



universität
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Diplomarbeit

Titel der Diplomarbeit

Voice in Hausa: Grade 7 Verbs

Verfasser

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angestrebter Akademischer Grad

Magister der Philosophie (Mag.phil.)

Wien, 2012

Studienkennzahl lt. Studienblatt: A 390

Studienrichtung lt. Studienblatt: Afrikanistik

Betreuer: emer. o. Univ.-Prof. Dr. Norbert Cyffer

Acknowledgements

This thesis could not have been written without the help of many people. I want to thank Norbert Cyffer for advising this work and for devoting so much of his time to discuss it with me. I also want to thank Georg Ziegelmeyer for sharing his insights into Hausa with me and pointing me to literature. I also want to thank Franz Ahamer, whose Hausa language courses as well as the courses in Hausa linguistics inspired me to become interested in Hausa linguistics.

This work would not have been possible without the support of Bashir Alhaji-shehu. He was always willing to help me with my inquiries about Hausa and to teach me new things. Without his help many questions would have been left unanswered.

I am very grateful to Dalina Kallulli for introducing me to the literature on voice and voice-syncretism as well as her valuable comments on an early draft of this thesis.

I also want to thank Russell Schuh and Philip J. Jaggar. I consider myself very lucky to have had the opportunity to talk to both of them. I feel like I understood twice as much about the problems after talking to them. I would also like to thank Paul Newman not only for writing such a handy Hausa dictionary, but also for providing me with invaluable material on the topic as well as showing general interest in my work.

Many thanks also to András Bárány for some great evenings spent talking about this thesis and problems in linguistics. They were invaluable to formulate new ideas and re-formulate old ones. Without him, writing this thesis would have been a lot less enjoyable. This thesis would have not been finished on time nor would it be understandable without the help of Ulrike Steindl. She literally sacrificed two weeks to work through the first draft of this work to make sure that the writing is understandable for third parties.

I am most grateful to my parents and family who have supported me in every possible way throughout my studies.

I would also like to thank the Liechtensteinian education authorities for their continuous financial support and the Department of African Studies at the University of Vienna for providing a great environment for studying and scholastic exchange.

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Chapter 1

Overview

1.1 The Goal and Scope of this Thesis

This thesis will discuss the properties of a verbal morpheme in Hausa, which is traditionally called *grade 7*. The term *grade* was coined by [Parsons \(1960\)](#) to refer to a class of tonal patterns and suffixes which modify a Hausa verb stem.

The goal of this thesis is twofold. On the one hand, the thesis aims to explain the distribution of the Hausa grade 7 morpheme in terms of its morphological and semantic properties. On the other hand, this thesis will give an overview about the research on Hausa verbal morphology and show which paths other authors have taken to explain the distribution of the grade 7 morpheme in Hausa.

1.2 The Central Idea of this Thesis

I make observations about the grade 7 morpheme from different linguistic perspectives, which are linked to each other to a certain extent.

Morphologically, I discuss that there exist transparently derived instances of grade 7. In these cases, the rule of grade 7 formation can be unambiguously identified. However, there are also forms which are not derived from other forms, but exist on their own, the *lexical* forms. This question is embedded in the bigger discussion about whether or not the Hausa verbal morphology system is in fact derivational, or in other words,

whether or not it is possible for one root to occur with all different verbal suffixes that the grade system provides.

Semantically, I notice that the interpretation of grade 7 is either a resultative, or a verbal reciprocal. This corresponds with the morphological data in that the resultatives are the transparent forms, whereas the verbal reciprocals are the lexical forms. Syntactically, the different instances of grade 7 will be realized differently.

In addition to these facts, another observation that I make is that the data in the literature directly contradict each other. Given that the authors were diligent in their work, the only possible conclusion is that there exists dialectal variation in the usage of grade 7. The data show that in addition to the two functions mentioned above, i.e. marking a resultative or a verbal reciprocal, in Western Hausa (WH), the grade 7 morpheme can also mark passive.

1.3 Methods

As methods I used literature research and grammaticality judgments. My linguistic assistant is 34 years old and is from Maiduguri in Bornu state. His first language is Hausa but he is also proficient in English, Nigerian Pidgin English, Kanuri and Fulfulde. All unquoted examples and judgments are from him. For my syntactic analysis I will follow Minimalist principles as presented in [Hornstein et al. \(2005\)](#).

1.4 Overview of Things to Come

Chapter 2 will introduce some contextual information and definitions. In section 2.1, I will give a short introduction as to where Hausa is spoken, and some general information about this language. Section 2.2 will introduce some main aspects of Hausa verbal morphology, which will be crucial for the analysis presented in this thesis, and will introduce the notion of grades in particular. Section 2.3 will discuss the question if analyzing Hausa grades as a single morpheme is feasible or not.

Chapter 3 discusses the various hypotheses about grade 7 which have been put forward in the literature so far. Section 3.1 will examine the

hypothesis that the grades 3 and 7 mark unaccusatives, as argued in Tuller (1990) and Campos (1998). Section 3.2 will review the assumption that grade 7 marks passive, as proposed in Jaggar (1981) and Abdoulaye (2000). Section 3.3 considers the hypothesis that the function of grade 7 is to mark that the subject of the verb sustains an action, which has been advanced by Parsons (1971/72), Wolff (1993), Newman (2000) and Jaggar (2001). In section 3.4, I will introduce the view that Hausa grade 7 marks multiple grammatical functions, i. e. resultatives, discontinuous reciprocals, and in certain varieties the passive, and thereby constitutes a voice syncretism.

Chapter 4 will reanalyze the grade 7 data under the syncretism hypothesis. Section 4.2 and 4.3 will discuss the resultative and passive instances of grade 7. Section 4.4.2, 4.5 and 4.6 will examine the non-derivational grade 7 verbs, which are the reciprocal verbs, the idiomatic grade 7 verbs and the ‘happen’-type verbs.

Chapter 5 summarizes and concludes the thesis.

Chapter 2

Introduction

2.1 The Hausa Language

Hausa is a West Chadic language spoken by an estimated 30 million first-language speakers mostly in northern Nigeria and in southern Niger, but also by diaspora communities in most west African cities ([Jaggar 2001](#)). Hausa “[...] is the most important and widespread West African language,[...]and has expanded rapidly as a first or second-language, especially in northern Nigeria.” ([Jaggar 2001:1](#)) Dialectologically, Hausa can be divided into multiple dialects, which are usually grouped into Western Hausa (WH), Northern Hausa (NH) and Eastern Hausa (cf. [Aristar & Ratliff 2009](#)). The variety of Eastern Hausa spoken in Kano is considered to be Standard Hausa (SH) at least in Nigeria (cf. [Newman 2000](#)).

It is important to note that the standard in Niger varies from the one in Nigeria. We should keep in mind that the examples used in this thesis are from various sources with different backgrounds. While the French literature (e.g. [Gouffé 1988](#) and [Tuller 1990](#)) as well as authors from Niger (e.g. [Abdoulaye 1992, 2000](#) and [Campos 1998](#)) work with the standard used in Niger, most other authors use the Nigerian standard (i.e. Kano Hausa). In our examples, the distinctions between the two standard varieties are limited to the lexicon. But the variation in Hausa will play a role for my analysis of grade 7.

2.1.1 Linguistic Properties of Hausa

Hausa is a SVO language which has two grammatical genders, masculine and feminine, and distinguishes high and low tone. Subject agreement and TAM (tense, aspect, mode) are marked on an auxiliary which precedes the lexical verb. The lexical verb itself carries a morphological marking composed of a tonal pattern and a final vowel. These affixes are referred to as *grades* in Hausa linguistics.¹

The example below shows an unmarked sentence of Hausa. It can be seen that the default word order is SVO. In (1a), the auxiliary *yaa* agrees with the subject *Abdù* in number and gender. It also marks TAM.

- (1) a. Abdù yaa **yankà** naamà-n ràakumii.
 Abdu 3MASC.PERF cut.I meat-of camel
 ‘Abdu made a cut into the camel meat.’
 ‘Abdu divided the camel meat.’
- b. Abdù yaa **yànkì** naamà-n ràakumii.
 Abdu 3MASC.PERF cut.II meat-of camel
 ‘Abdu cut off (a piece of) the camel meat.’
- c. Naamà-n ràakumii yaa **yàнку.**
 meat-of camel 3MASC.PERF cut.VII
 ‘The camel meat has been cut into.’
 ‘The camel meat has been divided.’
 ‘(A piece of) the camel meat has been cut off.’

(Abdoulaye 2000:242)

I would like to direct the reader’s attention to the changes in the main verbs of (1a)–(1c). We observe that these forms vary in their tonal pattern and their final vowel. This variation coincides with a semantic change. These tonal patterns and final vowel are referred to as *grades* since Parsons (1960). In the next section, I will explain the grade system in more detail.

¹The grades will be marked with Roman numbers in the glosses throughout this thesis. High tones will be default, and low tones are marked with the diacritic ` . Falling tones are marked with ^ , long vowels will be transcribed with a double vowel. In case a long vowel is low, the tone mark will only appear on the first grapheme.

2.2 The Hausa Grade System

The Hausa grade system was introduced by [Parsons \(1960\)](#) as a framework to explain Hausa verbal affixes. Its soundness as a theoretical model was validly challenged *inter alia* by [Newman \(1973\)](#) and [Campos \(1998\)](#), but it is still very popular in language instruction and as a method to describe Hausa verb morphology.

Table 2.1: Parsons' Grade System from [Abdoulaye \(2000:241\)](#)

Grades	A-Form no object	B-Form cliticized DO	C-Form full DO	
Primary:				
I	<i>jeefàa</i>	<i>jeefàa</i>	<i>jeefà</i>	'throw'
II	<i>jèefaa</i>	<i>jèefee</i>	<i>jèefi</i>	'throw at'
III	<i>fita</i>	—	—	'go out' (autonomous process)
Secondary:				
IV	<i>jeefèe</i>	<i>jeefèe</i>	<i>jeefèe</i>	'throw at' (completeness, intensive)
V	<i>jeefar</i>	<i>jeefar dà</i>	<i>jeefar dà</i>	'throw away' (efferential, causative)
VI	<i>jeefoo</i>	<i>jeefoo</i>	<i>jeefoo</i>	'throw' (ventive)
VII	<i>jèefu</i>	—	—	'be thrown (at)' (passive/intensive)

The forms A through C in table 2.1 describe the different syntactic environments in which a verb can appear. Form A appears in an environment where there is no object, form B occurs with a pronominal object, and with form C, a nominal object follows the verb. Grade 3 and grade 7 are intransitive, therefore, they only occur in the A-form.

The grades were structured hierarchically by Parsons. It was assumed in Parsons' account that secondary grades were derivable from primary grades. This predicts that for every word occurring in grades 4–7, there will be a corresponding form in grades 1–3.

This is only partially true. Even though most grade 7 verbs are synchronically *derivable* from a base form in lower grades, others are underivable. For example, the verb *jeef-* can occur in both primary and secondary grades. This is in opposition to the verb *wànzù* - 'happen', which only occurs in grade 7 and has no other forms. Therefore, it cannot be derived from a primary form. The question of derivability of grade 7 verbs will be further discussed in chapter 4.

These examples show that the distinction between primary and secondary grades is not absolute, but rather indicates a tendency of derivability. Also, the functions proposed for the various grades in table 2.1 have

more of a didactic value, but cannot be seen as a valid generalization, as there remain many exceptions that are not accounted for. For example, [Parsons \(1960\)](#) classifies grade 5 as causative. However, [Newman \(1983\)](#) shows that this is not the case and introduces the notion of *efferential*, defined as ‘action directed out and away (form the speaker)’ ([Jaggar 2001:253](#)). However, [Jaggar \(2001\)](#) points out that the main function of grade 5 verbs is to ‘transitivize intransitive verbs’ and that a ‘strict efferential reading is not a necessary condition on the formation’ of grade 5 verbs (cf. [Jaggar 2001:253](#)). In Parsons grade system, grade 7 is described as expressing a passive or intensive reading. The discussion of the data in this thesis will make it clear that this is a simplification.

One of the basic claims of the grade system is that the tonal pattern and the final vowel in fact constitute a single morpheme. The following section will explore the possibility of separating the tonal pattern from the final vowel, as proposed in [Campos \(1998\)](#) and in [Frajzyngier & Munkaila \(2004\)](#), which would allow us to treat Hausa grades compositionally. However, I will argue that the separation is not possible.

2.3 Dividing Tone and Suffix

The claim that the final vowel and the tonal pattern do not form a single morpheme, but are segmentable into two separate morphemes, was first suggested by [Campos \(1998\)](#). He proposes that the initial low tone in grades 2, 3 and 7 is a morpheme on its own, marking unaccusatives while the initial high tone of the other grades is the unmarked form. [Frajzyngier & Munkaila \(2004\)](#) adopt this idea, but give a different analysis for the initial low tone. To them, the initial low tone marks *Point of View of the Subject*. In this section, I will subject the idea that a separation of the tonal pattern from the final vowel is possible, to close scrutiny. While the proposal is appealing in some respects, I will conclude that there are irreconcilable problems with it.

In order to separate grades into two morphemes, a distinct interpretation for the tonal pattern and the suffix must be identifiable. Thus, the main question is if there are syntactic or semantic commonalities shared by low tone initial verbs. [Campos \(1998\)](#) and [Frajzyngier & Munkaila \(2004\)](#)

suppose that the syntactic commonality lies in the ungrammaticality of the *regular applicative* with low tone initial verbs.

With most high tone initial verbs (e.g. grade 1, 4, 5 and 6), the applicative *wà / mà* follows the verb. Example (2) shows that a high tone initial grade 1 verb neither changes its tonal pattern nor changes its final vowel when combined with an applicative. The only difference between *kaamà* in (2a) and *kaamàa* in (2b) is the length of the final vowel. This is not of relevance for the problem at hand, because final vowel lengthening occurs generally in certain syntactic environments in Hausa (cf. A to C forms in table 2.1). It is a process occurring independently of the grade changes.²

- (2) a. Naa kaamà kiifii.
 1SG.PERF catch.I fish
 ‘I have caught a fish.’
 b. Naa kaamàa wà Muusaa kiifii.
 1SG.PERF catch.I APPL Musa fish
 ‘I caught Musa a fish.’

(Hayes 1990:93)

In the following discussion, I will call applicatives that do not change the tonal pattern or the final vowel of the verb *regular applicatives*.

The behavior of grade 2, grade 3 and grade 7, i.e. the grades that are low tone initial, on the other hand is quite different. Verbs in these grades only surface in the so called pre-dative suffixed-form (PDS) with applicatives. The PDS is marked with an all high tonal pattern and the suffix *-aĩ*. (3) demonstrates this. The grade 2 verb *nèemaa* in (3a) has a low-high tonal pattern, the PDS form *neemaĩ* in (3b) has a high-high pattern.

- (3) a. Naa nèemi àbinci.
 1SG.PERF look for.II food
 ‘I looked for food.’³
 b. Naa neemaĩ wà yârân àbinci.
 1SG.PERF look for.PDS APPL child.PL.DEF food
 ‘I looked for some food for the children.’

²For information on the phenomenon of final vowel length in Hausa, cf. Leben & Bagari (1975) and Crysmann (2005)

³Please notice that the *-i* in *nèemi* is due to the occurrence of the grade 2 verb *nèemaa* in a C environment, cf. table 2.1 on page 6

We can see in (4) that the regular applicative is in fact ungrammatical with grade 2 verbs (cf. (4a)), with grade 3 verbs (cf. (4b)) and with grade 7 verbs (cf. (4c)).

- (4) a. *Naa nuunàa wà Aishà hòotoo gà màì gyàdaa.
 1SG.PERF showII APPL Aisha photo of peanut salesman
 ‘I showed Aisha the photo of the peanut salesman.’
 b. Gàskiyaa taa bàyyanà (*wà Ali)
 truth 3FEM.PERF revealed.III (APPL Ali)
 ‘The truth was revealed (to Ali).’
 c. Maataa sun gàmu (*wà Ali)
 Women 3PL.PERF meetVII (APPL Ali)
 ‘The women met (for Ali).’

(Tuller 1990:100f)

Campos (1998) as well as Frajzyngier & Munkaila (2004) assume that the initial low tone marks the same grammatical category which causes the ungrammaticality of the regular applicative phrase with grade 2, 3 and 7 verbs.

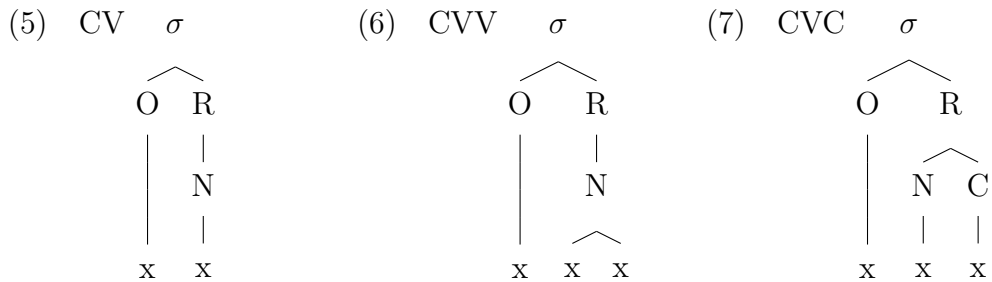
This analysis faces two obstacles. First, it is not entirely clear that grades 2 and 3 are comparable with grade 7 in their applicative use. Grades 2 and 3 regularly form the applicative with the PDS-form. Grade 7 verbs on the other hand are very restricted in their use of applicatives. In fact, only two grade 7 verbs can form an applicative at all (cf. Frajzyngier & Munkaila 2004). This suggests that while grades 2, 3 and 7 resemble each other in all being low-tone initial and disallowing for regular applicatives, there is an additional differentiation of grade 7, which causes it to be barely acceptable with applicatives. Hence, there is a lack of evidence for the claim that grades 2 and 3 and grade 7 form a uniform class.

But there are also verbs which are not low tone initial but still require the PDS for forming an applicative. These verbs are classified in Newman (2000) as grade 3a and grade 3b. Grade 3a verbs differ from other grade 3 verbs only in their tonal pattern, which is high-high instead of low-high. In all other respects they behave like other grade 3 verbs in being unaccusative and requiring the PDS with applicatives. This contradicts the motivation for the occurrence of PDS in Campos (1998) and Frajzyngier & Munkaila (2004), because they assume that the PDS occurrence is triggered by an initial low

tone. The data in Newman (2000) shows that also initial high tone verbs can co-occur with the PDS. If we were to follow the separation of the tonal pattern from the suffix as proposed by Campos (1998) and Frajzyngier & Munkaila (2004) we would need an explanation for this phenomenon.

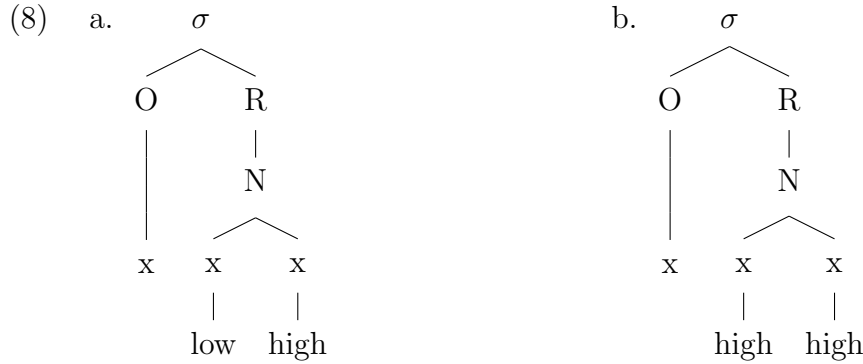
Frajzyngier & Munkaila (2004) notice the problem and propose a way how to resolve it without elaborating on this idea. They notice that most grade 3a verbs have a long initial vowel. In fact, only one, *girma* - ‘grow up, grow older, grow lager’, out of the 15 grade 3a verbs recorded in Newman (2007) does not have a long initial vowel or diphthong. They suggest two phonological rules to explain the occurrence of the long initial high tone in some realizations of grade 3. On the one hand, they propose the spreading of high tones from right to left in a syllable. On the other hand, they argue that an alternating tonal pattern is obligatory in Hausa verbs. If this is the case, the long initial high tones in grade 3a have an underlying L-H pattern. I will try to formalize what I believe to be Frajzyngier & Munkaila’s (2004) ideas and evaluate them in the following paragraphs.

Hausa has 3 kinds of syllable structures: CV, CVV and CVC. I will presume that the syllable structure in (5) corresponds to a CV, (6) to a CVV and (7) to a CVC syllable.



I will assume that the nucleus is the domain within which high tone spreading occurs. This means that high tones can not spread over syllable boundaries. The obligatory spreading of high tones from right to left causes all

underlining low–high tonal patterns to surface as high–high patterns.



This means that all underlying low-high patterns, schematized in (8a) surface with the high-high tonal pattern, schematized in (8b). This predicts that no low-high tonal patterns, i.e. rising tones, exist in Hausa, which is indeed the case. Hausa has a short and a long high tone, a short and a long low tone as well as a long falling tone, which can be conceived as a high and low tone on adjacent nuclear skeleton position. An obligatory spreading of high tones from left to right explains the absence of a long rising tone, because all underlying L-H tonal patterns surface as H-H. [Frajzyngier & Munkaila's \(2004\)](#) assumption of an obligatory spreading of a high tone from right to left is therefore very plausible and also very desirable to explain the absence of raising tones in Hausa.

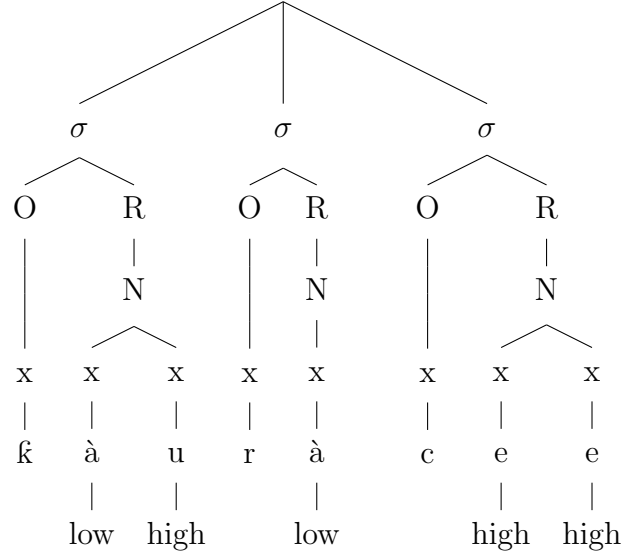
Besides the obligatory spreading of high tones from right to left, [Frajzyngier & Munkaila \(2004\)](#) also propose a phonological process which assigns an alternating tonal pattern to Hausa verbs. This is necessary because in [Campos \(1998\)](#) and also in [Frajzyngier & Munkaila \(2004\)](#), only the initial tone is assigned morphologically, since only the first tone is considered to be morphologically. All the other tones have to be assigned phonologically. The ‘extended OCP’ as proposed in [Kaye \(2001\)](#) is a phonological process which does just that. The question needs to be whether the OCP is applicable to Hausa. It is a priori clear that the OCP can not apply to nouns and most other lexical items, because there exist a number of lexical items that do not have an alternating tone pattern, such as *bindigàa* - ‘gun’ or adjectives like *birkideedèe* - ‘huge’. In this cases tone has to be assigned in the lexicon. We also know that morphology affects the tonal pattern. Therefore, we have to conclude that the OCP can only apply to vowels which have not

been assigned tone otherwise, i.e. through the lexicon or by a morphological process.

Frajzyngier & Munkaila (2004) point out that many verbs have an alternating tonal pattern. This is only partially true. While bisyllabic grade 1, 2, 3, 4 and 7 verbs do have an alternating tonal pattern, grade 5 and 6 do not. This generalization breaks down further if one considers more than bisyllabic verbs. Trisyllabic grade 7 verbs, as well as grade 2 verbs in their B and C forms have an L-L-H pattern while trisyllabic grade 1 verbs as well as some grade 4 verbs have a H-L-L pattern in their C form. It not possible to incorporate these facts into a theory which assumes only the initial tone to be grammatically specified, and all the other tones to be derivable by a phonological rule.

There is another problem arising from the assumption that the long initial vowel in grade 3a verbs, surfacing as a long high vowel is in fact a H-L pattern in an underlying structure. If grade 3a verbs are marked by a low tone underlyingly, all things being equal, one has to assume that verbs with a long initial high tone, namely grade 1 or grade 4 verbs, which do not use the PDS in applicative formation, have to be regarded as having an underlying low-high tonal pattern and are in fact marked with an initial low tone. Therefore, they would be expected to cooccur with the PDS. This prediction is in clear contrast to the facts.

Here is an example of a phonological structure under Frajzyngier & Munkaila's (2004) analysis. *kauràcee* - 'to avoid' is generally classified as a grade 4 verb. Since its initial vowel is a diphthong, it is predicted that the initial high tone is a result of high tone spreading. This means that we have to assume an underlying structure as in (9).

(9) Phonological representation of *kauràcee*

As we can see in (9), *kauràcee* is underlyingly marked with an initial low tone, as are grade 2, 3 and 7 verbs and should not allow for a regular applicative, contrary to the actual facts, as can be seen in (10).

- (10) Sun *kauràcee* wà juunaa.
 3PL.PERF avoid.IV APPL each other
 ‘They avoided each other.’ (Newman 2007:129)

I see no straightforward solution which could fix the problem arising from the separation of tonal pattern and suffixes as proposed in Campos (1998) and Frajzyngier & Munkaila (2004). If we are to assume that the initial low tone causes the applicative formation with the PDS-form we are stuck with grade 3a and 3b verbs which have an initial high tone, but form the applicative with PDS. If we assume, as proposed in Frajzyngier & Munkaila (2004) that the initial high tone in grade 3a verbs is in fact an underlining low-high tonal pattern, we would need to assume that other verbs, like the grade 4 verb *kauràcee* - ‘to avoid’, which forms a regular applicative, are in fact low tone initial verbs. It is therefore not possible to generalize that the initial low tone causes the PDS form. I will therefore treat grade 7 to be a single morpheme.

In the next section, I will introduce the syntactic properties of grade 7.

2.4 Describing Grade 7

In the following section, I will introduce the data in terms of their syntactic and semantic properties. I will focus on the problematic aspects of the data.

I have argued in section 2.2 that the Hausa grade system is merely a descriptive system, which is not fine-grained enough to account for all the variability in the data. The question thus arises if grade 7 is in a derivational morpheme and what the base of the process is. I have hinted in section 2.2 that not all grade 7 verbs are derivable. In the following I will show that some grade 7 verbs are in fact derivational while others are not. I will use the term *syntactically derived* as defined in Hajič et al. (2006):

- (11) ‘Syntactic derivation concerns the cases in which the base word is to be used in a different syntactic environment (function) while the core of its meaning stays preserved.’

In (1), which is repeated below in (12), we can clearly see that the grade 7 verb in (12c) is syntactically derived from (12a) and (12b). We can see that not only the ambiguity of *yankà* - ‘cut into, divide’ in (12a) is preserved in *yàнку* - ‘be cut into, be divided, be cut off’ in (12c), but it also carries the semantics of *yàнки* - ‘cut off’ in (12b). *yàнку* can therefore be derived from the grade 1 verb *yankàa* or the grade 2 verb *yàнкаa* alike.

- (12) a. Abdù yaa **yankà** naamà-n ràakumii.
 Abdu 3MASC.PERF cut.I meat-of camel
 ‘Abdu made a cut into the camel meat.’
 ‘Abdu divided the camel meat.’
 b. Abdù yaa **yàнки** naamà-n ràakumii.
 Abdu 3MASC.PERF cut.II meat-of camel
 ‘Abdu cut off (a piece of) the camel meat.’
 c. Naamà-n ràakumii yaa **yàнку**.
 meat-of camel 3MASC.PERF cut.VII
 ‘The camel meat has been cut into.’
 ‘The camel meat has been divided.’
 ‘(A piece of) the camel meat has been cut off.’

(Abdoulaye 2000:242)

The syntactic function of grade 7 is not obvious right away. Very often, grade 7 verbs take one argument less than their non-grade 7 counterparts.

In (13) we can see that the direct object *kòogii* - ‘river’ in (13a) surfaces as the subject in (13b).

- (13) a. Abdù yaa kèetàree kòogî-n.
 Abdu 3MASC.PERF cross.IV river-MASC.DEF
 ‘Abdu crossed the river.’
 b. Kòogî-n yaa kèetàru.
 river-MASC.DEF 3MASC.PERF cross.VII
 ‘The river was crossed.’

Based on the alternation of (13a) and (13b), some authors proposed a passive analysis of grade 7 (cf. Jaggar 1981; Abdoulaye 2000).

However, grade 7 has a somewhat unexpected behavior with the imperfective aspect. The imperfective examples in (14) correspond to the perfective examples in (13). In (14a), we see the regular progressive interpretation of the imperfective aspect, namely that the action is ongoing. The corresponding grade 7 sentence in (14b) on the other hand does not have a progressive but only a potential interpretation. The potential interpretation does not necessarily imply that the action has taken place, but that it is possible that the action can be achieved.

- (14) a. Abdu yanàa kèetàree-waa kòogî-n.
 Abdu 3MASC.IMPERF cross.IV-VN river-MASC.DEF
 ‘Abdu is crossing the river.’
 b. Kòogî-n yanàa kèetàru-waa.
 river-MASC.DEF 3MASC.IMPERF cross.VII-VN
 ‘The river is crossable.’⁴

In a typological survey of passive morphology across languages, Haspelmath (1990) points out that the fact that most grade 7 verbs only allow for a potential reading in the imperfective aspect is rather unusual crosslinguistically. The Hausa data therefore diverges from the typical behavior of passives in other languages.

If we presume grade 7 to be some sort of argument suppression process, we will have to ask which argument is being suppressed. If we consider (15a) to be the base form, it is evident that the external argument in (15b) has been deleted or is being suppressed, because the agent is not longer

⁴The imperfective subcategorizes for a noun or a verbal noun (VN)

represented in the sentence. But we can not assume the same for (15c), because the subject stays the same, while the semantics of verb changes.

- (15) a. Audù yaa googà taasà-r.
 Audu 3MASC.PERF polish.I bowl-FEM.DEF
 ‘Audu polished the bowl.’
- b. Taasà-r taa gòogu.
 bowl-FEM.DEF 3FEM.PERF polish.VII
 ‘The bowl is polished.’
- c. Audù yaa gòogu.
 Audu 3MASC.PERF polish.VII
 ‘Audu is an old hand.’ (Jaggar 2001:266)

As is shown in (15c), not all grade 7 constructions promote the object of the non-grade 7 construction to subject position. (15c) cannot be derived from (15a). It must be analyzed as an idiom. I will call grade 7 verbs like *kèetàru* - ‘to be crossed’ in (13b) and (14b) as well as *gògu* - ‘to be polished’ in (15b) as *de-transitive* grade 7 verbs and verbs like *gògu* - ‘to be experienced’ in (15c) as *metaphorical* grade 7 verbs.

Some grade 7 constructions do not promote or suppress arguments at all, as can be seen in (16). *gweebàa* - ‘guava’, the subject of the intransitive verb in (16a), is also the subject of the intransitive grade 7 verb in (16b). Its semantic role stays unchanged. A passivization analysis can therefore not account for all the data. According to Jaggar (1981), the difference between (16a) and (16b) is that the latter is more stative than the former. I will call verbs like *nùku* - ‘to be ripe’ which are derivable from intransitive counterparts *de-intransitive* grade 7 verbs.

- (16) a. Gweebàa taa nùka.
 guava 3FEM.PERF become ripe.III
 ‘The guava became ripe.’
- b. Gweebàa taa nùku.
 guava 3FEM.PERF become ripe.VII
 ‘The guava was ripe.’ (Jaggar 1981:33)

We will argue in section 4.2 that grade 7 marks a resultative construction and that pairs such as (16a)/(16b) or (13a)/(13b) are the result of a

derivation process applying to the VP. However, some grade 7 verbs are synchronically not derivable, because there is no systematic relation between the verb in grade 7 and the same stem in any other grade. The semantics of *gamà* - ‘to cooperate’ in (17a) is not preserved in *gàmu* - ‘to meet’ in (17b). Interestingly enough, the imperfective sentence (17c), which corresponds to the perfective sentence (17b), does not have a potential interpretation but a regular progressive one. This makes very clear that verbs like *gàmu* - ‘to meet’ differ systematically from the cases in which the imperfective has no progressive reading.

- (17) a. Sun gamà kânsu.
 3PL.PERF combine.I REFL.3PL
 ‘They cooperated.’
- b. Mun gàmu à hanyàa.
 1PL.PERF meet.VII at road
 ‘We met on the road.’ (Newman 2007:68)
- c. Munàa gàmu-waa à hanyàa.
 1PL.IMPERF meet.VII-VN at road
 ‘We are meeting on the road.’

At first glance, some common semantics between *gamà* - ‘to cooperate’ and *gàmu* - ‘to meet’ may be possible. But if we have a look at further examples we see that there is no systematic process. The semantic relationship between *shaakèe* - ‘to strangle someone’ in (18a) and *shàak* - ‘to be good friends’ in (18b) is not of a similar kind as the one between *gamà* and *gàmu* in (17). However *gàmu* and *shàaku* resemble each other syntactically and semantically in that they call for plural subjects or an obligatory cogitative phrase to express a second argument, and in that both arguments are agents and experiencer of the event described by the verbs. I will call verbs that behave in that manner *gàmu-type* verbs.

- (18) a. Omãr yaa shaakèe Yuusufù.
 Omar 3MASC.PERF strangle.IV Yusufu
 ‘Omar strangled Yusufu.’
- b. Omãr da Yuusufù sun shàaku.
 Omar and Yusufu 3PL.PERF be good friends
 ‘Omar and Yusufu are good friends.’

An other group of verbs which are not clearly derivable are verbs like *fàaru* - ‘to happen’. There is no systematic semantic relationship between *faaràa* - ‘to begin’ and *faarù* - ‘happen, occur’. I will call the verbs which behave like *fàaru* ‘*happen*’-verbs. There are three of this verbs. The other two verbs beside *fàru* are *àuku* - ‘happen, occur, arise’ and *wànzù* - ‘happen, occur’

- (19) a. Yaa faarà shaarè dāakìn.
 3MASC.PERF begin clean room
 ‘He began to sweep the room.
- b. Mèe yakèe fàaru-waa?
 what 3MASC.IMPERF.REL happen.VII-VN
 What is happening?

(Newman 2007:59)

In (19b), we see that the imperfective aspect subcategorizes for a *verbal noun* (VN) or a noun. The verbal noun is realized with grade 7 verbs with the suffix *-waa* - ‘VN’. We can also see in the same example that the Hausa auxiliary distinguishes between a regular form and a *relative form* (REL). The auxiliary marks that a constituent was moved by focus fronting or by Wh-fronting with this *relative form*.

From the examples above it is clear that some grade 7 verbs are derivable from other verbs. The questions arises what the function of grade 7 is and how to deal with this apparent split of derivational and non-derivational grade 7 verbs.

In chapter 4, I will argue that *gàmu*-type verbs are syntactically derived from other verbs, and that *gàmu*-type verbs differ in there syntactic representation from de-transitive and de-intransitive grade 7 verbs. As I have mentioned above, verbs like *gàmu* - ‘to meet’ call for a plural subject or an obligatory PP which introduces a second participant, and thereby systematically differ from verbs which have a potential reading in the imperfective. The potential reading with the imperfective aspect cannot be a property of the grade 7 morpheme itself, because not all grade 7 verbs have a potential reading. I will show that only verbs with a transparent grade 7 derivation exhibit this reading.

Jaggar (1988) traces the Hausa grade 7 marker back to a Chadic competitive marker **k^wo*. The grade 7 morpheme with the tonal pattern low - high with the suffix -u is documented at least for 150 years. Schön (1862) mentions in his grammar a list of intransitive verbs with the suffix -u. He does not mark tone in his work, which is consistent with the state of linguistic research of the time, the list therefore consist not only of grade 7 verbs but also of grade 3 verbs ending in -u. The list, copied in the appendix is quite short, containing 20 verbs. Only 19 of them are in fact may be considered grade 7 verbs. But the list contains examples for all uses mentioned above, with the exception of the metaphorical use. However the absence of this uses might be due to the short list and not to the absence of the metaphorical grade 7 verbs in the Hausa of that day per se. Since the grammar does not mention all the words in context it is not always clear how the words were used but we have examples for most uses mentioned above. I will use Schön's (1862) orthography for the examples quoted from him. We can see in (20) an example for the grade 7 verb *gàmu*. Schön (1862) uses diacritics not to mark tone but vowel length and quality more general. I copy them but please keep in mind, that they do not mark tone like in other examples.

- In (21) we can see *fàaru* - ‘happen’ being used very much like in today’s Hausa (cf. (19b) above).

- Schön (1862) does not give any sentences to demonstrate how *kètàru*-type verbs behaved, especially not in different aspects, but we can see in his word list (cf. appendix) that they exist.

We also have an account from Robinson (1897) that grade 7 ‘is generally used where a passive or intransitive sense is intended’ (Robinson 1897:46-47) cited in (Jaggar 1988:387). We do not have examples for idiomatic uses of grade 7 verbs in Schön (1862) but we can find some examples like *bùgu* - ‘to be drunk’ or *tàbu* - ‘to be crazy’ in Robinson’s (1913) dictionary. There is no indication that grade 7 has been used differently 150 years ago then today. The origins of grade 7 is therefore not retraceable in written accounts.

In the next section, I will discuss the analysis proposed in the literature so far. I will also outline analysis proposed in this thesis in section 3.4.

Chapter 3

Hypotheses about the Nature of Grade 7

After showing that Hausa grades are not divisible into two or more separate morphemes but are monomorphemic, the question arises what the function of the grade 7 morpheme is. This section will discuss the possible hypotheses to explain the phenomenon proposed in the literature.

There are a number of proposals to account for the distribution of grade 7 verbs. They fall in three categories. Some authors think that grade 7 marks unaccusativity, others have argued for a passive approach, and some consider grade 7 to mark a sustentative. I will discuss these 3 hypotheses in the following three sections, respectively. Finally, I will present the idea that grade 7 is an instance of voice syncretism, marking resultatives as well as discontinuous reciprocals. Also, I will propose that in Western Hausa, grade 7 not only marks resultatives and discontinuous reciprocals, but that it also marks passive in this variety of Hausa.

3.1 Grade 7 as Unaccusative

[Tuller \(1990\)](#) first introduces the idea that grade 7 alongside with grade 3 marks *unaccusative* and argues that some phenomena common to grade 3 and grade 7 verbs can be explained under this assumption. This idea was further developed by [Campos \(1998\)](#), who assumes grade 2 to be unaccusative as well.

Tuller's (1990) main reason for arguing for the *Unaccusative Hypothesis* of grade 7 verbs is the ungrammaticality of the *regular applicative*, which is phonologically realized as *wà*, with grade 7 and 3 verbs.¹ Please notice that the applicative marker *wà* is tonally distinct from the suffix *-wa* marking verbal nouns. She argues that *wà* forms an island which prevents the internal argument from raising to subject position. Because also passives and resultatives require the raising of the object to subject position, these facts could also be used to support a passive or resultative analysis for grades 3 and 7. Tuller (1990) argues for treating them as unaccusative, together with some grade 4 verbs. She stays uncommitted as to whether the grade 3 and 7 affixes themselves mark unaccusativity. If she did assume that, it would mean that these grades are allomorphs of the same morpheme. The fact that minimal pairs of grade 3 and grade 7 verbs exist shows that they cannot be viewed as allomorphs because the distribution of these grades is not complementary. We can see one of these pairs in (22).

- (22) a. Dookii yaa gàji.
 horse 3MASC.PERF tire.III
 The horse became tired.
- b. Dookii yaa gàjìyu.
 horse 3MASC.PERF tire.VII
 The horse was thoroughly tired. (Jaggar 1981:33)

If we were to believe that grade 3 and grade 7 verbs are not morphemic in present day Hausa, we would lose a very high degree of predictability of the semantics of grade 7 verbs and their syntactic behavior. The idea that every single verb form of Hausa is in fact lexicalized is a very unappealing prospect.

But Tuller's (1990) proposal also has another problem. The assumption that the applicative morpheme *wà* blocks movement of internal arguments to subject position would also predict that the applicative blocks any other operations that involve movement, such as focus fronting or wh-fronting also with other verbs but grade 2, 3, and 7. But as we can see in (23b), wh-fronting is fine and the answer with focus fronting (23c) is grammatical as well.

¹Hausa applicatives are sometimes referred to as '*datives*' or '*indirect object markers*' in the literature. We follow Abdoulaye (1992) in calling the construction an applicative, since it behaves like a high applicative in the sense of Pylkkänen (2002).

- (23) a. Abdù yaa sayàa wà Bàlki littaaŋi a kàasuŋaa.
 Abdu 3MASC.PERF buy.I APP Balki book at market
 ‘Abdu bought a book for Balki at the market.’
- b. Mèe Abdù ya sayàa wà Bàlki à kàasuŋaa?
 what Abdu 3MASC.PERF.REL buy.I APP Balki at market
 ‘What did Abdu buy for Balki at the market?’
- c. Littaaŋi ne Abdu ya sayàa wà Bàlki à
 book PART Abdu 3MASC.PERF.REL buy.I APP Balki at
 kàasuŋaa.
 market
 ‘Its a book Abdu bought for Balki at the market.’

Tuller’s (1990) claim that *wà* forms an island is therefore false. There seems no immediate motivation for arguing for the unaccusative account any more. This is however no proof that the hypothesis is wrong per se. A possible alternative explanation could also be that the applicative needs to be licensed by an external argument. Since unaccusatives do not have external arguments, they cannot license the applicative, which makes any unaccusative with applicative ungrammatical.

3.2 Grade 7 as Passive

Jaggar (1981) proposes that grade 7 marks two distinct but related kinds of passive, i.e. *perfective-passive* and *imperfective-passive*. Grade 7 verbs that cannot be viewed as passive in Jaggar’s (1981) definition are analyzed as intensive or non-intensive bleached forms. He introduces the features $[\pm passive]$ and $[\pm totality]$.

In his terminology, a passive is defined as a construction in which the object of a corresponding active surfaces as the subject of the passive sentence. He uses the feature ‘totality’ to describe that grade 7 marks the completeness of an event. Intensive forms are grade 7 verbs which have an intransitive grade 3 or 4 base like (16) in section 2.4. Jaggar’s (1981) intensive form corresponds to what I labeled de-intransitive forms. Non-intensive grade 7 forms are verbs like *gàmu* - ‘to meet’, as in (17). He hypothesizes that passive is the productive function of grade 7, and that the intensive

and the non-intensive forms are ‘bleached’ over time by changing the feature value from [+passive] [+totality] to [−passive] [+totality] in the case of intensives, and [−passive] [−totality] in the case of *gàmu*-type verbs.

- (i) For Jaggar (1981), Hausa passives have the features [+passive] [+totality]. The distinction between perfective-passive and imperfective-passive is not due to these features. To him, verbs like *kèetàru* - ‘be crossed’ in (13b) are perfective-passive, and verbs like *kèetàru-wa* - ‘be crossable’ in (14b) are imperfective-passives, which have a potential reading. Be reminded that the suffix *-wa* regularly forms verbal nouns, which have to occur in the imperfective. The imperfective-passives are formed the same way as imperfectives in other grades, which have a progressive reading. Jaggar (1981) is not specific about how the potential reading in the imperfective-passives arises, at any rate the potential passive reading does not follow from his feature based analysis.
- (ii) According to Jaggar (1981), the intensive forms carry the features [−passive][+totality]. This category is composed of verbs like *nùku* - ‘to be ripe’ in (16b), which are considered to have an *intensive/totality* reading. These verbs very often have an intransitive grade 3 base. Jaggar (1981) poses the question how the intensive grade 7 verbs differ from their grade 4 counterparts, which are considered to be intensive forms as well. He mentions that the verbs in the former have a more stative interpretation than the later.
- (iii) The last group of verbs, the *gàmu*-type verbs, have the features [−passive][−totality]. They are assumed to have lost their totality and passive meaning over time.

Jaggar’s (1981) proposal faces some problems. He is forced to assume two different kinds of passives, the perfective-passive and the imperfective-passive, to account for the potential interpretation of imperfective grade 7 verbs. The distinction between these two passives is very regular: the aspect determines the kind of passive. The interpretation of the passive is fully predictable by the aspect in which it appears in. By introducing two separate passives, this relation is represented as accidental.

It is also surprising that the feature combination [+passive][−totality] is not attested. This indicates that the bleaching process proposed in Jaggar (1981) is not random, because the passive feature has to be marked minus before the totality feature can be marked minus. This does not follow from Jaggar’s (1981) account.

The account does not specify which group of verbs experience bleaching and if there are kinds of verbs that are more likely to bleach than others. Many of the intensive grade 7 verbs have an intransitive grade 3 or grade 4 counterpart. These verbs cannot form a passive in Jaggar’s (1981) definition of passive, since they have no object which could be subject of a passive sentence. Thus, it is unclear how these verbs could have ever had the feature [+passive]. Therefore, the feature value can not be changed and bleaching can not take place.

Jaggar’s (1981) account was modified by Abdoulaye (2000) who distinguishes broadly between passive grade 7 and non-passive grade 7 constructions. In his description of passive grade 7 constructions, Abdoulaye (2000) does not use the distinction between perfective-passive and imperfective-passive. He also makes no more reference to the features introduced in Jaggar (1981), but he retains Jaggar’s (1981) distinction of passive, intensive and *gàmu*-type verbs. Abdoulaye (2000) labels the [+passive][+totality] group passive. His data, which seem to be mostly from Western Hausa, diverge from Jaggar’s (1981) in two major respects. Abdoulaye (2000) gives examples of a *gà* - ‘in, at’ phrase which functions as a nonobligatory agentive prepositional phrase, very much like the English *by*. Another difference is that there are instances of imperfective-passives with a progressive reading instead of a potential reading. He also states that passive grade 7 verbs do not necessarily have an intensive reading.

He divides the group of non-intensive, non-passive verbs in an *association/dissociation* and a *happen*-group. Abdoulaye (2000) considers association/dissociation verbs to be verbs like *gàmu* ‘meet’ and *ràbu* ‘part company’. The three ‘happen’ verbs are the verbs *aùku*, *fàaru* and *sàamu*, which are translatable as ‘happen’.

Abdoulaye (2000) analyzes grade 7 diachronically. To him, the intensive, non-passive grade 7 verbs are the remains of the original function of grade 7, which was to mark intensive/totality verbs. Through grammatical-

ization, the function of grade 7 today became marking passive. In modern day Hausa, the intensive verbs are assumed to be marked by grade 4. [Abdoulaye's \(2000\)](#) view is that the use of grade 7 as passive in modern Hausa causes intensive grade 7 forms to be prone to change to grade 4. This process will eventually create two homogeneous classes, a passive grade 7 and an intensive/totality grade 4 class.

[Abdoulaye's \(2000\)](#) analysis leaves some questions unanswered. While most verbs do not co-occur as intensive grade 7 and as intensive grade 4, some verbs actually surface in both grades. The fact that they do not co-occur is easily explainable in terms of morphological blocking. The occurrence of verbs in both grades must be considered a state of transition from grade 7 to grade 4, leading to some sort of temporary morphological synonymy. In this group, grade 7 and grade 4 verbs would be interchangeable, grade 7 morphology and grade 4 morphology would thus be synonymous in this very restricted setting. This is in opposition to what [Jaggar \(1981\)](#) says. He reports that these two forms are not synonymous but have a slightly different interpretation, i.e. the grade 7 form has a more stative interpretation.

The other problem is the non-passive, non-intensive group of verbs. [Abdoulaye \(2000\)](#) makes the assumption that bleaching creates two homogeneous classes. He uses 'bleaching' as a process that causes a morphologically complex form to transform into a morphological simplex form. Passive grade 7 forms can be viewed to be built from a verbal stem, which carries the semantics of the verb, and a passive morpheme, which carries the passive interpretation and causes the stem to be interpreted as passive. These verbs are regularly interpreted as passive since the passive morpheme, i.e. grade 7, regularly forms passives. Bleached forms on the other hand can not be viewed as compositions, since they are not segmentable into two meaningful parts, but form a single morpheme. Regularities within bleached forms can therefore only be explainable under reference to their origins, but there is no inherent reason for them to form regular classes. One would therefore expect bleached forms to display randomness in their semantic and syntactic behavior. But [Abdoulaye \(2000\)](#) analyzes non-passive, non-intensive grade 7 verb as belonging to one of two groups.

While a handful of 'happen' verbs seem reasonably explainable, the development of an 'association/dissociation' class (i.e. the *gàmu*-type verbs) from an intensive group calls for some more explanation. They have in fact

a quite regular semantic interpretation and syntactic distribution, which is not predicted in Abdoulaye's (2000) approach.

All non-passive grade 7 verbs in Abdoulaye's (2000) view boil down to be fossils, an accident of grammaticalization. But the data show a great deal of regularity which is not explained in Abdoulaye's (2000) account. A hypothesis able to predict the occurrence of more or all grade 7 verbs is therefore more appealing.

3.3 Grade 7 as Sustentative

The *Sustentative Hypothesis* argues that the primary function of grade 7 verbs is to mark subjects that have or are capable of fully sustaining the action of the verb. The term was introduced by Parsons (1971/72) who states that grade 7 verbs normally have the meaning of 'having fully sustained, or being capable of sustaining, the transitive action of the verb.' Consider examples (24a) and (24b) repeated from (13b) and (14b). We can see that the subject in (24a) is not in control of event but is affected by it. In (24b), the subject is not affected by an event yet, but such an event is possible.

- (24) a. Kòogî-n yaa kèetàru.
 river-MASC.DEF 3MASC.PERF cross.VII
 'The river was crossed.'
- b. Kòogî-n yanàa kèetàru-waa.
 river-MASC.DEF 3MASC.IMPERF cross.VII-VN
 'The river is crossable.'

(Parsons 1971/72:77f.) uses the term *sustentative* initially only for grade 7 verbs which have a transitive counterpart. Newman (2000) extends the term to all grade 7 verbs. Broadly along the same lines as Parsons (1971/72), he divides grade 7 verbs into 2 subgroups. The *patient oriented* (i.e. what Parsons (1971/72) labels *sustentative*) and the *actor/experiencer oriented*. The *patient oriented* verbs are verbs like *kèetàru* - 'be crossed' which have a patient as a subject and are derived from a transitive verb. *Actor/experiencer oriented* verbs are more diverse. Newman (2000) divides them into 4 subgroups.

One group consists of *gàmu*-type reciprocal verbs, another group of the three *happen*-verbs. Yet another group is referred to as *metaphorical* verbs

like *gògu* - ‘to be polished, to be experienced’ which are ambiguous between a patient oriented and a metaphorical reading. The last group of verbs is composed of grade 7 verbs which have intransitive, very often grade 3, counterparts. An example for this is *gàjìyu* - ‘to be dog-tired’ in (22b), which has the intransitive counterpart *gàji* - ‘to become tired’ in (22a). Newman (2000) and Jaggar (2001) say *gàjìyu* is semantically strengthened compared to its counterpart *gàji*.

The sustentative approach has some appealing aspects. The structuring of grade 7 verbs in different classes creates homogeneous subgroups of verbs, and gives a great descriptive tool. Every grade 7 verb can be clearly assigned to a single subgroup. It is therefore quite easy to generalize over subgroups.

On the other hand, the approach also faces some problems. The definition of sustentative is wide enough to incorporate all cases of grade 7 uses. But it is not quite clear how to exclude grade 3 verbs. Grade 3 verbs have a patient or experiencer as a subject, and are thus also sustentative. As such, they should be marked grade 7. This is not the case. Thus, it has to be argued that the function of grade 7 has to be more specific than to mark that the subject has sustained or is capable of fully sustaining the action of a verb, since the same can be said about perfective grade 3 verbs.

Furthermore, the subgrouping is in some respects unmotivated. The main difference between patient oriented grade 7 verbs and semantically strengthened grade 7 verbs is that the former is derived from transitive verbs while the latter is derived from intransitive verbs. There is no specific reason why derivability from a transitive or an intransitive base should be a major division. The semantically strengthened verbs, a subgroup of actor/experiencer oriented grade 7 verbs, behave very much like patient oriented verbs in that they do not allow for a progressive interpretation in the imperfective aspect. In addition, *gàmu*-type verbs also differ from semantically strengthened verbs in that they call for a plural subject or an obligatory comitative phrase. In Newman (2000) and Jaggar (2001) semantically strengthened verbs and *gàmu*-type verbs are grouped together even though syntactically, patient oriented and semantically strengthened verbs resemble each other much more than semantically strengthened verbs and *gàmu*-type verbs.

In extending the function of sustentative to all grade 7 verbs, the account also lacks an explanation about why some grade 7 verbs have a potential

interpretation with imperfective aspect while others as the happen verbs and the *gàmu*-type verbs do not.

The introduction of the new grammatical category ‘sustentative’ to linguistic analysis needs to be well motivated crosslinguistically or absolutely necessary to analyze grade 7. Sustentative is not a category used for the analysis of other languages. Therefore, the question arises if it is absolutely necessary to assume this category to explain the Hausa data.

In the next section I will give a short introduction to my own account which will be elaborated on further in chapter 4.

3.4 Grade 7 as Voice Syncretism

In section 3.4.1, I will discuss which problems previous accounts had in dealing with grade 7 verbs. In section 3.4.2, I will sketch how I will deal with these problems. In chapter 4, I will elaborate on this proposal in more detail.

3.4.1 Common Problems with Previous Accounts

In this section, I will discuss the problems arising in previous analyses of grade 7 verbs. I summarize the terminology used in the literature to refer to subcategories of grade 7 verbs in table 3.1. I have not included Tuller (1990) and Campos (1998), since they do not subcategorize grade 7 verbs.

Table 3.1: Overview of terminology used in the literature

	passive hypotheses		sustentative hypotheses		
In this thesis	Jaggar (1981)	Abdoulaye (2000)	Jaggar (2001)	Newman (2000)	
de-transitive	+passive -totality	passive	semantically passive	patient- oriented	syntactically passive
metaphorical	-passive +totality		metaphor- ical	agent/ experiencer oriented	metaphor- ical
de- intransitive		totality (dia- chronic ori- gin)	semantically strengthened		semantically strengthened
<i>gàmu</i> -type	-passive -totality	bleached	reciprocal		associative/ dissociative
happen- verbs		happen- verbs	happen- verbs		happen- verbs

The accounts above face some problems. The sustentative approach as well as the unaccusative approach do not clearly distinguish between the function of grade 7 and grade 3. Since grade 3 takes experiencer and patient subjects, any account which focuses on this property of grade 7 verbs will have problems to distinguish between these two grades.

On the other hand, the passive analysis of grade 7 has the problem that a number of grade 7 verbs do not have a passive interpretation, and that these grade 7 verbs are not randomly distributed. Jaggar (1981, 1988, 2001), Newman (2000), Abdoulaye (2000) all subclassify non-passive or actor/experiencer oriented grade 7 verbs in opposition to passive or patient oriented verbs, what I call de-transitive verbs. This is problematic because the potential reading with grade 7 verbs is shared by the de-transitive, de-intransitive and the metaphorical grade 7 verbs. But these three groups are classified as substantially different. Thus shared semantic properties are not expected. Also the distinction between the de-intransitive and the rest of the Hausa verb system is not clear. De-intransitive verbs are treated as having the same properties as grade 4 verbs in Abdoulaye (2000), Newman (2000) and Jaggar (2001). The explanation for why certain verbs are realized grade 7 and some grade 4 is lost.

Another important question in analyzing grade 7 verbs is how to explain the potential reading with imperfective aspect with some grade 7 verbs. In none of the discussed proposals, the potential reading follows from the assumed categories. There is no reason why some grade 7 verbs have a potential interpretation with the imperfective aspect while others have a progressive interpretation in the same aspect. This interpretation occurs regularly. Only the *gàmu*-type verbs and the happen-verbs allow for a progressive reading in the imperfective aspect while all the others do not. Ideally a theory will provide an explanation for these facts. In the following, I will propose an account which focuses on these two questions, i.e. on how to explain the potential interpretation with grade 7 verbs and on how to distinguish the function of grade 7 verbs semantically and syntactically from other verb classes.

3.4.2 My Account

I propose that grade 7 is a *voice syncretism* marking resultatives, passives and verbal reciprocals alike. Syncretism is the phenomenon that distinct grammatical categories are marked by the same morpheme. By treating grade 7 as a syncretism, I am able to map the distinct behavior of subgroups of grade 7 verbs to distinct grammatical categories. By identifying these groups I am capable of explaining the syntactic behavior of these groups as well as predicting which verbs will surface with grade 7 marking.

I will retain most distinctions made in earlier literature, i.e. the happen-verbs, the *gàmu*-type verbs and the idiomatic/metaphorical-grade 7 verbs. In contrast to earlier work I will assume that de-intransitive and de-transitive grade 7 verbs belong to the same category. I will argue that both these forms are in fact resultatives, i.e. that both denote states and that this is the reason why they can not be interpreted as progressive. I will further argue that what [Abdoulaye \(2000\)](#) analyzes as passive is in fact not the same construction [Jaggar \(2001\)](#) and [Newman \(2000\)](#) discuss. [Abdoulaye's \(2000\)](#) passive is ambiguous between a passive and a resultative interpretation. I assume that the reason for this mismatch is in fact that [Abdoulaye \(1992, 2000\)](#) analyzes a different variety of Hausa than [Jaggar \(1981, 1988, 2001\)](#) and [Newman \(2000\)](#).

Three grammatical categories participate in the Hausa voice syncretism. Whereas Hausa varieties slightly deviate from one another in regard to which of these three categories participate. All Hausa varieties mark resultatives and discontinuous reciprocals with grade 7. Some, like the SH described in [Jaggar \(1988, 2001\)](#), only mark these two categories with grade 7. Others, like Katsinanci, a western Hausa dialect described in [Abdoulaye \(1992, 2000\)](#), additionally have a passive function.

Studies by [Haspelmath \(1990\)](#) and [Embick \(1997\)](#) have shown that the categories participating in voice syncretism across languages are quite restricted. If we are dealing with an instance voice syncretism in Hausa, we expect similar categories to participate in this voice syncretism as in other languages of the world. All three grammatical categories participating in the Hausa syncretism, namely resultatives, passives and verbal reciprocals, have been shown to participate in voice syncretism in various languages

around the world by [Haspelmath \(1990\)](#) (cf. appendix). It is therefore quite reasonable to assume that they participate in a voice syncretism in Hausa.

In the following, I will discuss the variation of grade 7 in Hausa.

3.4.3 Variation in Grade 7

The question of variation in grade 7 verbs has not attracted too much attention, because the grade 7 morpheme is apparently used in across all Hausa dialects. However, there is variation in the usage of grade 7. Newman (2000) notices that there is variation in the use of the preposition *gà* and *wajen*. Abdoulaye (1992) describes *gà* as behaving very much like *by* in English passives. Bature (1991) describes *wajen* to have this function in the Hausa variety he describes, while Newman (2000) states that his SH informants consider the uses of *gà* and *wajen* with grade 7 to be ‘*strange and a bit forced*’ (Newman 2000:668). He reports that they can only interpret the agentive prepositional phrase as only the agent could cause the state described in the grade 7 verb. Campos (1998) says, that grade 7 verbs are not capable of controlling purpose clauses and gives the ungrammaticality of (25a) as an example for this. Bature (1991) and Abdoulaye (2000) on the other hand say the opposite. According to them grade 7 can control purpose clauses. Bature (1991) gives the grammaticality of (25b) as prove for that.

- (25) a. *Gidan-shì yaa gĩnu dà gàngam.
House-3MASC.POSS 3MASC.PERF build.VII with purpose
'His house was build on purpose.'
(Campos 1998:115)
- b. koofàaĩ taa bùudfu don taimàkaa wà
door.FEM.DEF 3FEM.PERF open.VII for helpI APPL
yârân.
boys.PL.DEF
'The door was opened to help the boys.'
(Bature 1991:104)

It is very clear that these two views are not compatible. The question that such insights raise is if the data from all different authors are reconcilable in just one phenomenon. It is conceivable that Newman (2000) and Abdoulaye (2000) deal with different varieties of Hausa. I assume that the fact that some of the data from different authors contradict each other reflects

variation in different varieties of Hausa. We will find in section 4.3 that this assumption will help to explain the data put forward in the literature.

It is important to note that the assumptions made here about the dialectal variations are solely based on the work published hitherto. Further research and data will be needed to substantiate the proposal and to see how the lines between different varieties in respect to grade 7 have to be drawn.

For the purpose of this paper, only two varieties will be taken into account. On the one side SH as described by Newman (2000) and Jaggar (1988, 2001), on the other side Katsinanci as used in Abdoulaye (1992, 2000).²

In the following, I will discuss the separate categories which participate in the Hausa voice syncretism.

²Abdoulaye (2000) states in his acknowledgments that he takes his primary data from Katsinanci, a western Hausa dialect, and from Standard Hausa. Since he does not mark the examples for their origin, we will take the differences to SH as described in Newman (2000) and Jaggar (2001) as reflecting the variation from SH to WH in grade 7 usage.

Chapter 4

Categorizing the Data

This chapter aims to give a new syntactic analysis of the grade 7 data. In section 4.1, I will summarize the syntactic and semantic properties of the descriptive classes used in chapter 3. These are the properties that I will take into account for my own analysis. In sections 4.2 to 4.3, I will discuss the resultative and the passive use of grade 7. As opposed to previous accounts, I will argue that the de-transitive and the de-intransitive do not fulfill a different function in SH, but are in fact both instances of resultatives. I will argue further that in the WH-Hausa varieties, the de-transitive verbs are ambiguous between a resultative and a passive interpretation. In sections 4.4.2 to 4.6, I will examine the metaphorical uses, as well as the *gàmu*-type verbs, which I will analyze to be verbal reciprocals. I will also cover the *happen*-verbs. I will argue that these 3 groups can not be considered to be syntactically derived as defined by Hajič et al. (2006). This is in contrast to the resultatives and the passives uses of grade 7 which are syntactically derived.

4.1 Types of Grade 7 Verbs

In this section I will summarize the syntactic and semantic properties of grade 7 verbs. I use the subgroups as established in section 2.4.

4.1.1 De-Transitives

De-transitive grade 7 verbs are characterized by being derived from transitive counterparts. In grade 7, they do not have an agent subject.

These verbs also display a certain amount of regional variation. In SH, no agent can be expressed in a prepositional phrase. In this case, these verbs express that an event has been fully completed. They have the property of a potential reading with the imperfective aspect, and a progressive one is excluded in this aspect. In WH, these verbs can be combined with an agentive prepositional phrase and do not necessarily have the ‘fully-completed’ interpretation (cf. [Abdoulaye 2000](#)). In the varieties in which an agent can be expressed, a progressive interpretation with grade 7 verbs is also possible.

4.1.2 De-Intransitives

De-intransitive grade 7 verbs are derived from unaccusative intransitive verbs. Consequently, this derivation does not affect the argument structure. These verbs do not allow a progressive interpretation with imperfective aspect, and cannot express an agent, not even in an optional prepositional phrase. In this respect, they resemble the de-transitive group of SH a great deal. Just like the de-transitives, they also do not allow for a progressive reading in the imperfective. Additionally, they also express the ‘fully-completed’ interpretation.

4.1.3 Metaphorical Grade 7

A common property of all metaphorical grade 7 verbs is that they do not have a progressive reading in the imperfective thus they pattern with de-transitive and de-intransitive verbs. Most of these verbs have animated subjects. This is in contrast to de-transitive and de-intransitive verbs, which do not show such a tendency. Grade 7 verbs with a metaphorical interpretation also have a literal grade 7 counterpart.

4.1.4 *gàmu*-Type Grade 7

The *gàmu*-type verbs are distinguished from the other classes because they call for either a plural subject, or a commitative prepositional phrase formed with *dà* - ‘with, and’. They also differ from other groups in that they have a progressive reading in the imperfective. Another important feature of these verbs is that they are not derived from verb forms in other grades. This

means that a verb with semantics like *gàmu* - ‘to meet’ can only occur in grade 7, and not in other grades.

4.1.5 *Happen*–Verbs

The ‘happen’–verbs consist of three items which behave distinctly different from other grade 7 verbs and are therefore considered to form a small but separate group. They are distinct from de-intransitive, de-transitive as well as metaphorical grade 7 verbs in that they allow for the progressive interpretation with the imperfective aspect. They are in contrast with *gàmu*–type verbs in that they do not require a plural subject or commitative phrase.

4.1.6 Prospect

In the following I will analyze the de-transitive and the de-intransitive verbs to have a common resultative function. They do not differ fundamentally from each other and have the same syntactic and semantic properties. I will explain the dialectal variation in de-transitive verbs in terms of an ambiguity between resultatives and passives in Katsinanci variety of Hausa. The *gàmu*–type verbs will be analyzed as reciprocals.

4.2 Resultatives

In this section I will introduce first the term resultatives and the properties resultative construction generally have. I will further show that de-transitive and de-intransitive grade 7 verbs are resultatives.

What is common to all uses of the term *resultative* in the literature is the idea that it denotes the resultant state of an event. I will adopt the term from Embick (2004a), who uses it for the phenomenon of *adjectival passive* in traditional English grammar, or *Zustandspassiv* - ‘state passive’ in traditional German grammar. The reason to adopt this terminology is the morphological characteristics of Hausa. In contrast to English and German, where the labeling indicates some similarities to adjectives and passives, grade 7 is not related to the adjective formation at all. To call it a ‘state passive’ would also cause confusion because the term ‘passive’ frequently refers to eventive passives, but grade 7 is only passive in a limited

number of Hausa varieties. I deem it clearer and less confusing to refer to the function of grade 7 in SH as resultative, and the one in WH as ambiguous between a resultative and an eventive passive or just passive.

In order to exemplify the typical properties of the resultative and its distinction to eventive passives, I will look at the English construction first. The English passive morphology is ambiguous between an eventive passive and a resultative interpretation. Sentence (26a) is ambiguous between a reading in which an agent is sinking the ship and a reading in which the ship is lying on the bottom of the sea i.e. the state resulting from the event of sinking. The sentence can thus be interpreted as an eventive passive in the former case, and a resultative in the latter. In (26b), the sentence is disambiguated, it only retains the eventive passive interpretation. This utterance is only consistent with a situation in which the ship is sinking and the cause for this is the action of the Germans. This is due to the agentive PP. (26c) shows that the eventive passive reading is inconsistent with adverbials stressing no change of state took place. This sentence can therefore only be interpreted as a resultative, meaning that the ship is on the bottom of the sea and that its state has not changed. So far, we have seen that the agentive PP selected for a passive reading, and the adverb ‘still’ was only consistent with a resultative one. In (26d) we see that the combination of the two renders the sentence ungrammatical, because ‘still’ prevents the eventive passive reading, and the ‘by’-phrase does so with the resultative. The sentence can therefore not be interpreted at all.

- (26) a. The ship is sunk.
 b. The ship is sunk by the Germans.
 c. The ship is still sunk.
 d. *The ship is still sunk by the Germans.

We saw that the agentive PP is a typical property of the passive, while certain adverbs are an indicator of resultant states. The resultant state is also characterized by an completive interpretation. One can observe that semantically, the resultative reading describes not the event of sinking, but rather the state that results from this event. This does not mean that every state results of an event. For example, to say that *the earth is round* does not imply that there was a previous state of the earth in which it

was another shape, say square, and that its present shape is the result of a rounding process.

4.2.1 The Resultative Construction in Hausa

In this section, I will show that grade 7 on de-intransitive and de-transitive verbs marks resultatives in SH. (27) shows that these verbs denote resultant states. Because these grade 7 verbs do denote resultant states rather than events, adverbs modifying events are ungrammatical which can be seen in (27c).

- (27) a. Audù yaa googà taasà-r.
 Audu 3MASC.PERF polish.I bowl-FEM.DEF
 ‘Audu polished the bowl.’
- b. Taasà-r taa gòogu.
 bowl-FEM.DEF 3FEM.PERF polish.VII
 ‘The bowl is polished.’
- c. * Taasà-r taa gòogu a hankàlii.
 bowl-FEM.DEF 3FEM.PERF polish.VII slowly
 ‘The bowl is polished slowly.’

It is often mentioned in the literature that de-transitive grade 7 verbs as well as de-intransitive grade 7 verbs carry the notion that the process was completely done. We can see this reading in (28).

- (28) Dookii yaa gàjìyu.
 horse 3MASC.PERF tire.VII
 ‘The horse was thoroughly tired.’ (Jaggar 1981:33)

A ‘completely and thoroughly done’ interpretation of resultatives is expected, since resultatives do not denote an event but the result of the event. To say: ‘The Titanic is sunk.’ means that the event of sinking is completely done. It cannot mean that the Titanic just hit an iceberg and is in the process of sinking. The sentence means that the process of sinking is complete and that the Titanic is in a state of being at the bottom of the sea. From the example with the Titanic as well as in (28), we can see that resultatives denote the state which results from an event. The implicature that an event was completely done follows from the resultative reading.

In the previous literature, many authors (e.g. Jaggar 2001; Newman 2000; Abdoulaye 2000) analyzed de-transitive and de-intransitive grade 7 verbs to be fundamentally different. However, the difference in SH only surfaces in the fact that they are derived from different verbs. In all other respects, these two groups behave exactly the same: they both have a completive interpretation; they do not allow for a progressive interpretation; they cannot occur with an agentive PP; and they have non-agentive subjects.¹

Another argument in favor of treating de-transitive and de-intransitive grade 7 verbs as belonging to the same group comes from the paradigm in (29). This example shows that a single grade 7 verb can have a corresponding intransitive *and* a corresponding transitive form. We see in (29a) that the transitive verb *kàrfàfaa* – ‘to make strong, strengthen’ and the unergative verb *kàrfafè* – ‘become strong’ in (29b) correspond to the grade 7 verb *kàrfàfu* – ‘be strong’. If there was a principled distinction between de-transitives and de-intransitives, one would expect different results from the two derivations. However, there is neither two distinct grade 7 forms, nor an ambiguity in sentence (29c).

- (29) a. Omàr yaa kàrfàfà Audù.
 Omar 3MASC.PERF makes strong.I Audu
 ‘Omar made Audu strong.’
- b. Audù yaa kàrfafà.
 Audu 3MASC.PERF become strong.III
 ‘Audu became strong.’
- c. Audù yaa kàrfàfu.
 Audu 3MASC.PERF be strengthened.VII
 ‘Audu was strengthened.’

I will show in the following how the syntactic structure of the Hausa resultatives compare to the structure of transitive and unergative sentences. I

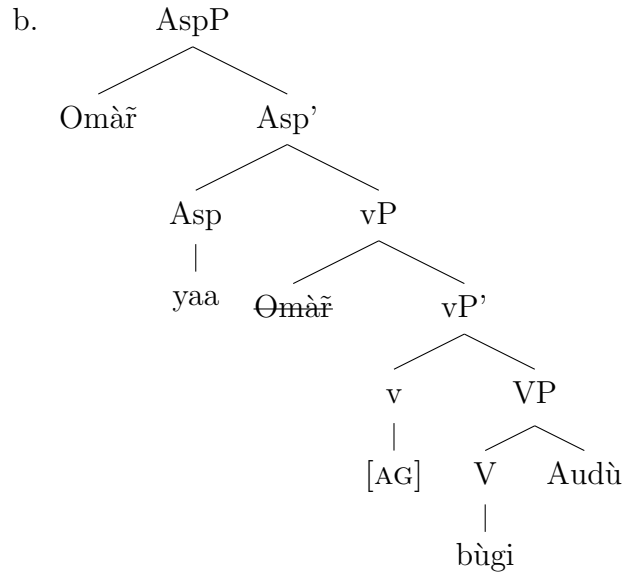
¹It is interesting that it is also common in typological studies to distinguish two kinds of resultatives. Nedjalkov & Jaxontov (1988) use the terms *objective resultative* and *subjective resultative*. The objective resultatives identifies resultatives, the subject of which corresponds to the object in the non-resultative verb, i.e. they have a transitive base. The subjective resultative identifies resultatives, the subject of which corresponds to the subject of the non-resultative verb, i.e. an unaccusative base. Objective resultatives therefore correspond to de-transitives and subjective resultatives correspond to de-intransitives

will use the two feature [AG] and [FIENT] introduced in Embick (2004b) and in Embick (2004a) respectively. The feature AG is inserted into *v*, i.e. the head of the functional projection *v*P. The feature is responsible for introducing agents into the syntactic and semantic structure. This means that only sentences with the feature AG have an external argument². Embick (2004a) uses the feature FIENT to characterize the resultative construction. To him, the FIENT feature, just like the AG feature, is inserted in *v*. I will assume that FIENT has the semantic properties proposed in Kratzer (2000) for the ‘*stativizer*’ in German *state passive* constructions, the German resultative construction. This operator is a phrasal operator modifying the VP, i.e. the verb and its object. Kratzer (2000) characterizes the ‘*stativizer*’ to be an aspectual operator which maps properties of events onto properties of time. The output of this operation is a property of time which is true for any event that is completed at the evaluation time (cf. Kratzer 2000). I will show in the following how these two features interact and how they help to understand resultative constructions and the grade 7 data.

(30) demonstrates the syntactic structure of a transitive sentence in Hausa. We can see that the verb *bùgi* - ‘to hit, to beat’ takes the direct object *Audù* as a complement. The agent *Omàr* is not introduced by the verb but by the [AG] feature in *v*. The external argument has to move to Spec of AspP for reasons of agreement.

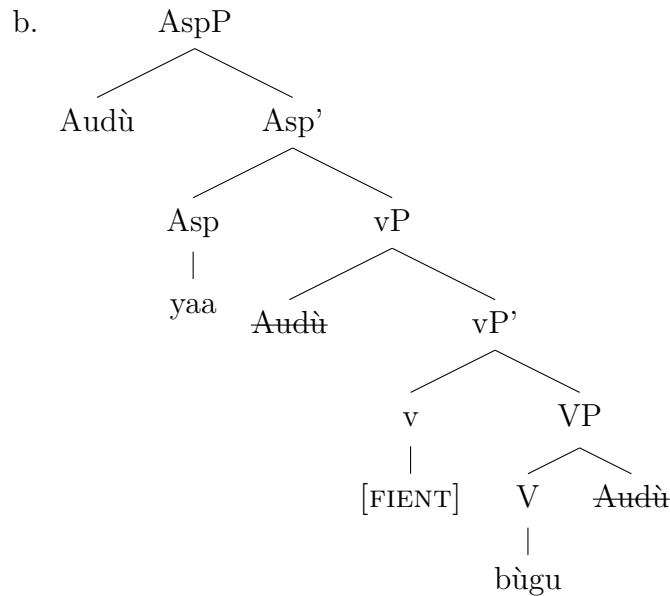
- (30) a. Omàr yaa bùgi Abdù.
 Omar 3MASC.PERF beat.II Abdu
 ‘Omar beat Abdu.’

²I follow Kratzer (2002) in assuming that the external arguments are not true arguments of the verb.



If we compare the structure of the transitive verb *bùgi* in (30b) to the resultative *bùgu* in (31b), we see that the resultative does not have the feature [AG], which introduces the external argument in the structure. The resultative therefore has no external argument.

- (31) a. Abdù yaa bùgu.
 Abdu 3MASC.PERF beat.VII
 ‘Abdu was beaten.’

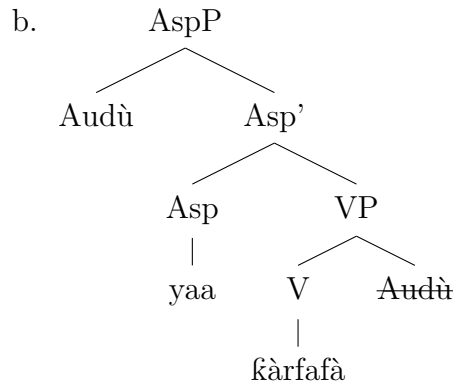


(31b) also shows that the FIENT feature occupies the v position, the same position occupied by the agent introducing feature AG in the transitive structure. It also exemplifies that the subject of the resultative construction is base generated in VP, in the same position as the object in the transitive

sentence in (30b). The argument *Audù* has to raise to Spec AspP for reasons of agreement. In (31b), the external argument is not suppressed like in passives, but it is not projected in the resultative construction in the first place. It can therefore not control purpose phrases or agentive phrases, which we will discuss further below.

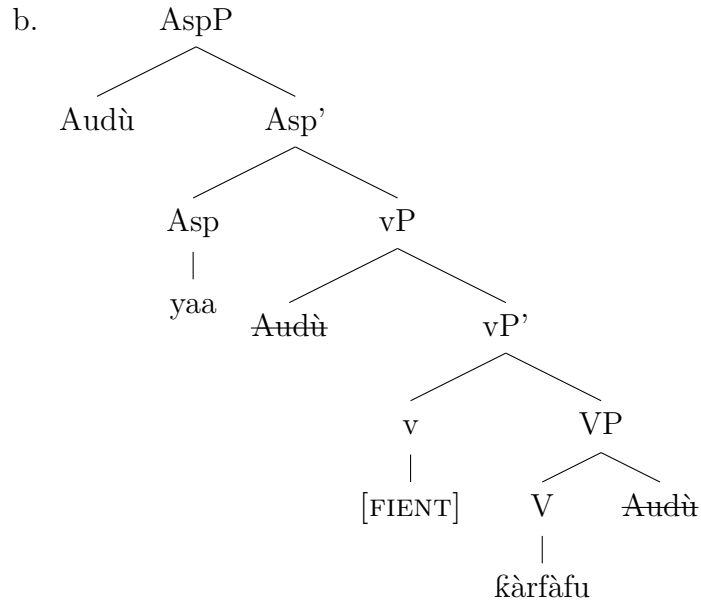
(32) and (33) look at the derivation of resultatives from unaccusative verbs. The structure in (32b) is the representation of the sentence in (32a). The unaccusative structure in (32b) differs from the transitive structure in (30b) in that the unaccusative structure does not have a vP projection and also no AG feature. The unaccusative structure therefore has no agentive subject. The subject of the unaccusative verb is its internal argument, which is base generated in VP.

- (32) a. *Audù yaa kàrfafà*
 Audu 3MASC.PERF become strong
 ‘Audù became strong.’



I have introduced resultativization as a phrasal operation on VP. Since the external argument is not in VP, the absence of it does not play a role for resultativization. Unaccusative verbs can therefore form resultatives like transitive verbs. (33b) is the resultative construction corresponding to the unaccusative structure in (32b).

- (33) a. *Audù yaa kàrfàfu*
 Audu 3MASC.PERF be strong
 ‘Audù is strong.’



The resultative structures of the de-intransitive verb in (33b) and the structure of the de-transitive verb in (31b) are identical. Since the feature AG is not projected in resultative constructions, resultatives derived from transitive verbs are not distinguishable from resultatives derived from unaccusative verbs in their syntax or semantics. Embick (2004b) points out that the absence of the [AG] feature in resultative constructions explains the absence of agentive PPs and purpose phrases, since both have to be licensed by the feature AG. This clearly contrasts resultative constructions to passive constructions, where such agentive PPs as well as purpose phrases are grammatical. To analyze de-transitive and de-intransitive verbs as resultatives explains the ungrammaticality of the purpose phrases in (25a) repeated in (34).

- (34) * Gidan-shì yaa gìnu dà gàngam.
 House-3MASC.POSS 3MASC.PERF build.VII with purpose
 ‘His house was built on purpose.’

(Campos 1998:115)

It also explains the ungrammaticality of an agentive PP, as (35) shows.

- (35) * Wannàn gida-n yaa gìnu gà Muusaa.
 This house-MASC.DEF 3MASC.PERF build.VII by Musa
 ‘This house was built by Musa’

(Campos 1998:117)

In this section, I have shown that de-transitive and de-intransitive grade 7 verbs have the same function in Hausa, i.e. to mark resultatives. Therefore, they denote states rather than events. This can be seen in the fact that they do not allow for adverbs modifying events such as *a hankàlii* - ‘slowly’. I have shown furthermore that de-transitive and de-intransitive grade 7 verbs do not differ in their syntax or semantics, because grade 7 verbs do not project the AG feature. Derivations from unaccusative and transitive verbs are therefore indistinguishable in their argument structure since only the internal argument is relevant for resultativization. The absence of the AG feature with grade 7 verbs also explains why grade 7 constructions do not allow for purpose phrases or agentive prepositional phrases.

4.2.2 Resultatives in the Imperfective Aspect

As I described in section 2.4, aspect influences the interpretation of Hausa resultatives in an unusual fashion. Jaggar (2001) describes grade 7 to surface in the potential and the future TAM with potential semantics, just like the imperfective aspect can. In this section, I will argue that this potential reading is due to the absence of an event argument, and can therefore also appear in other constructions, such as statives, that do not have an event argument.

The potential interpretation with resultative grade 7 verbs is demonstrated in (36a) and (36b).

- (36) a. Wannàn mootàĩ tanàa gyàaru-waa.
This car.FEM.DEF 3FEM.IMPERF repair.VII-VN
'This car can be repaired/is repairable.' (Jaggar 1988:394)
- b. Zoobèn baa yàa sàatu-waa.
ring.MASC.DEF NEG 3MASC.IMPERF steal.VII-VN
'The ring cannot be stolen.'
(Imam 1939:79) in (Jaggar 1988:394)

However, this reading is not restricted to the imperfective aspect. Newman (2000) and Jaggard (2001) note that the so-called potential and future TAM have a potential reading. Even though the three TAMs (i.e. the imperfective, the potential and the future TAM) have a very similar interpretation with

grade 7 verbs, the imperfective aspect reportedly expresses a stronger degree of ‘generic time-stability’ (Jaggar 2001:263) than the future or potential TAM.

- (37) a. Mootàr tâ gyàaru.
 car.FEM.DEF 3FEM.POT repair.VII
 ‘The car will be/is repairable.’
- b. Wannàn naamàa bàà zâi yàнку ba.
 this meat NEG 3MASC.FUT cut/cut off.VII NEG
 ‘This meat cannot be cut/cut off’ (Jaggar 2001:264pp)

This means that the potential reading with grade 7 verbs is common to TAMs in Hausa which denote the non-completeness of an event at the time of utterance. The imperfective denotes that an event is ongoing at the time of utterance. The future and the potential TAM denote that the event is going to take place or may take place in the future. This means that an event can not be interpreted as being completed at the time of utterance in all three cases.

The fact that resultatives in Hausa are grammatical with imperfectives seems counter-intuitive at first glance. The imperfective aspect denotes the non-completeness of an event at the time of evaluation. This is somewhat contradictory to the notion of resultatives which denote the resultant state of an event, i.e. the completeness of an event. One would thus expect the resultative construction to be ungrammatical with imperfective aspect. This is true for English. In (38), only (38b) can have a resultative interpretation, while this interpretation is not available in the continuative in (38a). (38a) can only mean that an agent is in the process of sinking the ship in question. (38b) can have the interpretation that the ship in question is on the bottom of the sea, why and how this state was attained is left unspecified.

- (38) a. The ship is being sunk.
 b. The ship is sunk.

Like the Hausa resultative, the English resultative can not be interpreted in the progressive. The fact that the Hausa resultative has a potential interpretation in the imperfective aspect indicates that the Hausa imperfective is quite different from the English progressive form.

Because only events can be interpreted as being in progress, the absence of an event argument will prevent a verb from being interpreted as a process.

A regular interpretation of future and imperfective TAM is unavailable in their resultative form, because these forms do not have an event argument. If the assumption of the missing event argument in resultative grade 7 verbs is correct, and this absence is the reason for the potential reading to arise, one expects a potential reading also with other verbs that lack an event argument, such as stative verbs. This is in fact what we find in Hausa statives. As is shown in the gloss of (39), the stative verb *sanɪi* ‘to know’ has a potential reading in the imperfective aspect.

- (39) Bálki tanàa sanìn Idii.
 Bálki 3FEM.IMPERF know.VN Idi
 ‘Balki should know Idi.’/‘Balki may well know Abdu.’ (Abdoulaye 1992:292)

(39) shows that statives with the imperfective aspect has a potential reading, like resultative grade 7 constructions. Statives and resultatives are similar in that both lack an event argument (cf. Kratzer 2000). I assume that the same mechanism that causes the potential reading in resultatives also causes the potential reading in statives.

It is not clear at this point how the absence of the event argument triggers the potential reading with the imperfective and the future aspect in Hausa. This question must be left for further research at this point.

4.3 Eventive Passive Use

I have shown in section 4.2 that SH marks resultatives, but not passives with grade 7. I will argue in this section that this is not the case for all Hausa varieties. Here, I will discuss the data from Abdoulaye (1992, 2000) and I will show that the Hausa variety discussed in his work, i.e. Katsinanci, has a passive construction marked with grade 7. However, this does not mean that this variety does not mark resultatives with grade 7. In Katsinanci, grade 7 verbs are ambiguous between a passive and a resultative interpretation, very much like the English passive. In section 4.3.1, I will introduce the notion of *eventive passives*. In section 4.3.2, I will introduce the Katsinanci data and show that the data displays the properties of passives. In section 4.3.3, I will discuss the origins of the passive constructions in Hausa.

4.3.1 Generalizations about Eventive Passives

I will use the term *eventive passive* and *passive* interchangeably, but it is important to stress that resultatives and passives are two different categories even though resultatives are very often labeled *passive* in traditional grammars, e.g. *adjectival passive* in English or ‘*Zustandspassiv*’ - *state passive* in German.

I understand a passive to be

- (40) A sentence where the external θ is either implicit or expressed in a optional phrase.

The defining property of passives is therefore the fact that passives do not have an expressed external argument as an obligatory argument. Anticausatives and resultatives share this property. However, passives differ from anticausatives and resultatives in that the external argument is implicit in a passive sentence³ or realized in a PP in passive constructions. By contrast, the external argument in anticausatives and resultatives does not exist, and can not be expressed implicitly or optionally in PPs.

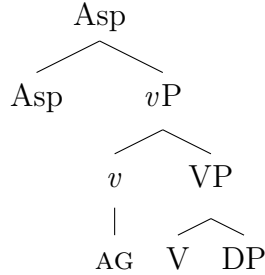
- (41) a. Das Glas zerbricht.
 DEF.NEUT glass break.3SG.PRES
 ‘The glass breaks.’
 b. Das Glas ist zerbrochen.
 DEF.NEUT glass be.3SG.PRES break.PAR
 ‘The glass is broken.’
 c. Das Glas wird zerbrochen.
 DEF.NEUT glass become.3SG.PRES break.PAR
 ‘The glass is being broken.’

There are various different analyses of the syntactic structure of passives (e.g. Collins 2005 or Embick 1997). Most of them agree in that passives project the functional head *v*. I will assume along the lines of Embick (2004b) that the functional head *v* carries the semantic feature AG which allows inter alia for the agent to resurface in a PP and the licensing of a purpose phrase.

³Cf. Chierchia (2004) for a semantic explanation of these phenomena.

A syntactic structure along the lines of Embick (2004b) is given below.

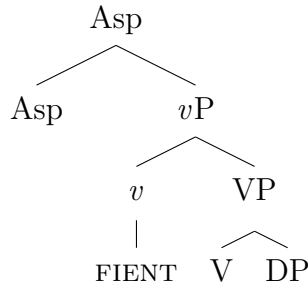
(42) *Eventive Passive*



(cf. Embick 2004a:365)

The passive construction in (42) is distinct from the structure of resultatives as shown in (43) in that it has an AG feature in *v* instead of the feature FIENT.

(43) *Resultative*



I have argued in section 4.2 that the reason for resultativization to be possible with unaccusative verbs is that resultativization applies to VP and not *vP*. However, passivization suppresses the agent, it therefore affects *vP*. Since unaccusative verbs do not have an external argument which could be modified by passivization, the process is not possible with unaccusative verbs. Therefore, I predict that only de-transitive verbs but not de-intransitive verbs can have a passive interpretation, which is true for Katsinanci.

I have argued that the aspectual restrictions with resultatives are caused by the absence of the event argument. I therefore predict that verbs denoting events have no such restrictions. Passives do denote events and should therefore not display aspectual restrictions. I will show in the following section that this prediction is borne out in Katsinanci.

In this section, I have formulated the hypothesis that given the predictions made on the basis of the work of Embick (2004b) and Kratzer (2002),

only constructions that have an external argument are expected to be passivized. I will therefore predict only de-transitive grade 7 verbs to have a passive interpretation. I have also argued that passives are distinguishable from resultatives in that they allow for agentive PPs and purpose phrases. They differ from resultatives in that they are expected to allow for a progressive reading.

4.3.2 Eventive Passives in Hausa

WH marks passives alongside resultatives with grade 7. While de-intransitive and de-transitive verbs have a resultative interpretation, the de-transitive verbs can also have a passive interpretation. De-transitive verbs are thus ambiguous between a resultative and a passive interpretation in WH. In contrast to SH, in which no agent can be licensed by grade 7 verbs, Abdoulaye (1992, 2000) describes that Katsinanci, a WH dialect, allows a *gà* phrase in which the agent can resurface in grade 7. (44) shows an example from Abdoulaye (2000) and demonstrates that the agent can in fact be explicitly expressed in Katsinanci.

One argument to assume that Katsinanci marks passive is the fact that this variety allows for an agentive prepositional phrase headed by *gà*–‘in, on, at, near’ as can be seen in (44b), in which the agent Abdù can surface in a PP. Note that this is not possible for SH according to Newman (2000) and Jaggar (2001).

- (44) a. Abdù yaa yankà naamàn ràakumii.
 Abdu 3PL.PERF cut.I meat.of camel
 ‘Abdu cut the camel meat.’
- b. Naamàn ràakumii yaa yàнку (gà Abdù).
 meat.of camel 3MASC.PERF cut.VII (by Abdu)
 ‘The camel meat was cut (by Abdu).’ (Abdoulaye 1992:268)

Abdoulaye (2000) does not test whether the grade 7 construction in Katsinanci can be a resultative. Therefore, we lack the data to apply the same criteria that were used for English and SH. But the fact that Abdoulaye (2000) describes grade 7 to have the same properties as described in Jaggar (1981, 1988) indicates that Katsinanci has the resultative interpretation as well as the passive interpretation.

From the fact that a purpose phrase with passive grade 7 verbs is grammatical, it can be seen that the grade 7 construction has a suppressed AG feature. In section 4.2.1, I observed that purpose phrases are ungrammatical in SH. (45) shows that such purpose phrases are grammatical in WH.

- (45) koofàa taa bùudfu don taimàkaa wà yâarân.
 door 3FEM.PERF open.VII sake.of help.I to children
 ‘The door was opened in order to help the children.’
 (Abdoulaye 2000:248)

In section 4.2.2, I have shown that resultatives as well as statives have no progressive interpretation in the imperfective aspect, but surface with a potential reading. I have argued that this is due to the fact that resultatives and statives do not denote events. However, passives do denote events and can therefore also express progressive events. If I am correct in assuming that WH has an eventive passive in contrast to SH, which is not morphologically distinguishable from the resultative, I predict that this eventive passive may also express progressive events if used in the imperfective aspect.

This is the case for WH. (46) has a grade 7 verb in the imperfective aspect, but the embedded sentence has a progressive and not a potential interpretation as can be seen in the English gloss.

- (46) Ta ci gâba ta tardà fànkàasuu
 3FEM.PERF.REL continued 3FEM.PERF.REL find.I cake
 yanàa sòoyu-waa shii kadai.
 3MASC.IMPERF fry.VII-VN 3MASC alone
 ‘She continued and found a pancake getting fried alone.’
 (Abdoulaye 2000:264)

Abdoulaye (2000) notes that (46) is taken from a fairytale published in Niger in 1983. According to him, the context makes it very clear that the girl is seeing the cakes in the process of being fried and is not seeing a pancake which is capable of being fried. The sentence thus has an unambiguous eventive passive reading.

In this work, I am proposing that de-transitive grade 7 verbs in WH are ambiguous and can also be interpreted as passive. This is not unique in the world’s languages. The English eventive passive also has a resultative reading, i.e. an adjectival passive, as was demonstrated in section 4.2. The sentence *The ship is sunk* may therefore be interpreted as *The process of*

sinking is completed, which is a resultative interpretation. It also has a progressive reading, *The ship is in the process of sinking because somebody is sinking it*, which is an eventive passive reading. However, as soon as we add a *by*-phrase (*The ship is sunk by the captain himself*), the sentence can only have a progressive interpretation as an eventive passive.

It is important to stress that even among those varieties that mark eventive passive and resultative with grade 7, not all eventive passives or resultatives are ambiguous. All passives with an expressed agent as well as de-intransitive grade 7 verbs are unambiguous. I discussed in section 4.2.1 that resultatives are unable to license an external argument. The agent phrase disambiguates, because only passives can license it. The reason why de-intransitives are unambiguous is due to their lack of an external argument. De-intransitive verbs are derived from unaccusatives which do not have an external argument. Because an external argument is required for passive formation, these verbs cannot have a passive form. De-intransitives therefore have no passive construction.

The fact that the de-intransitives are unambiguous also helps to understand the group of grade 7 verbs which Abdoulaye (2000) considers to be a frozen, intensive, non-passive grade 7 group. We are now able to predict these verbs to be formed from unaccusatives, frequently grade 3 verbs. It is important to note that these verbs are not frozen at all, but are simply unambiguous resultatives.

This section showed that the data given in Abdoulaye (1992, 2000) is explainable, if we assume that de-transitive verbs in Katsinanci are ambiguous between a resultative and a passive interpretation. This ambiguity explains the grammaticality of agentive PPs as well as purpose phrases, which are ungrammatical in SH. It also explains why de-transitive grade 7 verbs can have a progressive reading in WH. We can only explain the fact that de-transitive grade 7 verbs may have a progressive or a potential reading in the imperfective aspect if we assume that de-transitive verbs are ambiguous between a resultative use, which triggers the potential interpretation, and a passive use, which allows for a progressive interpretation. Using the example of English, I have shown that a resultative-passive syncretism also exists in other languages than Katsinanci and that this syncretism has a striking similarity to the one observed in WH.

4.3.3 The Origin of the Eventive Passive in Hausa

Jaggar (1988) argues that grade 7 *-u* is ultimately related to a widespread ‘completive’ in Chadic, which was reconstructed as **-kwo* by Newman. The question arises at this point, if grade 7 first marked resultatives or passives in Hausa. Abdoulaye (2000) argues that the passive in Hausa is derived from an earlier *intensive* marker which I identified in this thesis as a resultative. I concur with Abdoulaye (2000) in this point. The arguments for such a view are very strong.

Under the assumption that grade 7 originally only marked passive in all Hausa varieties, and the resultative was a later development, a possible assumption is a process of lexical expansion. This process would cause grade 7 in its passive interpretation to assume an additional resultative interpretation in all Hausa varieties. After this process was completed, the passive function of grade 7 would have been lost in some varieties but not in others, while the resultative was stable. This would have led to a distribution in which some grade 7 verbs could mark passive and resultative, while in other varieties, grade 7 could only mark resultatives. This is clearly a very unlikely course of events.

If we were to assume on the other hand that the passive is a later development in Hausa, we are able to explain the fact that the passive is somewhat restricted. There is also another indication for this hypothesis. The preposition of the agent phrase is unstable for different varieties. I have introduced Abdoulaye’s (2000) data, which uses the preposition *gà* - ‘in, on, at, near’. Bature (1991) mentions *wajen* - ‘to, towards, at’ as having the same function in his variety. As we can see in (47), *wajen* heads a agentive PP.

- (47) Mootàĩ taa gyàaru (wajen Audù)
 car.FEM.DEF 3SG.PERF repair.VII (by Audu)
 ‘The car was repaired by Audu’ (Bature 1991:98)

This means that there is dialectal variation in the preposition which heads the agentive PP. It is important to notice that *gà* as well as *wajen* are not dialectally restricted per se. Both of them are used as prepositions in Hausa quite generally. The variation is restricted to their usage heading the agentive phrase in passive constructions. The fact that we see variation in

the preposition heading the optional agentive phrase is a strong additional argument for assuming that the passive function of grade 7 verbs is a more recent development in Hausa. Under the assumption that passive was the original function of grade 7 in Hausa, one would expect that the preposition introducing the agent arose together with its passive use. The variation indicates that the lexical expansion from resultatives to passives may be different autonomous developments.

By assuming a grammaticalization path from resultatives to eventive passives, we can explain the variationally restricted use of eventive passives as well as the fact that different varieties use different prepositions to head the agentive PP.

4.4 Reciprocal Verbs

In this section, I will show that the *gàmu*-type verbs are a subgroup of reciprocals in Hausa which are distinguishable from other reciprocals in Hausa in their morphology, semantics and syntax.

4.4.1 General Properties of Reciprocal Verbs

Reciprocality is a quality of an event that expresses that a plurality of participants are the actor as well as the recipient of an action.

Semantically, reciprocal events are said to express a relationship between two participants *x* and *y* in case the participants are each actor and patient of the event at the same time. If the sentence (48a) is true, it is not only true that *x* saw *y* but it is also true that *y* saw *x*. This relationship has the semantic quality of *symmetry*, because in order for the sentence to be true, whatever *x* does to *y*, *y* has to do to *x*. Symmetry is a property of all reciprocals.

- (48) a. *x* and *y* saw each other.
 b. *x* and *y* met each other.

In the examples above, we can see that both sentences in (48) are symmetric. However, there is still a quite significant distinction in the level of symmetry between (48a) and in (48b), as Dimitriadis (2004) points out. The sentence in (48b) is only true if *x* met *y* and *y* met *x* simultaneously, and it can

only denote a single symmetric event. I cannot mean that x met y, but y did not meet x at first, and only at a later stage did y meet x. It is not reducible to non-symmetric subevents. (48a) on the other hand can also describe two distinct events, one in which x saw y and another, in which y saw x, which is not necessarily simultaneous. Therefore, the sub-events can also be non-symmetrical, i.e. these sub-events can also be non reciprocal.

This effect is very strong in a situation like (49) below.

- (49) Maria and Angelika read the 10 pages of the article to each other in the park.

This sentence is true in a situation where Maria reads the 10 pages of the article to Angelika while Angelika simultaneously reads the same pages to Maria. However, we can also interpret this sentence as two or more events in which Maria reads some pages to Angelika, who in turn reads some pages to Maria. This sentence is therefore true in a situation in which 8 pages are read by Maria to Angelika before lunch and the remaining two pages by Angelika to Maria after lunch.

I will follow Dimitriadis (2004) in calling the ‘meet’-type reciprocals like the ones in (48b) *irreducibly symmetric*. They are irreducible because they cannot be split into smaller events which are not symmetric. Dimitriadis (2004) defines them as in (50).

- (50) ‘A predicate is *irreducibly symmetric* if (a) it expresses a binary relationship, but (b) its two arguments have necessarily identical participation in any event described by the predicate.’ (Dimitriadis 2004:14)

I will call reciprocals like ‘see’ *reducibly symmetric*, because these can be divided into smaller subevents that are not symmetric.

Reciprocal events have two ways of being realized syntactically. Either they are realized with a plural subject, which I will call *continuous*. They can also be realized with one of the participants as the subject, and the other participant in a PP. This is called a *discontinuous reciprocal*.

We can see these two kinds of reciprocal constructions in German. This is demonstrated in the examples in (51). In (51a), we see the continuous construction with a plural subject. In (51b), the construction with a singular subject and an obligatory comitative phrase is shown. Please note that

the discontinuous reciprocal in (51b) only agrees with the singular subject. It is crucial that both sentences in (51) have the same semantics, the difference between them is pragmatic. A reciprocal constructions like (51a) is a discontinuous reciprocal, and the one in (51a) is a continuous reciprocal.

- (51) a. Maria und Angelika treffen sich.
 Maria and Katharina meet.3PL.PRES 3PL.RECIP
 ‘Maria and Angelika meet each other.’
- b. Maria trifft sich mit Angelika.
 Maria meets.3SG.PRES 3SG.RECIP with Angelika.
 ‘Maria meets with Angelika.’

The two sentences in (51) have a clearly different syntax, but they are true in the same situation. Such constructions are not possible with all reciprocal predicates in German. We can see in (52) that the reducibly symmetric reciprocal *sich vorlesen* - ‘read o each other’ is only grammatical with the continuous reciprocal construction in (52a) while it is ungrammatical with the discontinuous reciprocal in (52b).

- (52) a. Maria und Angelika lesen sich ein Buch vor.
 Maria and Angelika read.3PL.PRES 3PL.RECIP a book to
 ‘Maria and Angelika read a book to each other.’
- b. *Maria liest sich mit Angelika ein Buch
 Maria read.3SG.PRES 3SG.RECIP with Angelika a book
 vor.
 to
 ‘*Maria and Angelika read a book to each other.’

The discontinuous construction is restricted to irreducibly symmetric reciprocals in German. It follows that there is a relation between the semantics and the syntax of reciprocal constructions. Only irreducibly symmetric reciprocals can form discontinuous reciprocal constructions while reducible reciprocals are only grammatical with continuous reciprocal constructions in German.

According to [Dimitriadis \(2004\)](#), this close connection between semantic irreducibility and the discontinuous reciprocal construction is very common

across languages. He mentions only Bantu languages as an exception to this principle. In Bantu languages, the discontinuous construction is not restricted to verbs denoting irreducibly symmetric events, but it is grammatical in all reciprocal constructions. For all other languages studied by him, this generalization holds. It is interesting to notice that there is no report of a language in which irreducibly symmetric reciprocals are ungrammatical with discontinuous reciprocals while reducibly symmetric reciprocals are.

I argue that Hausa corresponds to a general linguistic observation and also has a discontinuous reciprocal construction and that this reciprocal construction is, as in German and many other languages, restricted to reciprocals denoting irreducibly symmetric events. I will demonstrate in section 4.4.2 that Hausa has two forms to express reciprocal events. On the one hand, it can be expressed analytically with a reciprocal pronoun. On the other hand, it can be formed with a grade 7 verb. Grade 7, in contrast to the analytically formed reciprocals, marks irreducibly symmetric events.

4.4.2 Reciprocal Verbs in Hausa

In this section, I will show that the *gàmu*-type verbs are irreducibly symmetric reciprocals. I will argue that they behave like irreducibly symmetric reciprocals in languages like German. I will use the semantic reducibility and syntactic discontinuity as criteria.

There are distinct ways to mark irreducibly symmetric reciprocals and reducibly symmetric reciprocals in Hausa. Reducibly symmetric reciprocals are marked with a reciprocal pronoun *juunaa* - ‘each other, one another’ in its bare form, or in a bound form which is formed with the respective possessive pronouns. We can see the list of reciprocal pronouns in table 4.1. The fourth person plural form in Jaggar (2001) is perhaps more commonly referred to as an impersonal reciprocal.

Table 4.1: Reciprocal Pronouns from Jaggar (2001:389)

<i>juunanmù</i>	1.PL
<i>juunankù</i>	2.PL
<i>juunansù</i>	3.PL
<i>juunaa</i>	4.PL

Jaggar (2001) is not quite clear under which circumstances the base form or the bounded form is used. According to him, the base form is acceptable in all circumstances. In (53), both forms are possible.

- (53) Zaa mù tàimàki juunaa / juunanmù
 FUT 1PL help.II each other / each other.1PL
 ‘We will help each other.’ (Jaggar 2001:389)

The grade 7 marked reciprocal verbs behave like irreducibly symmetric reciprocals in languages like German. In Hausa, the *gàmu*-type verbs call for a plural subject or an obligatory PP with *dà* - ‘and, with’.⁴ According to Abdoulaye (2000), the two sentences, (54a), which has a plural subject, and (54b), which has an obligatory commutative PP, do not differ in their semantics.

- (54) a. Abdù dà Àali sun gàmu (dà juunaa).
 Abdu and Ali 3PL.PERF meet.VII with one.another
 ‘Abdu and Ali met.’
 b. Abdù yaa gàmu *(dà Àali).
 Abdu 3MASC.PERF meet.VII (with Ali)
 ‘Abdu met Ali.’
 (Abdoulaye 2000:253)

All *gàmu*-type verbs have irreducibly symmetric semantics. This can be concluded because they cannot be interpreted as multiple discrete reducible symmetric events (like German *treffen*). For example the sentence is uninterpretable because *gàmu* is an irreducibly symmetric reciprocal. This means that there is only one event of meeting, Abdu cannot meet Iris without Iris meeting Abdu at the same time. This explains the ungrammaticality of (55).

- (55) * Abdù dà Idii sun ha!du à kàasuwaa. Abdù ne
 Abdu and Idi 3PL.PERF meet.VII at market. Abdu PART
 ya faarà ha!du-wa dà Idii.
 3MASC.PERF.REL begin.I meet.VII-VN with Idi.
 ‘Abdu and Idi met at the market. It was Abdu who first met Idi.’

⁴They are very often referred to as *association/dissociation* verbs (e.g. Newman 2000 and Abdoulaye 2000), while Jaggar (2001) labels cases like (54a), the ones with plural subjects, reciprocal.

By contrast, the sentence (56) is entirely acceptable. This is because *gàni* - ‘to see’ is reducibly symmetric, therefore it can be interpreted as multiple events.

- (56) Abdù dà Idii sun ga juunaa à kàasuwaa. Abdù ne
 Abdu and Idi 3PL.PERF see each other at market. Abdu PART
 ya fàara ganin Idii.
 3MASC.PERF.REL begin.I see.VN Idi
 ‘Abdu and Idi saw each other at the market. It was Abdu who saw
 Idi first.’

The list of the reciprocal grade 7 verbs is quite homogeneous. All of them are irreducibly symmetric in nature. Table 4.2 is a list of these verbs.

Table 4.2: Some reciprocal verbs from Abdoulaye (2000:254)

<i>gàmu</i>	‘meet, gather’
<i>hàɗu</i>	‘meet, gather’
<i>jittu</i>	‘agree’
<i>ràbu</i>	‘part, divorce’
<i>sàadu</i>	‘meet’
<i>tàaru</i>	‘gather’

The examples above show that the *gàmu*-type verbs in Hausa are irreducibly symmetric reciprocals, and are thereby distinct from analytic reciprocals in form and in function. It is predictable from the semantics of the reciprocal whether or not it surfaces as grade 7. No reducible symmetric verb will be marked with the grade 7 morpheme.

4.4.3 On the Derivability of Reciprocal Grade 7 Verbs

In this section, I will argue that reciprocal grade 7 verbs are not derivable from other verbs. This does not mean that there are no verbs with the same stem form and similar semantics in other grades. For example, Newman (2000:668) list a number of reciprocal grade 7 verbs with corresponding non reciprocal grade 1 verbs. These are pairs of words with similar semantics and phonological form. In such cases, an important question is whether these forms can be derived from one another and which form should be considered to be the base form. I will show that they are in fact instances

There are cases in which reciprocal grade 7 verbs and grade 1 verbs have a similar semantics in different syntactic environments. In (57), we see such a case. The connection of the grade 1 verb *saadàa* - ‘cause to meet, to introduce’ and of the grade 7 verb *sàadu* - ‘to meet’ is clear. Given the definition of syntactic derivation in (11) on page 14, these two forms are derived from each other since the core of the meaning of the two verbs stays preserved while the syntactic function is different.

- Under the assumption of a derivation process a subsequent question is which form is derived from what other form and what kind of process is being marked by the derivation. There exist two logical possibilities: If we assume that grade 7 verbs like *sàadu* - ‘to meet’ are the base form, it will have to be assumed that the derivation causes an external argument in (57a) to surface. If the grade 7 verb is the derived form, an explanation for the lack of the external argument has to be found.

We have seen in section 4.2 and in section 4.3 that grade 7 marks resultatives and passives in some varieties. I have argued that these forms are derived from transitive and intransitive verbs. The passive and the resultative formation both prevent the external argument from surfacing in subject position. It is possible to hypothesize that the same rules which form resultative and passive grade 7 verbs also form reciprocal *gàmu*-type verbs. However, this view is incompatible with the data. Viewing the *gàmu*-type verbs as an instance of passivization would predict that *gàmu*-type verbs

behave like passives in Hausa as discussed in section 4.3. This would involve having an implied external argument and being restricted to certain local varieties. We therefore expect an implied agent or causer which is not one of the participant of the reciprocal event with all *gàmu*-type verbs. Such a reading of *gàmu*-type verbs has been never assumed or proposed to my knowledge. It is also not possible to express an agentive prepositional phrase with *gàmu*-type verbs as (58) demonstrates.

- (58) Abdù dà Àali sun ràbu (*gà Idii).
 Abdu and Ali 3PL.PERF separate.VII (by Idi)
 ‘Abdu and Ali parted company (by Idi). (Abdoulaye 2000:253)

I have furthermore argued in section 4.3 that SH does not have a passive, but SH has *gàmu*-type verbs. If this grade 7 verb were the result of a passivization process we would expect some sort of variational restriction. The fact that *gàmu*-type verbs are neither variationally restricted and do not imply an agent make it clear that these verbs can not be viewed as passives.

To assume *gàmu*-type verbs to be resultatives also runs into problems. I have demonstrated above that resultatives do not have an event argument. I have demonstrated further that the absence of the event argument prevents a progressive reading with resultative grade 7 verbs. In contrast to resultatives, reciprocal grade 7 verbs do have a progressive interpretation in the imperfective aspect. Therefore, they can not be resultatives.

Under the assumption that the grade 1 verb *sadàa* - ‘to introduce’ in (57a) is the derived form, the presence of a causer has to be explained. A grammatical category which introduces a causer into the argument structure of a verb is called a *causative*. Parsons (1960) initially claims that grades 1, 2 and 3 are *primary grades*, from which other grades are derived. However, Jaggar (2001) shows that grade 1 is not a homogeneous class of verbs. He mentions that grade 1 verbs are in fact diachronically multiple distinct classes of verbs which collapsed due to sound changes. He divides grade 1 verbs into three classes. There are *basic verbs* which are not derivable. The second group is *applicative verbs*, which are called that way because grades 2 and 3 and some grade 7 verbs may shift to grade 1 to form the applicative. The group relevant for this discussion are the *denominal grade 1 verbs*.

This group is called denominal because they are formed from nominals by a -aC- suffix in which the consonant is the reduplicated final consonant

of the noun. Interestingly, these denominal verbs can surface as transitive grade 1 or unaccusative grade 3 verbs. This is demonstrated in (59). In (59a), we see the grade 1 verb *raunànaa* - ‘to weaken, to injure’ and the grade 3 verb *ràunanà* - ‘to become weak, to become injured’ in (59b).

- (59) a. Tsuufaa yaa raunànaa shì.
 old age 3MASC.PERF weaken.I him
 Old age has weakened him.
- b. Yaa raunàna.
 3MASC.PERF become weak.III
 He has become weak. (Bargery 1934:846)

We can see in (59) that also unaccusative grade 3 verbs may have a causative grade 1 counterpart. This is comparable to the reciprocal grade 7 - causative grade 1 alternation. In both cases, an intransitive verb can also surface in grade 1 as a causative. We can observe the same alternation with grade 4 and grade 1 verbs (e.g. *hargìtsaa* - ‘to muddle up something’ grade 1/*hargìtsee* - ‘be muddled up, become chaotic’ grade 4).

The pattern emerging are pairs of intransitive grade 3, 4 or 7 verbs and transitive grade 1 verbs. The grade 1 verb differs from the other grades in that it allows for a causer. It is striking that 3 distinct grades are mapped onto a single grade, i.e. grade 1. Moreover grade 1 has a uniform semantics, which is untrue of the other three grades. It is more likely that grades 3, 4 and 7 are the morphological bases of the process which has the grade 1 verb as a result than the other way around.

If we were to assume a process which subtracts the causer argument, grade 1 would be the base and the other three grades would be the derived forms. In this case we would struggle to predict which verb will surface as which grade, i.e. grade 3, 4 or 7. This is especially the case since both, the grade 3 and grade 4 verbs participating in the alternation, are unaccusative verbs, and there are no syntactic differences between these verbs. This is why I conclude that the grade 1 verbs in the alternations with grades 3, 4 and 7 are in fact the derived forms.

In the following paragraphs I will argue that reciprocal grade 7 verbs can not be formed productively. (60a) demonstrates the analytic reciprocal marking in Hausa with *juunnāa* - ‘each other’, and also shows that reciprocals can be formed productively in other grades than grade 7. As we can

see in (60b) the grade 7 marking is ungrammatical in a reciprocal context. However, it is possible to express a resultative with grade 7 as in (60c).

- (60) a. Mun tàimakì *(juunaa).
 1PL.PERF help.II each other
 ‘We helped each other.’
 b. *Mun tàimàku (dà juunaa).
 1PL.PERF help.VII (with each other)
 ‘We helped each other.’
 c. Abdù yaa tàimàku.
 Abdu 3MASC.PERF help.VII
 ‘Abdu was helped.’

From these facts, it is necessary to conclude that reciprocal grade 7 verbs are marked reciprocal in the lexicon. The usage of grade 7 in reciprocal constructions is thus not productive and can therefore not be assumed to be the outcome of a derivation.

This section demonstrated that there are two kinds of reciprocals, those which have an irreducibly symmetric semantics and the ones which have a reducibly symmetric semantics. These two kinds of reciprocals are marked differently in Hausa. While the reducibly symmetric reciprocals are formed analytically with the reciprocal pronoun *juunaa* - ‘each other’, the irreducibly symmetric reciprocals are marked with grade 7. I have furthermore shown that verbs that have an irreducibly symmetric semantics can not be derived from other verbs and cannot productively be formed in Hausa. Therefore, they have to be lexical in nature.

4.5 Idiomatic Verbs

It is one of the main properties of language to use expressions metaphorically. To my knowledge this is not restricted to certain syntactic categories. It is therefore not unexpected to find grade 7 verbs that have idiomatic uses. These verbs include *bùgu* - ‘to be really drunk’ from ‘to be beaten’, *gògu* - ‘to be experienced’ from ‘to be polished’, *kàràntu* - ‘be educated’ from ‘to be read’. It is interesting that idiomatic grade 7 verbs which have their origins in resultative grade 7 verbs are not used to express events but only to express states. The idiomatic uses of grade 7 verbs are therefore not random. Resultant states are used metaphorically to express other states. The

idiomatic grade 7 verbs can not be interpreted progressively in the imperfective aspect, like resultatives and statives. The contrast to passive grade 7 verbs not only does not allow for a progressive reading with imperfective aspect, but also does not allow for an agent to surface in a prepositional *gà* or *wajen* phrase. By contrast, a causer can surface in a instrumental PP with *dà* as (61) demonstrates.

- (61) Abdù ya bùgu dà giyàa.
 Abdu 3MASC.PERF.REL was drunken.VII with beer
 ‘Abdu was drunk form the beer.’ (Abdoulaye 2000:244)

4.6 ‘Happen’–Verbs

This small group of three grade 7 verbs are all translatable as ‘happen’.

Table 4.3: Grade 7 vs. non-grade 7 forms from Abdoulaye (1992:292)

grade 7 form		non-grade 7 form	
<i>àuku</i>	‘happen, occur’	<i>aukàa</i> (I)	‘befall, attack, collapse’
<i>fàaru</i>	‘happen, occur’	<i>faaràa</i> (I)	‘begin, start’
<i>wànzù</i>	‘happen, occur’	—	—

The ‘happen’–verbs are relatively free and do not have the same restrictions as the other grade 7 verbs, neither with respect to TAM selection like the resultatives, nor like reciprocal verbs, in the number of the subject. They also do not imply an agent, as passives do. They do not fit into any other class of grade 7 verbs and therefore form a separate group. (62a) demonstrates, that the ‘happen’–verbs do allow for the progressive interpretation while (62b) demonstrates more generally how happen verbs are used.

- (62) a. Mèe yakèe fàaru-waa?
 What 3MASC.IMPERF.REL happen.VII-VN
 ‘What is happening?’ (Newman 2007:59)
- b. Wannàn yaa fàaru cikin kùrùuciyaarsà.
 DEM 3MASC.PERF happen.VII in youth
 ‘This happened during his youth.’ (Newman 2007:133)

(62a) and (62b) show that ‘happen’-verbs are related to the resultative grade 7 verbs in that they do not subcategorize for an external argument. One can easily imagine their origin in a resultative construction, which lexicalized and lost its stative interpretation, therefore allowing for the progressive interpretation with imperfective aspect, as demonstrated in (62a)

4.7 Conclusion

In this section, I have shown that grade 7 is composed from different distinct grammatical categories. There are resultatives and passives as well as verbal reciprocals. With analyzing grade 7 as a syncretic morpheme, I am able to explain the different syntactic and semantic behavior of grade 7 verbs, namely why some grade 7 verbs do not allow for a progressive reading in the imperfective aspect as well as for the fact that some grade 7 verbs need a plural subject. By recognizing variation in grade 7 use, I am able to explain and predict the occurrence of passive in Hausa. The analysis also provides an explanation for why grade 7 verbs are intransitive.

Chapter 5

Conclusion

This thesis aimed to explain the distribution of the grade 7 morpheme in Hausa. On the basis of general phonological considerations, I showed that grade 7 cannot be multiple morphemes, but has to be analyzed as a single morpheme consisting of a tonal pattern and a suffix.

Earlier literature on the topic do not discuss certain problems. They do not go into detail about why some grade 7 constructions in the imperfective aspect have a potential interpretation, while others have a progressive interpretation. Another stipulation made in previous analyses was that de-transitive and de-intransitive grade 7 verbs are fundamentally different. Such an assumption cannot explain why these two groups behave the same syntactically. Another fact that was not discussed in previous analyses are the unexpected regularities found in reciprocal grade 7 constructions. Another major point of controversy was simply the data. Different authors used contradictory data. So far, no analysis managed to include all of these judgments.

In my analysis, I showed that grade 7 is an instance of a voice syncretism. It combines the grammatical functions of resultatives, reciprocals, and passives in some varieties. Analyzing de-intransitive and de-transitive grade 7 verbs as a resultative is motivated by the ‘completeness’ interpretation these constructions bear. To treat these groups as resultatives explains the fact that they surface as intransitive constructions in which the agent can never be expressed, not even in a PP. It also explains the absence of purpose phrases with de-intransitives and de-transitives. Since resultatives denote resultant states rather than events, the resultative analysis also accounts

for the absence of a progressive interpretation with the imperfective aspect and the ungrammaticality of adverbs modifying events.

The fact that grade 7 marks resultant states also explains why all the idiomatic uses of grade 7 verbs denote states. The idiomatic grade 7 verbs are very similar to resultative grade 7 verbs but distinguish themselves in two ways. They are not derivable from other bases and they denote states instead of resultant states.

I propose that in Katsinanci, de-transitive verbs also have a passive interpretation and are ambiguous between a passive and a resultative interpretation in this variety. This approach explains the deviation in the judgments in Abdoulaye (1992, 2000) from the data from SH as seen in Jaggar (1981, 1988, 2001) and Newman (2000). By analyzing Katsinanci to have a passive marked with grade 7, I can explain the grammaticality of purpose phrases and of agentive PP phrases headed by *gà* - ‘in, at’ with grade 7 verbs, as well as the progressive reading de-transitive verbs can have in Katsinanci.

I analyze the *gàmu*-type verbs to be irreducibly symmetric reciprocals. As criteria to identify these verbs I used the fact that they have a plural subject or an obligatory *dà* - ‘and, with’ phrase expressing a second argument. They have irreducibly symmetric semantics. By analyzing them as irreducibly symmetric reciprocals, they do not only form a coherent class of verbs, but I can also explain why these verbs allow for a progressive reading in the imperfective aspect and why they can not be derived from other verbs.

I agree with other authors that the three grade 7 verbs labeled here as ‘*happen*’-verbs form a class of verbs distinct from the other functions of grade 7 morphology. I concluded that these verbs arose from lexicalization of resultative grade 7 verbs.

This thesis raises two questions for future research. One question concerns the geographical distribution of the passive function of grade 7 verbs in Hausa dialects. Another question is the reason for the potential reading to arise with resultative and stative verbs. The fact that resultatives and statives do not allow for a progressive reading is also observable in other languages. However, the potential reading seems to be due to the nature of the Hausa imperfective aspect rather than the resultative. This question

would need to be answered in an independent study about the imperfective aspect in Hausa.

Abbreviations

1	1 st person	NH	Northern Hausa
2	2 nd person	OCP	obligatory conture principle
3	3 rd person	PAR	past participle
4	impersonal	PART	particle
I	grade 1	PDS	pre-dative-suffix form
II	grade 2	PERF	perfective aspect
III	grade 3	PL	plural
APP	applicative	POSS	possessive
DEF	definiteness marker	PRES	present tens
DO	direct object	RECIP	reciprocal
FEM	feminine	REL	relative
IMPERF	imperfective aspect	SH	Standard Hausa
IV	grade 4	TAM	tens, aspect, modus
MASC	masculine	VII	grade 7
NEG	negation	VN	verbal-noun
NEUT	neuter	WH	Western Hausa

Bibliography

- ABDOULAYE, MAHAMANE L. 1992. *Aspects of Hausa Morphosyntax in Role and Reference Grammar*. State University of New York dissertation.
- ABDOULAYE, MAHAMANE L. 2000. Passive and Grammaticalization in Hausa. *Studies in Language* 24.235–275.
- ARISTAR, ANTHONY, and MARTHA RATLIFF. 2009. Multitree: A Digital Library of Language Relationships. Online: <http://multitree.org/>
- BAERMAN, MATTHEW; DUNSTAN BROWN; and GREVILLE G. CORBETT. 2005. *The Syntax-Morphology Interface—A Study of Syncretism*. No. 109 in Cambridge Studies in Linguistics. Cambridge: Cambridge University Press.
- BARGER, GEORGE PERCY. 1934. *A Hausa-English Dictionary and English-Hausa Vocabulary*. Oxford: Oxford University Press.
- BATURE, ABDULLAHI. 1991. *Thematic Arguments and Semantic Roles in Hausa: Morphosyntax and Lexical Semantics Interface*. Stanford University dissertation.
- CAMPOS, PASCAL DE. 1998. *Predicate Formation and the Syntax of Hausa Verbs*. Boston University dissertation.
- CHIERCHIA, GENNARO. 2004. A Semantics for Unaccusatives. *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*, ed. by Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, 22–59. Oxford: Oxford University Press.
- COLLINS, CHRIS. 2005. A Smuggling Approach to the Passive in English. *Syntax* 8.81–120.

- CRYSMANN, BERTHOLD. 2005. An Inflectional Approach to Hausa Final Vowel Shortening. *Yearbook of morphology 2004*, ed. by Geert Booij and Jaap van Marle, 73–112. Dordrecht: Springer.
- DIMITRIADIS, ALEXIS. 2004. Discontinuous Reciprocals. MS. Utrecht institute of Linguistics OTS.
- EMBICK, DAVID. 1997. *Voice and the Interfaces of Syntax*. University of Pennsylvania dissertation.
- EMBICK, DAVID. 2004a. On the Structure of Resultative Participles in English. *Linguistic Inquiry* 35.355–392.
- EMBICK, DAVID. 2004b. Unaccusative Syntax and Verbal Alternations. *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*, ed. by Elena Anagnostopoulou Artemis Alexiadou and Martin Everaert, 136–158. Oxford: Oxford University Press.
- FRAJZYNGIER, ZYGMUNT, and MOHAMMED MUNKAILA. 2004. *Grammatical and Semantic Relations in Hausa: 'Point of View', 'Goal' and 'Affected Object'*. Köln: Rüdiger Köppe.
- GOUFFÉ, C. 1988. Fonction de la diathèse dans le verbe haoussa. *Studies in Hausa Languages and Linguistics in Honour of F. W. Parsons*, ed. by Graham Furniss and Philip J. Jaggar, 33–44. London: Kegan Paul International.
- HAIJČ, JAN; JARMILA PANEVOVÁ; ALLA BÉMOVÁ; JIŘÍ KÁARNÍK; and PETR PAJAS. 2006. The Prague Dependency Treebank, version 2.0. Online: <http://ufal.mff.cuni.cz/pdt2.0/doc/manuals/en/t-layer/html/ch05s01s01.html>
- HASPELMATH, MARTIN. 1990. The Grammaticization of Passive Morphology. *Studies in Language* 14.25–72.
- HAYES, BRUCE. 1990. Precompiled Phrasal Phonology. *The Phonology-Syntax Connection*, ed. by Sharon Inkelas and Draga Zec, 85–108. Chicago: University of Chicago Press.

- HORNSTEIN, NORBERT; JAIRO NUNES; and KLEANTHES K. GROHMANN. 2005. *Understanding Minimalism*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- IMAM, ABUBAKAR. 1939. *Magana Jari Ce*, vol. 2. Northern Nigerian Publishing Company.
- JAGGAR, PHILIP J. 1981. *Some Unusual Lexical Passives in Hausa*. Master's thesis, University of California Los Angeles.
- JAGGAR, PHILIP J. 1988. Affected-Subject ('grade 7') Verbs in Hausa: What are they and where do they Come from. *Passive and Voice*, ed. by Masayoshi Shibatani, 387–416. Amsterdam - Philadelphia: John Benjamins Publishing Company.
- JAGGAR, PHILIP J. 2001. *Hausa*. Amsterdam - Philadelphia: John Benjamins Publishing Company.
- KAYE, JONATHAN. 2001. A Short Theory About Tone. MS.
- KRATZER, ANGELIKA. 2000. Building Statives. *Berkeley Linguistic Society, Proceedings of Berkeley Linguistic Society*, vol. 26, 385–399.
- KRATZER, ANGELIKA. 2002. The Event Argument and the Semantics of Voice. MS. University of Massachusetts.
- LEBEN, WILLIAM R., and DAUDA M. BAGARI. 1975. A Note on the Base Form of the Hausa Verb. *Studies in African Linguistics* 6.239–48.
- NEDJALKOV, VLADIMIR P., and SERGEJ J. JAXONTOV. 1988. The Typology of Resultative Constructions. *Typology of Resultative Constructions*, ed. by Vladimir P. Nedjalkov, 3–62. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- NEWMAN, PAUL. 1973. Grades, Vowel-Tone Classes and Extensions in the Hausa Verbal System. *Studies in African Linguistics* 4.297–346.
- NEWMAN, PAUL. 1983. The Efferential (alias 'Causative') in Hausa. *Studies in Chadic and Afroasiatic Linguistics*, ed. by Ekkehard Wolff and Hilke Meyer-Bahlburg, 397–418. Hamburg: Helmut Buske.

- NEWMAN, PAUL. 2000. *The Hausa Language — An Encyclopedic Reference Grammar*. New Haven - London: Yale University Press.
- NEWMAN, PAUL. 2007. *A Hausa-English Dictionary*. New Haven - London: Yale University Press.
- PARSONS, F. W. 1960. The Verbal System in Hausa. *Afrika und Übersee* 44.1–36.
- PARSONS, F. W. 1971/72. Suppletion and Neutralization in the Verbal System of Hausa. *Afrika und Übersee* 55.49–97, 188–208.
- PYLKKÄNEN, LIINA. 2002. *Introducing Arguments*. MIT dissertation.
- ROBINSON, CHARLES H. 1897. *Hausa Grammar (with Exercises, Readings and Vocabularies, and Specimens of Hausa Script)*. 1st edn. London: Kegen Paul, Trench, Trübner and Co.
- ROBINSON, CHARLES HENRY D.D. 1913. *Dictionary of the Hausa Language*, vol. I. 3rd edn. London: Cambridge University Press.
- SCHÖN, REV. J. F. 1862. *Grammar of the Hausa Language*. London: Church Missionary House.
- TULLER, LAURICE. 1990. L'hypothèse inaccusative et les verbes du “degré 3” et du “degré 7” en haoussa. *Linguistique Africaine* 5.95–126.
- WOLFF, EKKEHARD. 1993. *Referenzgrammatik des Hausa: zur Begleitung des Fremdsprachenunterrichts und zur Einführung in das Selbststudium*. Verlag Berlin-Hamburg-Münster: LIT.

Appendix

Glossary

Aspect: Aspect structures events internally, in contrast to tense, which relates an event time to the speaking time. The most frequent aspectual elements are the imperfective and the perfective. The imperfective marks uncompleted events. In Hausa, the imperfective is normally evaluated in the present tense and is used to express progressive, habitual or durative actions. The perfective aspect in Hausa denotes the anteriority or completeness of an event (cf. [Jaggar 2001](#)).

Applicative: The term *applied argument* is used in Bantu linguistics to denote additional arguments that are not core arguments of the verb. I call these arguments applied arguments and the morpheme which marks them *applicative*. The applicative is an argument introducing morpheme. [Pylkkänen \(2002\)](#) distinguishes two main groups of applicatives, the low applicatives and the high applicatives. The low applicative differs from the high applicative in its semantics and syntax. The syntactic difference is mainly that the low applicative is ungrammatical with unergative verbs, while the high applicative does not have this restriction. According to [Pylkkänen \(2002\)](#), English is a language with a low applicative.

The English verb *to buy* is a transitive verb, taking an agent as subject and a patient as an object as can be seen in (63a). We are able to express a recipient by a directional prepositional phrase (63c), or by introducing a recipient indirect object (63b). It is clear that neither the argument introduced by the PP nor the indirect object are in fact a core argument of the verb since *buy* only requires an agent and a patient to form a grammatical sentence.

- (63) a. I buy a book.
b. I buy a book for John.
c. I buy John a book.

Pylkkänen (2002) argues that the process introducing indirect objects in English is actually a low recipient applicative with the interpretation of a transfer of a possessor relation. It asserts that that the direct object is transferred to the possession of the indirect object (cf. Pylkkänen 2002:15). Because of its semantics the English applicative can not be used with unergative verbs, since unergative verbs do not have direct object. Sentence (64a) is therefore ungrammatical.

- (64) a. *I run John.

I assume that the Hausa applicative, in contrast to the English applicative, is a high applicative creating a ‘[t]hematic relation between an applied argument and the event described by the verb’ (Pylkkänen 2002:15). In example (63c), this would mean that a book is bought with the intention of giving it to John, as opposed to what it actually means, namely that it is bought for whatever reason and then given to John. In Hausa, the applied argument is interpreted as *benefactive* or as *malefactive*. This interpretation is not uncommon for high applicatives across languages (cf. Pylkkänen 2002). In Hausa, the phonological realization of the applicative is *wà* with nouns and *ma* with pronouns. In (65a), we can see the transitive verb *dafàa*–‘to cook’ with an applicative. In (65b) the unergative verb *daaràa*–‘to let out a laugh’ is shown. Both have a benefactive interpretation.

- (65) a. Taa dafaa wà mijìntà àbinci.
3SG.PERF cook.I APPL husband food
She cooked her husband food. (Newman 2007:215)
- b. Ali yaa daaràa wà Binta.
Ali 3SG.PERF laugh.I wà Binta
Ali laughed for Binta. (Tuller 1990:101)

Core Arguments: *Core arguments* are the arguments of a verb which are necessary to form a grammatical utterance. The verb *buy* has two core arguments, an agent and a patient. Out of the blue *I buy a car* is a grammatical sentence, while *I buy* or *A car buy* is not.

Derivation: I base my definition of *derivation* on the definition of *syntactically derived* in Hajič et al. (2006):

‘Syntactic derivation concerns the cases in which the base word is to be used in a different syntactic environment (function) while the core of its meaning stays preserved.’

I extend this definition by the criterion of regularity. I therefore consider *derivation* to be a

Regular process, in which a base word is to be used in a different syntactic environment, while the core of its meaning stays preserved.

External argument and internal argument: I understand external arguments to be agents and causers, all other arguments of the verb e.g. patient and experiencer to be internal arguments.

Irreducibly symmetric reciprocal: Irreducibly symmetric reciprocals are a subset of reciprocals. I adopted Dimitriadis’s (2004) definition for irreducibly symmetric reciprocal. I consider a predicate to be *irreducibly symmetric* if (a) it expresses a binary relationship, but (b) its two arguments have necessarily identical participation in any event described by the predicate.’ (Dimitriadis 2004:14)

Passive: I define a passive sentence as:

A sentence where the external argument is either implicit or expressed in a optional phrase.

External arguments are in this context either an argument with the semantic role of an agent or a causer. This definition excludes all cases of argument rearrangement where the external argument has to be expressed. The fact that the external argument is optionally expressible or implied in a passive sentence distinguishes passive constructions clearly from unaccusatives and resultatives.

Reciprocal: Reciprocality expresses that a plurality of participants are the actor as well as the recipient of an action. The reciprocal construction *Maria and Angelika cut each other's hair* expresses that not only Maria cuts Angelika's hair but also that Angelika cuts Maria's hair. Therefore, the two participants in this action are the agent of one event and the patient in the other.

Stative verb: I use the term *stative* or *states* only for so called *natural states* (cf. Nedjalkov & Jaxontov 1988). Natural states in contrast to *secondary states* are states that are not necessarily the product of an event. Examples for natural states are *to lie*, *to understand*, *to know*. States are contrasted with events, which denote changes of states and with qualities, which are unchangeable properties.

Sustentative: Sustentative is a term used in Hausa linguistics. It denotes that the subject has fully sustained, or is capable of sustaining the action of the verb.

Syncretism: The term syncretism refers to the phenomenon that various distinct functional categories are marked with the same morpheme. Informally, one could say that *syncretism is the situation where the morphology 'lets down' the syntax* (Baerman et al. 2005:1). Table 5.1 is an example for a syncretism in the German verbal conjugation. As we can see, the 1PL and the 3PL are the same. We can thus say that this two forms are syncretic.

Table 5.1: German *sein* 'to be' from Baerman et al. (2005:8)

INF	sein
1SG	bin
2SG	bist
3SG	ist
1PL	sind
2PL	seid
3PL	sind

Syncretism can arise from different origins. On the one hand, it can arise through the collapse of phonological or morphological distinctions, on

the other hand, it can also evolve out of the lexical expansion of morphemes (cf. [Haspelmath 1990](#)).

Unaccusative verbs: Unaccusative verbs are generally understood to be intransitive eventive verbs which have an internal argument as syntactic subject. The subject of the verb has no control over the event. It is affected by the action denoted by the verb rather than to effect the action itself. Typical unaccusative verbs are *do die*, *to fall* or *to arrive*.

Voice Voice denotes the grammatical relationship of the subject to the action or property the verb denotes. Voice is thus inter alia the hyponym for passives, unaccusatives, causatives and resultatives. The term voice is sometimes also called diathesis.

Grade 7 Verbs in Schön (1862)

Table 5.2: Exhaustive list of grade 7 verbs from Schön (1862:49)

Intransitive Form	Translation	Transitive From	Translation
bùdu	to open	buda	to open
dadu	to be increased	dade	to lengthen, to prolong, to increase
faru	to happen		
furu	to be burning		
goddu	to appear	godda	to show
gammu	to meet	gamma	to join
karu	to be added	kara	to add
kaffu	to be fastened, standed		
kantu	to be unloosed		
nadu	to be rolled up, or coiled, entangled		
mutu	to die		
madzu	to be queezed, hemmed in		
rabu	to depart	raba	to divide
retu	to be swinging		
ragu	to be decresing		
sannu	to be known		
subu	gushed out		
šimfudu	spread		
taru	assembled		
wanzu	dispersed		

List of Grade 3a Verbs from Newman (2007)

Table 5.3: Exhaustive list of grade 3a verbs from Newman (2007)

<i>buuya</i>	‘hide (oneself)’
<i>fãrga</i>	‘realize, understand, become aware of, wise up ’
<i>girma</i>	‘grow up, grow older or larger’
<i>kuuka</i>	‘Used in expressions such as <i>Zâi kooka dà kânsà</i> . ‘He will have only himself to blame.’
<i>kwaana</i>	‘spend the night, spend a day (24-hour period), stop for a rest’
<i>kaaba</i>	‘be angry, be conceited’
<i>kaara</i>	‘cry out, complain’
<i>kaura</i>	‘move to another town, emigrate, die’
<i>saura</i>	‘remain, be left over’
<i>shaafa</i>	‘forget’
<i>suuma</i>	‘faint’
<i>tsiira</i>	‘escape, get away safely, be saved, get salvation from God.’
<i>tsuufa</i>	‘become old’
<i>tuuba</i>	‘repent’

List of Grade 7 Verbs from Newman (2007)

Table 5.4: Exhaustive list of grade 7 verbs from Newman (2007)

<i>àfu</i>	‘be eager to’
<i>àuku</i>	‘happen, occur, arise’
<i>bìyu</i>	‘be disciplined; (in continuous) be traversable (of road)’
<i>bùgu</i>	‘be drunk, be well beaten’
<i>cìwu</i>	‘(usu. in continuous) be edible’
<i>cùuđu</i>	‘be intimate with one another’
<i>dàfu</i>	‘be well cooked, boiled’
<i>dàfku</i>	‘be heavily laden with’
<i>dàidàitu</i>	‘be improved, correct, set right; be well reconciled’
<i>dàamu</i>	‘be fully mixed; be worried’
<i>dàrsu</i>	‘occur to someone’
<i>dàuku</i>	‘be adopted, be accepted’
<i>dìgu</i>	‘(fig.) get on in the world’
<i>fàku</i>	‘die (of prophets or saints)’
<i>fàaru</i>	‘occur, happen’
<i>fàsu</i>	‘burst’
<i>gàjìyu</i>	‘be dog-tired’
<i>gàmu</i>	‘meet’
<i>gàmsu</i>	‘be pleased, get on well’
<i>gìnsu</i>	‘have one’s full of some food’
<i>gòogu</i>	‘be experienced, be an old hand at sth.’
<i>gyàaru</i>	‘be repaired’
<i>hàđu</i>	‘be joined, meet: be full-blown’
<i>hìmmàtu</i>	‘strive hard’
<i>j’igàatu</i>	‘undergo severe physical suffering’
<i>jìttu</i>	‘be on good terms with’
<i>kàđu</i>	‘be beaten (e.g., a drum); be spun; be scared, tremble from fear; be in a fix’
<i>kàamu</i>	‘get caught, get stuck; contract a disease’
<i>kàřkàasu</i>	‘be disunited’
<i>kàsu</i>	‘subdivide into’

<i>kintsu</i>	‘be well behaved’
<i>kwààbù</i>	‘be well mixed and ready for building (e.g. clay)’
<i>kwànkwaàtsu</i>	‘become shattered, smashed into fragments’
<i>kyàutu</i>	‘be suitable, should be, ought to (followed by clause in the subjunctive)’
<i>kàgu</i>	‘be eager, anxious to’
<i>kàaru</i>	‘increase; benefit’
<i>kyàstu</i>	‘be struck’
<i>lùllùbù</i>	‘get covered’
<i>mòotsu</i>	‘be well stirred; become made; be shaken by the death of someone’
<i>nitsu</i>	‘reflect deeply’
<i>ràbu</i>	‘part, be separated, be divorced’
<i>ràgu</i>	‘used in <i>hankàli yaa ràgu</i> - ‘Be a little crazy’
<i>ràsu</i>	‘die (of people)’
<i>ràayu</i>	‘survive, prosper’
<i>sàadu</i>	‘meet; have sexual relations’
<i>sàrkù</i>	‘become close friends’
<i>shàayu</i>	‘to have been drunk or consumed; (in continuous tense-aspects) be potable (water)’
<i>shàakù</i>	‘be very close friends with’
<i>shàaru</i>	‘be cleanly swept’
<i>tàb u</i>	‘be mentally unbalanced’
<i>tàfiyu</i>	‘be well-traveled; (in continuous tense-aspects) traversable’
<i>tàaru</i>	‘meet together, assemble; (euphem.) have sexual intercourse’
<i>tsàãgu</i>	‘feel guilty’
<i>wànzù</i>	‘happen, occur; be eternal’
<i>wàatsu</i>	‘be dispersed, be scattered, be lying about’
<i>yàadù</i>	‘have been spread, be spreadable’
<i>yìwu</i>	‘be possible’
<i>zàkù</i>	‘be very eager’
<i>zàntu</i>	‘be coached, led (especially a witness)’
<i>zàunu</i>	‘be livable’

Abstract in English

This thesis attempts to explain the distribution of the grade 7 morpheme in Hausa. The grade 7 morpheme is a verbal affix on intransitive verbs. The affix consists of a tonal pattern and a suffix. In a first step, I elaborate on whether grade 7 constitutes a single morpheme, or multiple morphemes. I conclude that it can only be a single morpheme.

In a second step, I present the hypotheses which have been put forward in the last quarter of a century to explain the distribution of grade 7 verbs. These hypotheses are categorizable into three groups: the unaccusative hypothesis, the passive hypothesis, and the sustentative hypothesis. I show that all of these hypotheses are unable to explain the distribution of grade 7 verbs, as well as their syntactic and semantic variation.

I will also discuss dialectal variation in the distribution of grade 7. To my knowledge, the topic of variation in grade 7 has not been addressed so far. I will assume that contradictory grammaticality judgments reflect different varieties of Hausa.

In this thesis, I show that grade 7 verbs reflect a voice syncretism. It does not only mark resultatives, but also verbal reciprocals, and in certain varieties also passives. In assuming this syncretism, I am able to explain the syntactic distribution and the semantics of grade 7 verbs.

Abstract in German: Zusammenfassung auf Deutsch

Diese Diplomarbeit versucht, die Distribution des Grade 7-Morphems in Hausa zu erklären. Die Grade 7-Markierung tritt an intransitiven Verben auf. Es besteht aus einem tonalen Muster und einem Suffix. In einem ersten Schritt wird die Frage geklärt, inwieweit es sich bei Grade 7 um ein einziges Morphem handelt, was klar bejaht werden muss.

In einem zweiten Schritt werden die Hypothesen vorgestellt, die im letzten Vierteljahrhundert aufgestellt wurden, um die Distribution des Grade 7-Morphems zu erklären. Diese lassen sich in drei Kategorien einteilen: Die Annahme, dass Grade 7 Unakkusative, Passive oder Sustentative markiert. Ich zeige, dass alle drei Hypothesen nicht in der Lage sind, das Auftreten

aller Grade 7 Verben sowie deren syntaktisches und semantisches Verhalten vorauszusagen. Ein Thema welches, soweit ich weiß, noch nicht in früheren Analysen des Problems Beachtung gefunden hat, ist die Variation in Grammatikalitätsurteilen. Einige Beispiele, welche in die Literatur Eingang gefunden haben, widersprechen sich klar. Ich gehe daher davon aus, dass es dialektale Variation im Gebrauch des Morphems gibt.

Ich zeige in dieser Arbeit, dass es sich bei Grade 7 um einen Diathesesensynkretismus handelt. Grade 7 markiert demnach nicht nur Resultative, sondern auch verbale Reziprokale und in manchen Varietäten auch Passive. Unter dieser Annahme bin ich in der Lage, die syntaktische Distribution und die Semantik von Grade 7-Verben zu erklären.

Thomas Borer — Curriculum Vitae

Personal Data

Name Thomas M. Borer
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Education

August 2012 Expected Graduation as *Magister der Philosophie*
Oct 2006 Enrollment in African Studies, University of Vienna
Jun 2006 School leaving examination, with honors
Feb– Jul 2004 Exchange semester at Gosford High School, 2250 Gosford, Australia
1998–2006 Grammar school: PG Mehrerau, 6900 Bregenz, Austria

Summer Schools and Additional Activities

Jul 2009 European Summer School in Generative Grammar (EGG) in Poznań, Poland
Jul–Aug 2007 Participation in a field trip to Zinder, Republic Niger in collaboration with a Hausa dialectal project by the Department of African Studies of Vienna University.

Attended Conferences and Workshops

2008 Workshop on ‘Dynamics of Linguistic Change - Typology of Co- and Subordination’ in Gumpoldskirchen
2009 IACL 17 (International Association of Chinese Linguistics)
2009 Sinn und Bedeutung 14
2011 GLOW 34
2011 GPRT 8 (Government Phonology Round Table)
2011 Workshop on ‘Catching Language in the Wider Lake Chad Area - The constant Challenges of Language Change’ in Gumpoldskirchen

Conference Presentations

2012 2. Diskussionsforum Linguistik in Bayern

Scholarships

- 2012 Scholarship offered by the Education Authority of the
Principality of Liechtenstein
- 2009 Scholarship offered by the Education Authority of the
Principality of Liechtenstein
- 2008 Scholarship offered by the Education Authority of the
Principality of Liechtenstein
- 2007 Scholarship offered by the Education Authority of the
Principality of Liechtenstein
- 2006 Scholarship offered by the Education Authority of the
Principality of Liechtenstein

Languages

- High Allemanic First Language
- German First Language
- English Fluent
- French Conversation level
- Hausa Basic knowledge
- Fulfulde Basic knowledge
- Latin Reading competence