Conjunctive and disjunctive verb forms
D. Langa (Edoardo Mondlane University) & T. Taraldsen (University of Trosmø)

1. The basic contrast
In certain tenses, the verb has two morpho-syntactically distinct forms with the same TAM-semantics, a conjoint (CJ) form and a disjoint (DJ) form, on many Bantu languages. The CJ (verb form) must be followed by a (VP-internal) complement or an (VP-internal) adverb, while a DJ need not be followed by anything. In other tenses. the same form appears in both environments. We will call such forms neutral.
We will consider CJ and DJ forms as morphologically distinct even in the absence of segmental morphology whenever the two forms have distinct tone patterns that cannot fully be accounted for by general tone rules.

2. Two approaches to the CJ vs. DJ contrast
We know of two main theoretical interpretations of the empirical facts. On the one hand, researchers following Hyman & Watters (1984) take the CJ vs. DJ contrast to reflect focus placement. According to Hyman & Watters, for example, the DJ forms appear if and only if the truth value of the sentence is in focus ("assertive focus"), i.e. the occurrence of DJ morphology is directly comparable to the appearance of the emphatic *did* in English sentences like *He DID eat the apple.*
A different view is taken by van der Spuy (1993) and others who claim that DJ morphology simply signals that the verb is VP-final. (Notice that "VP" in this context must stand for a constituent big enough to contain both the verb and (focused) adverbs.) Occasionally, it is suggested that focus-placement is the determinant factor in some languages, while other languages require an analysis along the lines of van der Spuy; cf. Buell & Riedel (2008). But we will suggest that some characteristic properties of the CJ vs. DJ contrast are too stable cross-linguistically for this proposal to be plausible. Since those properties seem to speak in favor of an analysis akin to Hyman & Watters's proposal, we are therefore led to favor approaches associating the CJ vs. DJ alternation with focus placement in all Bantu languages, even though there are well-known counterexamples that are taken to argue against. One of these is mentioned in section 6, where we suggest that it can be circumvented on a more elaborate analysis of focusing.

3. Properties favoring Hyman & Watters (1984)
The following are the properties that seem to be characteristic of the CJ/DJ-alternation in all Bantu languages:

A. The DJ includes the CJ
Riedel (2009) notes that a CJ can be turned into a DJ by the addition of a morpheme to its left, reflecting Hyman & Watters claim that "the focus variants are derived from the [-focus] forms by the addition of something". But it does not appear to be the case that a DJ is ever turned into a CJ by the addition of an overt morpheme. This seems easier to understand under a focus-based analysis than in the analyses emanating from van der Spuy (1993) which would have to explain why there is an overt marker when the verb is VP-final, but none when it is not VP-final, rather than the other way around.

B. Sensitivity to TAM properties

The CJ/DJ alternation is found only with certain tense/aspect combinations, typically the present (non-progressive) and the perfect. Other TAM categories are typically neutral, e.g. the future or the progressive forms. While Hyman & Watters's account may provide the beginnings of an understanding of this (see section 6), analyses adhering to van der Spuy's view must take the limitation of the CJ/DJ-contrast to certain TAM-categories to be accidental. This will count as an argument against those analyses to the extent that the sensitivity to TAM-properties can be shown not to be random. We think that it is not, but to demonstrate this, we will need a precise characterization of the semantics of TAMs across the different Bantu languages.

C. Sensitivity to negation

There is generally no contrast between CJ and DJ forms with identical TAM-properties in negative sentences. Only the CJ forms appear, e.g. the Nguni *–ya-* never appears under negation. Again, it seems that analyses incorporating van der Spuy's hypothesis have nothing to offer, while Hyman & Watters can take the negation itself to be able to license "assertive focus". (However, the present perfect shows a DJ/CJ-alternation even under negation in Zulu according to Buell (xx).)

D. Limitation to certain clause-types

The alternation between CJ and DJ forms with the same TAM properties is only found in indicative sentences. There are no purely DJ-forming morphemes like the Nguni *–ya-* with participial or subjunctive verbs, although real TAMs may occur. This too seems unexpected on van der Spuy's proposal, but Hyman & Watters can account for it by showing that certain clause types are incompatible with assertive focus.

We would like to emphasize that claim that the CJ/DJ-alternation has these properties in all Bantu languages, must obviously be tested on the basis of data from more languages than we have been able to look at. But it is significant that they are shared both by Aghem for which a focus-based analysis seems plausible and Zulu, which van der Spuy's claim was based on.

In the next two section, we look at other empirical issue that need to be settled.

4. Objects in and out of VP

Saying that DJ morphology reflects assertive focus, makes predictions about the position of the object of a verb in its DJ guise only to the extent that one also assumes that assertive focus excludes associating the object with focus, and that non-focused objects must be "dislocated". In principle, there might be languages in which a DJ form allows the object to remain inside the VP. This obviously contrasts with analyses based on van der Spuy's proposal. Therefore, it is important to determine whether there are languages in which DJ morphology clearly is compatible with having an object in the VP. If there are such languages, the van der Spuy proposal simply cannot be the basis for a unified analysis of DJ vs. CJ contrasts across the Bantu languages. By contrast, finding languages in which the object must be evicted from the VP when the verb is a DJ form, doesn't contradict the focus-based analysis.

To this end, one needs to examine the position of the object with respect to VP-external elements in sentences with DJ verb forms. If the object must be dislocated when the verb appears in its DJ form, it would be expected to follow VP-external elements. But there is some evidence that this is not universally the case. For example, Hyman & Watters' examples (1) and (2) from Aghem show that the object of a DJ verb precedes *nɛ* "today" just like the object of a CJ verb, and that *nɛ* only precedes the object, when *nɛ* itself is focused and the verb is in its CJ form.

Prosodic evidence may also bear on this issue. For example, Kraal (2009) provides examples from Makonde where a DJ form is followed by a constituent with which it seems to form a prosodic domain exactly as the CJ form does.

5. Types of focus and the syntactic feature +Focus

In Luganda, a noun can lose its initial vowel only if it is focused. In Aghem, the class marker of a noun is prefixed to the noun when the noun is focused, but is a suffix when the noun is out of focus. In both languages, the "in-focus form" of an object cannot co-occur with DJ-morphology on the verb. (Notice that Hyman & Watters' example (1)b indicates that the out-of-focus form can still be VP-internal.) On Hyman & Watters' approach this is accounted for by assuming that only one constituent per clause can be focused. But this seems to presuppose that assertive focus and object focus etc. at some level count as the same thing, i.e. assigning assertive focus is just one of several equivalent ways of providing a (unique) focus. On this view, certain clauses (essentially indicative clauses) come with a syntactic feature +Focus (possibly located in the upper region of the clause) which must be associated with some constituent in the clause, but doesn't care which. A DJ form appears just in case the (extended) VP is to be associated with +Focus and there is no TAM which can mediate this association.

If this is correct, the clause types in which DJ forms do not appear must lack the feature +Focus. But if focusing an object or an adverb also involves association with +Focus, this leads to the expectation that the distinct in-focus forms of object nouns should not appear in these clause types either with the important qualification that the object of a participial verb in certain constructions might be accessed by the matrix +Focus, while assertive focus on the participial VP would be blocked by the matrix verb. It is therefore important to verify if this correlation holds in all Bantu languages where nouns arguably have distinct in-focus forms. If it does, we have another argument against simple implementations of van der Spuy's idea, which provides no reason to expect that in-focus forms of nouns and DJ forms of verbs should fail to appear in exactly the same clause-types.

We should add that contrastive focus cannot be dependent on +F within this scheme, since Hyman & Watters show that a contrastive focus marker may be associated with an out-of-focus noun in Aghem.

Finally we look at one type of counterexample to the focus-based account of CJ/DJ-alternations.

6. Auxiliary focus vs. VP-focus

Buell (xx) shows that even in a main clause the verb always appears in the CJ form in Zulu when it is followed by *kahle* "well". even though *kahle* itself may not be focused.

This is hard to understand on Hyman & Watters approach where DJ morphology is associated with assertive focus, since *He DID sing well* is perfectly fine.

To make Buell's observation consistent with the analysis outlined in section 5., we need to say that the appearance of *kahle* within the VP allows the VP itself to be focused without the intermediary of assertive focus, and that assertive focus in Zulu is a last resort mechanism invoked only when it is the only way of associating a constituent with +F. The first of these two claims embodies a claim about the way sets of alternatives are formed, assuming that focus is based on the existence of a set of alternatives, as in Rooth (1992): We suggest that a set of alternatives to a focused VP cannot be constructed by changing the verb or its arguments, but can be based on low modifiers like *kahle* (in a way that doesn't require *kahle* itself to be contrastively focused).

When the VP itself cannot be the basis for the construction of a set of alternatives, alternatives can only be formed with respect to TAM properties introduced at higher nodes. This is where auxiliary focus kicks in. In tenses that come with a TAM morpheme that expresses TAM values that can be used for the formation of alternatives, we then get neutral forms. If there is no such TAM morpheme, a DJ morpheme must be merged (assertive focus).

It is implicit in this that not all TAMs provide properties that allow the construction of alternatives. Departing from Hyman & Watters account, we will suggest that some TAMs are so deeply embedded that their TAM values are already fixed and cannot be played with to form alternatives at the point where they are seen by the relatively high +Focus head. For example, the same auxiliary can mean both future "will" and deontic "must" in Kîîtharaka, but has a DJ form only when it means "must", and we take this difference to reflect the fact that this auxiliary occurs low when it means "must", but high when it means "will", in a way consonant with the general thrust of Ramchand's (2012) account of modals.

7. The project

This survey of analyses and the data bearing on them is meant to highlight the need to fill in certain gaps in our understanding of what the patterns really are. We propose to use AfrAnaph resources to this end while being aware of it that eliciting reliable judgments about fine-grained TAM semantics is a tall order.

References:

Buell, L. & K. Riedel (2008), The conjoint/disjoint alternation in Sambaa, TiN-dag hand-out

Hyman, L. & J.R. Watters, Auxiliary focus, Studies in African linguistics 15.3

Kraal, P. (2009), Makonde, in G. Dimmendaal (ed), *Coding participant marking: Construction types in 10 African languages*, Vol. 110, John Benjamins

Ramchand, G. (2012), Indexical vs. anaphoric modals, ms., CASTL, Tromsø

Riedel, K. (2009), *The syntax of object marking in Sambaa*, LOT dissertation series

Rooth, M. (1992), A theory of focus interpretation, Natural Language Semantics 1.1

van der Spuy, A. (1993), Dislocated noun phrases in Nguni, Lingua 90, 335-355