bado?*
    INTERROG you.are.waiting.for.him still?
    "Are you still waiting for him ?"

26. *Hapana. A-   mesha-   fika.*
    No.   SUBJ.CL1-COUNTEREXP.POS-come
    "No, he has already come" (implied: even though usually he is late).

5. Epilogue

The discussion of the examples cited above has made clear that the system of TAM in Swahili cannot be interpreted coherently if aspectual facets are given prominence. Depending on the chosen example utterance, the authors will then arrive at conflicting interpretations and the language taxonomy remains inconsistent, with forms standing on their own without opposing markers to create incident structures. Forms like *me-* or *ki-* are, depending on the author, functionally described but remain without a systematic integration, as criticized by Nurse in the initial citation. But with the assumption that aspect in Swahili is predominantly semantic, a coherent systematic morphology of the verb with tense as the orienting dimension can be established for Swahili.

It could be interesting to explore the conjunctions of the modal with the temporal layer. The possibilities of modal uses for non-deictic tenses have been shown in the discussion of the markers *ki-* and *ka-*. Possibly mood plays a much greater role in the analysis of TAM in Swahili than has been assumed – it may even be more important than aspect.

I am hoping that my paper may add a small impulse toward the composition of a standardized grammar of the Swahili language for the average student to turn to. And even if the

---

[19] "…the function of a COUNTEREXPECTATIVE, whch in the affirmative […] is expressed by means of the modal verb **kwisha**."

proposal presented here should not stand up to the scrutiny of wiser and better scholars, I hope it may at least add to the discussion and help to deepen the argumentative basis for the model that may ultimately be chosen as the standard.

Bibliography

Ambros, Arne. 2007. *Swahili Lesebuch*. Wiesbaden: Reichert.

Bhat, D. N. Shankara. 1999. *The Prominence of Tense, Aspect and Mood*. Amsterdam, Philadelphia: John Benjamins.

Göbelsmann, Claus. 1995. Tempus, Aspekt und Modalität. *Swahili-Handbuch*, ed. by Gudrun Miehe & Wilhelm Möhlig (eds.). Köln: Köppe: 109-120.

Heuser-Ece, Katharina, Dirk Rabien & Richard Madete. 1992. *Karibu. Kiswahili-Sprachkurs*. Bonn: Holos.

Miehe, Gudrun & Wilhelm J.G.Möhlig. (eds.). 1995. *Swahili-Handbuch*. Köln: Köppe.

Mohamed, Mohamed. A. 2001. *Modern Swahili Grammar*. Nairobi, Kampala, Dar es Salaam: East African Educational Publishers.

Nurse, Derek. 2003. Aspect and Tense in Bantu Languages. Derek Nurse & Gérard Philippson (eds.). *The Bantu Languages*. London: Routledge: 90-102.

Polomé, Edgar. 1967. *Swahili Language Handbook*. Washington, D. C.: Center for Applied Linguistics.

Seidel, August. 1941. *Suaheli Konversations-Grammatik*. Heidelberg: Julius Groos.