3.1.1 Title: Predicate-centered focus types: A sample-based typological study in African languages

3.1.2 Research areas: General linguistics, typology, African languages

3.2 Summary

The present project is a continuation of the project B7 which started in September 2009. It investigates predicate-centered focus types from a typological perspective, sampling more than 20 diverse African languages. This sample will partly be extended in the present application phase. It is the only remaining project with a typological approach in the SFB. Based on the results obtained so far, we will focus in the new phase on the following topics, for which not all the languages in our sample will be relevant:
Topic 1: Phase-1 continuation - Encoding of predicate-centered focus in affirmative main clauses
Our previous research will be continued and extended concerning the investigation of:
- the functions of predicate-centered focus types in discourse;
- the organization of tense/aspect (TA) systems in individual languages with respect to predicate-centered focus;
- complex predicate structures;
- syntactic properties of focus structures.
Topic 2: Predicate-centered focus in clause types other than affirmative main clauses (I. Fiedler)
We extend the questions developed in phase 1 for affirmative main clauses to other clause types especially relevant for predicate-centered focus, such as (i) negative main clauses, (ii) selected subordinate clauses, and (iii) yes-no interrogatives and alternative questions.
Topic 3: Synchronic variation and diachronic development of predicate-centered focus
We aim to deepen our investigation by researching its dynamics in terms of (i) possible influence of language contact (here among languages of eastern Mali, K. Prokhorov) and (ii) its stability and variation within a genealogical language group (here Bantu languages, Y. Morimoto).
 An overarching goal of the 2nd phase is the development of a cross-linguistic data base on predicate-centered focus. This data base is designed to bring the data of the project and other sources into a unified format and annotation scheme, being searchable for different parameters and ensuring the sustainability of the data.

3.3 Project development

3.3.1 Report

In its first funding phase, the project has been investigating so-called predicate-centered focus types from a typological perspective, sampling more than 20 areally and genetically diverse languages of Africa. The overall goal of this phase of the project has been to study the interaction of predicate-centered focus with other focus types in terms of form and function, taking the possible influence of typological and areal factors into account. Our research was motivated by the fact that verb-related focus types have only marginally been treated in previous research on IS despite the fact that such categories figure centrally in the core grammar of a number of languages, particularly from Africa (see, inter alia, results of project B1). Apart from more general accounts of IS and the role of predicate-centered focus types (cf. Chafe 1974, Dik 1981, 1997, Höhle 1992, Lambrecht 1994, etc.), the basic research goals were influenced in particular by (i) Hyman and Watters (1984), who discuss the interaction of "auxiliary focus" and tense-aspect categories in a number of African languages and (ii) Güldemann (1996, 2003), who aimed at a unified approach and sub-classification of predicate-centered focus in connection with clause status and verb morphology and also looked at the polyfunctionality of the relevant structures (e.g. focus and such verb categories as the progressive).
 In the current investigation we start out with the following preliminary semantic classification of predicate-centered focus:

Predicate-centered focus

Operator

State of affairs (SoA)   **Polarity (esp. truth value)**   **TAM**
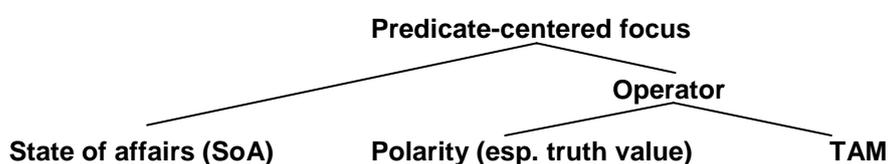
A first observation regarding this classification is that clearly distinct TAM focus, figuring salient in Hyman and Watters (1984), occurs only marginally in the sample languages. In the languages where it is attested, it is restricted to contrastive contexts, triggered in elicitation by selective (alternative) questions or contrastive statements. The cross-linguistic status of TAM focus is therefore still an open question.

The main findings of the current funding period are as follows:

(a) Formal encoding of predicate-centered focus

Predicate-centered focus is encoded in highly variable ways (Güldemann et al. 2010), ranging from:
- different types of prosodic means (e.g. Xhosa),
- bound and free verb inflection (e.g. Makhuwa, Mombo, Hausa, Koyraboro Senni),
- bound and free focus markers (e.g. Sandawe, Aja, Bambara),
- different syntactically complex constructions such as cleft-like patterns (e.g. Hausa, Ama, Amharic) and word order changes (e.g. Tamashek, Emai), to
- unmarked "default" clause structures (e.g. Hausa, Ik, among many others).

The salient role of default clauses for expressing predicate-centered focus was unexpected but actually echoes findings regarding non-subject term focus, which is also expressed frequently without marked encoding means (nearly all languages in the sample) (cf. **B1/B2**: Fiedler et al. 2009, **B1**: Schwarz and Fiedler 2007, **B2**: Hartmann and Zimmermann 2007, among others).

(b) Formal encoding and internal classification of predicate-centered focus

Regarding the possible differentiation of predicate-centered focus, most of the languages already investigated (e.g. Koyraboro Senni, Ama, Sandawe, Tamashek, Wolof) actually show a total formal conflation for all three types of predicate-centered focus, setting this domain as a whole apart from marked term focus. This echoes Güldemann (1996, 2003), who uses a general umbrella term "predication focus". In other languages (Aja, Makhuwa), state-of-affairs focus and TAM focus are expressed identically, while truth value focus is distinct (Güldemann et al. 2010). This seems to point to the special status of truth value in IS in these languages. This is, however, contrary to the observations by Musan (2002) that in the German perfect, the ambiguity between anteriority focus and truth value focus is less important than the ambiguity between anteriority and SoA focus. So far, there is only one case (Bambara, cf. Prokhorov 2010) where the assumed semantic split between operator focus and state-of-affairs focus can be observed formally (cf. also German analytical verb forms). As there is often lack of data concerning distinct TAM focus, this pattern might still turn up in more languages in future investigation.

Secondly, the so-called "communicative point" also influences the choice of a particular structure for predicate-centered focus. In some languages (Bambara, Aja, Hausa, Ama, etc.) assertive (information) focus is often encoded by the default sentence without any other coding means. On the other hand, with contrastive focus, more complex structures are employed. This again parallels term focus. In Bambara, for instance, the clause final particle dɛ is restricted to strongly contrastive contexts such as negation and cannot be used in plain assertions.

(1)　à　　yé　　　à　　fàga　　dɛ
　　　3S　　PFV.TR　3S　　kill　　PF
　　　{He didn't slaughter the sheep.} (No) He DID slaughter it. (Prokhorov, field notes)
　　　{Did he slaughter the sheep?} (Yes) *He DID slaughter it.

(c) Forms for predicate-centered focus used in other functions

We investigated whether and to what extent structures used to express predicate-centered focus are also employed for other functions, in particular for IS. That is, are the observed structures dedicated to one function or are they polyfunctional? One kind of polyfunctionality has been mentioned with respect to default clauses and their role for predicate-centered focus. But there are a number of other patterns, too, of which only a few will be mentioned: While a number of languages differentiate clearly between term and predicate-centered focus (e.g. Ama, Emai, Wolof, Koyraboro Senni, Amharic), several languages can use one and the same structure. For example in Sandawe, both term and predicate-centered focus types are marked by a floating focus morpheme in one clause type, and by the presence /absence of a high tone on the verb in another clause type (Morimoto 2010). It is also possible that cleft and cleft-like constructions display this polyfunctionality, as in Aja. Here, there is a strong correlation with state-of-affairs focus in particular.

(2) a.　　ā yú　　　　(yí)　é　　dù
　　　　　bean　　　　GF　　3S　　eat
　　　　　She ate BEANS.
　　　b. óò,　dà　　　　　(yí)　é　　dà

no   cook   GF   3S   cook

{The woman ate the beans.} No, she COOKED them. (Fiedler 2010a)

More remarkably, some languages exploit verb TOPICALIZATION in order to convey particularly truth value focus (cf. Güldemann 2010). The specific form-function correlation can be observed in languages which use both initial verb focus- and topic-preposing, as in Hausa.

(3)a. Verb topic preposing for truth value focus

gyaaraa,   wàllaahì   yaa   gyaarà   mootà-r

repair:VN   "By God!"   3M.S.PFV   fix   car-DEF.F

[lit.:] fixing, well he's fixed the car. [he really DID repair the car] (Jaggar 2001: 542)

  b. Verb focus preposing for state-of-affairs focus

gyaaraa   nèe   ya   yi   wà   mootàa

repair:VN   GF   3M.S.PFV.DEP   do   IO   car

[lit.:] It was repairing he did to the car. [he REPAIRED the car] (Newman 2000: 194)

There is also robust evidence in a number of languages investigated thus far that predicate-centered focus structures are also exploited for (event-central) theticity (in the sense of Sasse 1987). Finally, in some languages, predicate-centered focus interacts with tense-aspect in line with the findings by Hyman and Watters (1984) and Güldemann (1996, 2003). Thus, in Koyraboro Senni the imperfective is reinterpreted as progressive, and the perfective as perfect and counterfactual conditional, when using inflection for predicate-centered focus. Similar phenomena are observed in Ama.

(d) Discourse functions of predicate-centered focus types

The analysis of the discourse functions of predicate-centered focus types in texts is still at the beginning stage due to the delayed project start with full staff (see below). Data in nearly natural dialogic discourse, elicited with the help of short movies, confirm our expectation that predicate-centered focus occurs preferentially in argumentative verbal negotiation. In general, predicate-centered focus is extremely rare, even in spontaneous discourse, and also difficult to elicit. Nevertheless, textual contexts are crucial for a proper understanding of these expressions and need to be studied in more detail.

Methods

For the majority of languages our study was mainly based on secondary data of different quality. The following two major approaches were taken to study predicate-centered focus: (i) we identified the main pragmatic contexts where these focus types can be expected (contrast on an event, asserting an event, negotiation of a common ground, etc), and (ii) we analyzed the distribution of linguistic structures already known from the literature as expressions of predicate-centered focus (disjoint verb forms in Bantu, in-focus verb forms in Hausa, etc).

For some of the languages (Ama, Amharic, Bambara, Mombo, N|uu), we elicited primary data in field research. For this purpose, we also used the infrastructure of Tom Güldemann's professorship in African linguistics in involving Andreas Wetter and his expertise in Ethiopian languages. On the basis of the SFB questionnaire on IS (Skopeteas et al. 2006) and some newly developed tasks (short movies showing verbal actions to initiate discussions), we collected controlled data. This allowed us to obtain nearly natural data displaying state-of-affairs focus and truth value focus. Nevertheless, as these data are not fully spontaneous, not all structures occurring in normal conversation can be found (e.g., this was the case with the preposed infinitive construction in Amharic). Furthermore, we collected texts of different types such as narrations (tomato story, pear story) in order to obtain cross-linguistically comparable discourse material.

We are also engaged in the development of a digital Hausa corpus (cf. Chiarcos et al. 2010, accepted). This corpus construction, which started out as a joint project of A5 (Zimmermann), B2 (Hartmann), B7 (Güldemann), D1 (Stede) and D4 (Kuhn), consists of the digital archive of 'Voice of America' (not annotated), parallel texts (bible, partially annotated), a web corpus, the Hausar Baka corpus (Russel Schuh, digitalized by B2) and our corpus of predicate-centered focus. It will facilitate a more fine-grained automatic search for the structures we are interested.

For a subsequent typological comparison, we are preparing typological profiles for the sample languages to see whether the expressions of predicate-centered focus are influenced by certain basic structural parameters (cf., e.g., §3.3.1 for the presence of complex bipartite predicates).

3.4　　Project outline

The research questions of the current project for modeling the relation between form and function of predicate-centered focus (cf. §3.3.1) will be further pursued in the second phase, for both the original sample languages and additional languages (see §3.3.3 and 3.3.4.a). As far as we have strong indications in our currently available data, and based on the results of the 1st phase, we have identified a few new research foci - most of them are not relevant for the entire language sample (cf. §3.3.2). We also aim to deepen our knowledge of historical aspects of predicate-centered focus. Therefore, we will investigate how far predicate-centered focus structures are influenced by language contact in a small geographical area and what is their historical dynamics within a genetically close-knit language group (cf. §3.3.3). To pursue this goal, we additionally investigate the synchronic and diachronic dynamics of (a) the languages of eastern Mali and (b) some representative languages of the Bantu family where relevant expression types seem to have existed in an early language state but which underwent considerable changes in individual daughter languages.

3.4.1　　Topic 1: Phase-1 continuation - predicate-centered focus in simple affirmative main clauses

(a) Discourse analysis

As mentioned, there will be greater emphasis on discourse analysis, for which we are now better equipped after having identified the relevant structures in most sample languages. We plan to undertake studies analyzing how predicate-centered focus types are used in spontaneous natural texts in selected sample languages for which sufficiently large corpora are available. Some of the corpora have been/are being developed within the SFB (Wolof, Hausa); some are from elicited and/or published texts. We also aim to cooperate with colleagues who have created written, audio, and/or video corpora of natural discourse on several African languages that we could use for our investigation (cf. §3.4). Preliminary research indicates that predicate-centered focus is largely absent from narrative texts and occurs there largely in direct speech, while dialogic discourse provides more relevant tokens. The fact that sufficient NATURAL discourse data will not be available for all languages implies that the depth of analysis in this respect will not be the same across the entire sample.

(b) Relation between TA and IS categories

Previous work has shown that such tense-aspect categories as perfect and progressive intimately interact with predicate-centered focus or even develop out of this domain, as seen in Kamba.

(4) a.　ni marking truth-value focus

　　　n'ǐ-t'ū-tônya　　　kwĩka　　　maũndũ　　áu
　　　PF-1P-can:PRS　　INF:do　　　things　　　those
　　　We CAN do those things. (Ndumbu and Whiteley 1962: 174)

　　b.　ni marking progressive

　　　n'ǐ-méũ-theka
　　　PROG-2-laugh
　　　They're laughing [or: they're about to laugh] (Ndumbu and Whiteley 1962: 179)

　　　　Those sample languages where similar phenomena have been found (e.g. Koyraboro, Ama) will be investigated in order to explain in more detail the historical change from predicate-centered focus to perfect, progressive, etc.

(c) Complex predicate structures

In complex predicate structures like periphrastic tense/aspect (e.g., Bantu), light verb (e.g., Ama), and serial verb constructions (e.g., Aja) the lexical information on the one hand and the grammatical information (including assertion and truth value) on the other hand are separated formally across two constituents. This structural factorization, which of course is absent from simple predicates, has serious consequences for the encoding of predicate-centered focus. Our aim is to classify the relevant predicate structures and to explore how these determine the expression of predicate-centered focus.

(d) Syntactic properties of predicate-centered focus structures

As mentioned above, some languages employ complex syntactic constructions to express predicate-centered focus. There is an ongoing discussion on how to analyze some of them in structural terms. To mention one notorious case, out-of-focus verb forms in Hausa are often characterized as being subordinated in cleft-like constructions (cf. (3)b. above). However, they are also used in sequential

clauses in a type of co-subordination. This ambiguity makes it difficult to conclusively analyze the focus constructions with respect to their syntactic and clause linkage type. Exploring these issues in more detail provides a better understanding of the general syntactic patterns as well as the internal organization of the verb system. The possible prosodic reflex of the syntactic properties of verb focalization and verb topicalization will be analyzed for Akan in close cooperation with project D5.

3.4.2 Topic 2: Predicate-centered focus in clause types other than affirmative main clauses (I. Fiedler)

The research questions in phase 1 have been pursued largely for independent affirmative main clauses. The second phase attempts to extend the investigation to other clause types which have been observed to interact intricately with predicate-centered focus.

(a) Negation and truth value focus in negative main clauses

Sentential negation has repeatedly been analyzed as inherently focused under certain conditions (cf., e.g., Givón 1975, Marchese 1983, Güldemann 1996). Since sentential negation is most often marked on the predicate we expect an intricate interaction between negation and predicate-centered focus. For example, there is evidence from several languages (e.g., Ama, Aja, Hausa, some Bantu) that negation and the marking of truth value focus exclude each other. Compare (5) from Ama where the negation marker *há* and the marker for predicate-centered focus *ká* are in complementary distribution, namely in the slot directly before the verb (the form *á t̪ì-gə́l-d̪ɛ́* without any marker simply means 'I washed').

(5) {Did you wash the clothes?}

yɛ̀ì,	ǎ	ká	t̪ì-gə́l-d̪ɛ̀.	vs.	bwɛ̂r,	á	há	t̪ì-gə́l-d̪ɛ̀.
yes,	1S	PF	PFV-wash-pl		no,	1S	NEG	PFV-wash-pl

B: yes, I DID.   B: no, I DIDn't. (Fiedler 2010b)

We also investigate cases of the co-occurrence of negation and truth value marking. Are we dealing here with a different type of negation, possibly even more emphasized in the sense of correction or denial?

Moreover, the verb systems of a number of African languages (Makhuwa, Aghem and some other Bantu, Hausa, Fulfulde, Yom, etc.) display a dichotomy of two different TAM sets, one expressing that a (part of a) predicate is in focus, the other that it is not. This differentiation is cancelled in negation, some subordinated clauses, and some tense/aspect and modality forms. Given that these categories have quite different properties with respect to their focus structure, we need to motivate their similar behavior regarding the conjugation split. We will investigate these questions starting from the hypothesis, put forward by Güldemann (1996) for Bantu languages (see also Hyman and Watters 1984), that predicate-centered focus marking tends to be incompatible with inherently focused categories, among them negation (and some TA-forms), as well as contexts conveying background information and/or lacking internal IS organization (some subordinate clauses). On the other hand, we found that in the different African languages we investigated it is different TAM markers that 'lose' their focus distinction in the negation/subordination contexts, which would speak against a semantic explanation. To better understand the problem, we will analyze in more detail the specific morphosyntactic properties of the negation in these languages and investigate the specific role of aspectual or temporal information.

(b) Predicate-centered focus types in subordinate clauses

As just mentioned, some types of subordinate clauses (e.g., adverbial and restrictive relative clauses) have been characterized as less assertive and/or presenting presupposed information. However, this observation should not be generalized.

We will have a closer look at clause-linkage in our sample languages and their interaction with the expression of predicate-centered focus. We will investigate which subordinate clauses can be seen as more parallel to main clauses in exhibiting a focus-background structure and/or presenting salient information units (cf. Brandt 1990). Thus, complement clauses seem to recurrently convey (stronger) assertions (cf. Güldemann 1996: 159-87, Givón 2001, **A1**: Fanselow 2008).

But we have also identified cases where devices normally expressing predicate-centered focus turn up in special temporal clause-linkage types, e.g., in 'as soon as'-clauses. This suggests that even adverbial clauses should be more finely differentiated with respect to their IS behavior. Hausa, for instance, has two ways to express (temporal) adverbial clauses which are often described as not showing any semantic difference. The main structural difference between these two variants is that the conjunction can be either in a simple form (e.g., *bayan*), which is then followed by a predicate-centered focus form, or in a more complex structure conjunction+subordinator *dà* (e.g., *bayan dà*) triggering the out-of-focus verb form. We hypothesize that temporal clauses introduced by the simple conjunction

that displays less-dependent morphosyntax present foreground information, whereas in the latter the linkage between the two clauses is in focus. Based on the text corpus developed within the SFB and other Hausa texts, we will investigate whether the observed structural differences reflect differences in pragmatic structure or whether they are a matter of grammatical control, simply triggered by the conjunction *dà*. Compare also Newmann's (2000: 558) examples concerning the 'when' vs. 'as soon as' distinction, which correlates with the absence vs. presence of the predicate-centered focus verb form:

(6)a. dà ya tsayàa sai sukà yi ta bugùnsà.   [with out-of-focus PFV]
        When he stopped they kept on beating him.

   b. dà yaa tsayàa sai sù yi ta bugùnsà.   [with in-focus PFV]
        As soon as he stops they keep on beating him.

Similarly, Shona has a focusing auxiliary verb *ti* which is also found in certain temporal clauses. Its contribution to the overall semantics of such complex sentences is not to establish clause-linkage per se but to focus on the specific temporal relation (Güldemann 2002).

(7)   ka-rume   kai-ti   ka-ka-tema   ko-pfugama.
       12DIM-man   12:HAB-PF   12-COND-strike   12:INIT-drop.on.knee.
       whenever the little man struck he would drop on one knee
       [without kaiti:] if/when the little man strikes he drops on one knee

(c) The focus structure of yes/no questions

Previous investigations have shown that yes/no-questions do not always ask primarily for the truth value of a proposition. They can also focus on part of the proposition by questioning a single constituent. In some languages, this is reflected by the use of different focus-marking strategies. Consider, e.g., Ama: if the polar question contains the marker *ká*, the focus lies on the truth value of the whole proposition (8b), whereas without *ká* an argument of the proposition is in focus (8a).

(8)a. kàká   ádʒārā   t̪át̪á?   vs.   b. kàká   ádʒārā   kā   t̪át̪á?
        Kaka   bycicle   buy.PFV   Kaka   bycicle   PF   buy.PFV
        Did Kaka buy a BYCICLE?   DID Kaka buy the bycicle?   (Fiedler 2010b)

This resembles Makhuwa, where the disjoint verb is used when questioning the truth value, but the conjoint verb occurs when only a term is in focus. Our investigation thus far has revealed that this phenomenon is found in a number of languages. We will further investigate this more systematically by examining the pragmatics and structure of yes/no-questions in our sample languages. The theoretical analysis of focus in yes-no-questions and alternative questions will be carried out in close cooperation with A. Haida and S. Repp from Project A2 (cf. Haida 2010, Repp 2006).

3.4.3   Topic 3: Synchronic and diachronic development of predicate-centered focus structures

(a) Areal case study of eastern Mali (K. Prokhorov)

Eastern Mali is an area of considerable linguistic diversity hosting languages from half a dozen clearly distinct families, some of which display salient expression types for predicate-centered focus. We aim to establish a cross-areal profile of the expression of predicate-centered focus and identify the similarities and differences across these languages in order to answer the following questions: (i) What patterns related to predicate-centered focus can be identified as borrowed or as having evolved under influence of similar structures in neighboring languages? (ii) What sociolinguistic factors determine the direction of contact interference? Evidence that IS concepts can be transferred between languages comes, for example, from Yiddish that exhibits discourse functional borrowing from Slavic (cf. Prince 2001), and also from Lelemi (Ghana) which has borrowed its focus marker from Akan (Schwarz and Fiedler 2007).

In spite of their great heterogeneity, languages of eastern Mali show several common patterns in their morphosyntax including those related to predicate-centered focus, suggesting that these patterns have emerged under the influence of language contact. Thus, a number of so-called 'emphatic' clause-final particles are shared by the majority of languages of the area. Their function differs from language to language but always remains essentially connected with the expression of truth value focus. A relevant case in Bambara has already been illustrated in (1) with clause-final *dɛ́*. Compare in this respect the very similar clause-final particle *dé* in Mombo to express contrastive truth value focus. This particle is arguably borrowed from Bambara or from some other closely related Manding language.

(9)   ǹ-tɛ̀mɛ̀   dé
       1S.eat.PFV   PF
       {You did not eat the mangoes}. (NO,) I did! (Prokhorov field notes)

The relation between sociolinguistic status and possible direction of contact interference is also of importance. As Fulfulde and Bambara, (and French) are languages of wider communication, while Mombo and Bangeri me are spoken by rather small linguistic minorities, we assume that the smaller languages take over the structures from the first ones, as could be observed in the languages of the lower Volta Bassin (Schwarz and Fiedler 2007). At the same time Bangeri me is expected to be largely influenced by Dogon languages (including Mombo), since Bangeri me people live in a close contact with speakers of several Dogon varieties and even consider themselves as Dogon. To take the instance of the above mentioned particles, we assume that Mombo has borrowed its truth value particle from Bambara. We will test such hypotheses by looking for any internal and/or external linguistic evidence supporting them.

(b) Bantu case study (Y. Morimoto)

In an in-depth study of the Bantu family, we concentrate on the micro-variation observed in the grammar of predicate-centered focus and its historical dynamics, with particular focus on Savannah Bantu (zones D-S). It is planned that Prof. Jeff Good, who has crucial expertise on information structure in Bantu and Bantoid languages, comes to Humboldt University for a period of six month in 2013 as a visiting researcher.

One prominent focus-related phenomenon that has received much attention in previous research is so-called conjoint and disjoint verb morphology, referred to as "emphatic" (Collins 1962), "action focus" (Givón 1972, 1975), "focus" (Kimenyi 1980), or "assertive focus" (Moshi 1988) in the early literature. The exact analysis of the phenomenon, however, varies from language to language: a more recent analysis resorts only to syntactic constituency - that the conjoint verb must take a following constituent (e.g. Buell 2006); another, to the focal nature of the following constituent (e.g. Creissels 1996). Hyman and Watters (1984) and Güldemann (1996, 2003) argue for yet another view that the disjoint morphology is used to express predicate-centered focus. This view is reinforced by the current investigation of Makhuwa (Güldemann et al. 2010 and references therein); it is also exemplified by the following Zulu data concerning the presence and absence of the focus-sensitive prefix -*ya*- (Cheng and Downing, to appear).

(10)a. Q: When is Sipho cooking meat?

A:	ú-Sipho	ú-yí-phéka	namuhlâ:nje	í-nya:ma.	*conjoint for*
	1-Sipho	1SUBJ-9OBJ-cook	today	9-meat	*term focus*

Sihpo is cooking meat TODAY. [impossible with disjoint form úyayíphéka]

b. Q: Is Sipho going to cook the meat today?

A:	ú-Siph'	ú-ya-yí-phé:k'	í-nyama	namuhlâ:nje.	*disjoint for*
	1-Sipho	1SUBJ-DJ-9OBJ-cook	9-meat	today	*truth-value focus*

Sipho IS going to cook the meat today.

Building on our findings on Makhuwa and languages like Zulu, we aim to provide a unified analysis of these previously researched languages within a theory of predicate-centered focus.

Our study will additionally explore phenomena beyond conjoint/disjoint verb morphology such as (i) prosodic phrasing (Chewa - Kanerva 1990; Haya - Byarushengo, Hyman and Tenenbaum 1976; Xhosa - Jokweni 1995; Zulu - Cheng and Downing, to appear), (ii) tone marking on the object (Herero - Marten and Kavari 2006), and (iii) tone alternation on the verb (Haya - Hyman 1999; Tswana - Creissels 1996): languages that use prosodic phrasing uniformly show focus-sensitive "boundary narrowing" (cf. Downing 2004), where the phonological boundary comes after the focused constituent; tone marking on the object in western Bantu languages like Herero occurs when the object is in focus - or when some predicative feature is out of focus; the environment in which the verb tone alternates between high and low tone in languages like Haya and Tswana in some tenses (e.g. past tense) is identical to the conditioning of the conjoint-disjoint alternation in other tenses (e.g. present progressive). Based on these observations, we will further investigate these phenomena as potentially alternative expressions of the distinction of predicate-centered vs. term focus, in an attempt to take a step further from previous investigations which have analyzed them in isolation and seemingly unrelated.

An attempt to unify these core grammatical phenomena under a single discourse-functional domain eventually allows us to deepen our understanding of the possible history of predicate-centered focus in Bantu relating to such questions as: How have these different grammatical devices come to encode predicate-centered focus? How is it that some Bantu languages display multiple marking of predicate-centered focus (e.g., verb tone and verb morphology in Makhuwa), while others display only one of them. Could it be that earlier Bantu had multiple marking, and different languages lost different pieces of marking?

3.4.4   Methods

(a) Language sampling

Our investigation so far has been based on a sample of 22 languages representing the great typological and genealogical diversity in Africa. Compared to the first application, we have replaced a few languages but we will largely continue to work on this balanced language sample and further enrich it by several Malian and Bantu languages (see §3.3.3), as shown in the table below. While this sample is relatively large, the investigation is feasible due to the considerable experience of the project members and partners in the relevant research as well as their expertise on individual languages and the comparative aspects of the different language groups.

	No.	Family	Languages	Word order	Tone	Morphology
	1	Chadic	**Hausa**	SVO	+	synth.
	2	Berber	Tamashek	VSO	-	synth.
	3	Semitic	Amharic	SOV	-	synth.
	4	Cushitic	Somali	SOV	+	synth.
	5	Omotic	Gimira~Bench	SOV	+	synth.
	6	Saharan	Kanuri	SOV	+	aggl./synth.
	7	Moru-Madi	Ma'di	SVO/SAuxOV	+	aggl./synth.
	8	Bongo-Bagirmi	Mbay	SVO	+	aggl./synth.
	9	Kuliak	Ik	VSO	+	aggl./synth.
	10	Nilotic-Surmic	**Maa**	VSO	+	aggl./synth.
	11	Songhai	Koyraboro Senni	SVO/SAuxOV	?	isol./aggl.
	12	Nyimang	Ama	SOV	+	aggl.
	13	North Atlantic	**Wolof**	SVO	-	isol./aggl.
new	14	North Atlantic	Fulfulde	SVO	-	synth.
	15	Mande	**Bambara**	SAuxOVOther	+	aggl.
new	16	Mande	Bozo	SAuxOVOther	+	isol.
	17	Gur	Supyire	SVO/SAuxOV	+	aggl.
	18	Kwa	Aja	SVO/SAuxOV	+	isol.
	19	Benue-Congo	Emai	SVO	+	aggl.
	20	Benue-Congo	Makhuwa	SVO	+	aggl.
new	21	Benue-Congo	Kikuyu	SVO	+	aggl.
new	22	Benue-Congo	**Matengo**	SVO	+	aggl.
new	23	Benue-Congo	Zulu or North Sotho	SVO	+	aggl.
	24	Dogon	**Mombo**	SOV	+	aggl.
new	25	Isolate	Bangeri me	SAuxOVOther	+	isol./aggl.
	26	Ju-=Hoan	Juǀʼhoan	SVO	+	isol.
	27	Khoe-Kwadi	**Namib. Khoekhoe**	SOV	+	isol./aggl.
	28	Isolate	Sandawe	SOV	+	isol./aggl.
new	29	Malayo-Polynesian	Malagasy	VOS	-	aggl./synth.

Note: Bold = languages with planned detailed discourse analysis
Table 1: Language sample of phase 2

(b) Analytical tools

We will largely maintain the methodological approaches taken in the first project period. An important part of the languages will thus be dealt with on the basis of secondary sources (grammatical descriptions, text collections, etc). We will, however, also elicit first-hand data during primary research in Africa or in Germany for a growing number of languages, in order to compensate for the lack of relevant information in some descriptions and due to the extension of the number of languages as explained above. For data elicitation, we will rely on the available questionnaires and materials. In order to accommodate the new research questions, we will develop a questionnaire dealing with negated and subordinate clauses of different types, and another triggering verbal negotiation (e.g. a court case). We also plan to cooperate with colleagues working on some of our sample languages to share annotated texts etc (as done already in the past for Ama, Maa and several others).

In the first phase we focussed on identification, discrimination, and morphosyntactic analysis of expressions of predicate-centered focus; the main methods were related to grammatical description as well as data elicitation in individual languages. The primary interest in the second phase will increasingly shift from basic empirical work towards a more theoretically and typologically oriented work and involve more textual analysis. The main analytical methods will therefore be partly adjusted accor-

dingly. Based on the wealth of data from many diverse languages we have obtained/will obtain, our future research will concern far more techniques associated with the different types of cross-linguistic categorization and comparison known from typology and historical linguistics (including areal typology).

(c) Archiving and sustainability

The amount and complexity of our own data and those from the literature have grown to an extent that it has become necessary to develop a cross-linguistic data base on predicate-centered focus, concentrating on the collected examples that include grammatical categories, syntactic structures, discourse contexts etc. Further development and creation of such a data base will be a major task for the second phase. All the data including those on sample languages, sources, etc. will then be brought into a unified format and annotation scheme. It will be a relational data base (possibly Filemaker) which can be searched for different parameters and parameter co-occurrences. This will considerably enhance data retrieving for our research as well as data archiving and sustainability in the future.

Furthermore, by storing our data in the database ANNIS, in close cooperation with D1, we can ensure sustainability of the data and their possible use in the wider SFB context. After the expiration of a fixed retention period, these will be open to the interested linguistic public. All these data are supplemented by digital corpora for Hausa and Wolof, which have been and still are being developed within the SFB network with our collaboration (cf. §3.4).

3.4.5   Working program

The project comprises several components that supplement each other for achieving the overall goal: to better understand and explain the still insufficiently known domain of predicate-centered focus. We combine a considerable amount of primary field work with different types of (re)analysis of already available language data (from diverse perspectives). Reducing the balanced language sample would severely minimize the typological character of the project, which is one of its strengths both within and outside the SFB. All this requires the work capacity applied for here.

In general, field research, data analysis (particularly with respect to topic 1), data processing and archiving, and text analysis will be carried out throughout the project duration and need to go hand in hand, hence not specifically mentioned in the following approximate time schedule.

Year	Logistic and/or theoretical foci	Field research	Events
2011	Development of questionnaire for marked clause types (§3.3.2), Development of project data base		
2012	IS and negation (§3.3.2(a)), Typological and historical profile of eastern Mali (§3.3.3(a)), Comparative Bantu data on conjoint/disjoint marking (§3.3.3(b))	Bangeri Me, Bozo (Prokhorov); Ama (Fiedler), Ethiopia (Wetter)	Workshop with French team in Berlin
2013	IS and clause linkage (§3.3.2(b)), Relevant IS morphology in eastern Mali (§3.3.3(a)), Comparative Bantu data beyond conjoint/disjoint marking (§3.3.3(b))	Fulfulde, Bangeri Me, Bozo (Prokhorov); Matengo (Morimoto); Ethiopia (Wetter); Botswana-Namibia (Güldemann)	Workshop in Osaka with Japanese collaborators
2014	IS and yes/no questions (§3.3.2(c)), Relevant IS syntax in eastern Mali (§3.3.3(a)), Historical aspects of predicate-centered focus in Bantu(§3.3.3(b)); Typological, areal and genetic correlations by means of data base	Fulfulde, Bangeri Me, Bozo, Tamashek (Prokhorov); Matengo (Morimoto); Ethiopia (Wetter) ; Botswana-Namibia (Güldemann); Ama (Fiedler)	International conference on predicate-centered focus types in Berlin
2015	Systematization of data base; Typological, areal and genetic correlations by means of data base; preparation of final monograph publication		

As the project only started in the middle of the SFB, exploring the questions raised (including data gathering, data analysis, data processing, and the comparative analysis with respect to typological, theoretical, areal and genetic implications) can only be accomplished with 2 full positions. A more restricted working capacity would make it impossible to accomplish all tasks with the necessary depth, and pursue the well-balanced language sample to maintain the typological character of the project.