

## Towards a reconstruction of Proto-Mande

Unlike many of the previous speakers, I am going to focus on problems of syntactic reconstruction. This is of course a very problematic area, since we still don't know much about the syntax of many of the Niger-Congo languages (apart from word order – and even that is not always clear). What I'm going to present to you are just some thoughts on the methodology, illustrated with data from Mande.

As we all know, the historical relation between the Mande languages and the Niger-Congo family has been at the center of a long-standing debate, not only because of problems with lexical reconstruction, but also because of the structural properties of Mande. Some of the skepticism can be summarized – in a simplified form – in a single statement: “Mande languages look so unusual – how can they possibly be part of the Niger-Congo family?”

Indeed, Mande languages display a whole bunch of syntactic properties that are typologically unusual and have not been reported for the established sub-branches of Niger-Congo. Such properties present a real challenge for the hypothesis of Niger-Congo affiliation of Mande. It seems unlikely that a branch of Niger-Congo could have developed – in a relatively short time – all these typologically unusual properties. It seems more natural to hypothesize instead that these features were present in the ancestor of the Mande languages, and perhaps it was just a weird-looking proto-language isolate which perhaps had nothing to do with Niger-Congo.

In this talk I will discuss a few of the syntactic properties in more detail, just to show that the logic underlying this conclusion is not necessarily correct. I will argue that combinations of unusual properties do not have to represent independent innovations. Instead, I will suggest that a single unusual construction may trigger, in a proto-language, the development of whole clusters of unusual properties. And finally, I will discuss a possible mechanism of change that could result in the combination of properties attested in Mande.

### 2.

I'll start with my Rarum 1: this is a highly unusual relativization strategy attested in Southeastern Mande. I give a summary of the well-known typology of relativization strategies in (1); it's the typology based on the type of morphosyntactic means that are used to encode the syntactic role of the relativized noun phrase in the relative clause.

The subtype that's most relevant for us is the non-reduction strategy, which involves using a full-fledged noun phrase within the relative clause. The non-reduction strategy comes in three varieties. In internally headed relative clauses, a full noun phrase appears inside the relative clause, and there is no corresponding element in the main clause, something like *Which man's picture I saw, is not here*. In the correlative construction, the noun phrase appears inside the relative clause, which is followed by the main clause with a resumptive pronoun: *Which man's picture I saw, he is not here*. The last type is the paratactic strategy, and this construction is characterized by a very

loose relation between the two clauses – there is no special marking of relativization. That could be something like *I saw a man's picture, he's not here*, without any evidence for subordination.

I'll now turn to the unusual construction attested in Mande, to show that it doesn't fit into the standard typology. In (2a), from a Southeastern language called Wan, there's a simple sentence 'Take some rice to the woman', which can be read, literally, as 'Go with rice to the woman'. In (2b), there's another simple sentence: 'We slept at the woman's place'. Now let's see what happens if these two simple clauses are combined into a complex sentence in (3): 'Take some rice to the woman at whose place we spent the night', literally, we get 'Go with rice, we slept at the woman's place, to her.'

This construction is unusual: first of all, one clause appears to be embedded in the other – entire (2b) is embedded before the postpositional phrase of (2a). But surprisingly, the relative clause appears to be both internally and externally headed: the relativized noun phrase – 'the woman' – appears inside the embedded clause, but it is also referred to once again by an anaphoric pronoun within the main clause. In addition, there is no explicit marking of relativization, and the relative clause looks precisely like the independent clause in (2b).

I don't have time to fully argue that the construction is indeed an instance of a clause-internal correlative, and not some other kind of a non-reduction strategy. I give the crucial examples on the handout, and we can return to them later. I'll go directly to the properties relevant to the reconstruction.

There's an interesting difference between the correlative clauses of Mande and a superficially similar construction that has been described for modern Indo-Aryan languages. In Indo-Aryan, correlative clauses can be adjoined directly to the nominal head inside the main clause. I represent this analysis for our sentence in (3-double prime). Here, the correlative clause adjoins to the pronoun, and together they act as the argument of the postposition. This analysis wouldn't work for us, for the following reason. If a pronoun could be modified by an adjoining relative clause, we would expect such complex noun phrases to appear in all nominal positions. It turns out that in a number of Mande languages, this construction is restricted to sentences with postpositional phrases, that is, to sentences with relativized arguments of postpositions. In other words, the embedding of a relative clause is only possible in the position in front of a postpositional phrase, not in any position preceding a pronoun. In (7), there is an ungrammatical sentence with a relative clause inserted in front of an object pronoun; this option is not available in Wan. This shows that we need a better way of describing this construction, without assuming that the relative clause is adjoined to the pronoun. [[I have to skip further evidence in the interest of time; we can return to later on.]]

In (9), I represent the structure I assume for the sentences with clause-internal correlatives. Here, the postpositional phrase is directly preceded by a correlative clause. Interestingly, all Southeastern Mande languages have an alternative construction in which the relative clause is fronted. This is example (10), and it looks exactly like regular textbook examples of the correlative strategy. This construction is attested in all Mande languages, so it must be the original way relativization was expressed in Proto-Mande. What seems to have happened in Southeastern Mande is that the relative clause acquired the ability to appear inside the main clause.

In the example from Wan, the relative clause was embedded in the position before a postpositional phrase. If you look at example (11), from Dan-Gwetaa, you will see that the same type of clause can be embedded in the position before a verb phrase. The sentence means ‘Zan built a house that is surpassed in size by the house of the chief’, that is, Zan’s house is smaller than that of the chief. The main clause is ‘Zan has built it’, but in front of the verb phrase we get a correlative clause, and within the correlative clause, the relativized noun phrase is topicalized: ‘That house, the chief’s house is big and is superior to it in it’, that is ‘superior to it in its bigness’. The entire clause is embedded in the main clause, resulting in the – well, elegant – structure in (12).

I should also say a few words about the formal marking of relativization. The languages really vary in that respect, along a continuum stretching from obligatory relativizers to optional and non-existent markers. Some have post-nominal relativizers marking the relevant noun phrase, others have clause-final markers, which mark the entire relative clause. There are overviews in (13) and (14). Most importantly, the individual markers are very different; they are not cognate, and they reflect language-specific and recent innovations. These innovations postdate the development of clause-internal correlatives, so the differences in the formal marking are superficial, from the historical point of view, compared to the common underlying syntactic structure. //PAUSE//

Now the question I’m going to address is how the unusual syntactic structure developed, and here we come to my Rarum 2. I’m going to suggest that the development of clause-internal correlatives was triggered by another unusual property that all those languages have – the clause-internal nominal extraposition. In (15a), there’s an example with regular left-dislocation, from Wan: ‘That tree, climb into it!’ In (b), the same noun phrase is embedded in the position before the postpositional phrase: “Climb – that tree – into it.” This is a somewhat paradoxical construction with an “embedded extraposed noun phrase”: the noun phrase behaves as an extra-clausal constituent, and it is referred to by a pronoun within a postpositional phrase. But at the same time, it is embedded in the clause. In (16b), there’s a special position in front of the postpositional phrase where topicalized constituents can appear.

In some of the Southeastern Mande languages, extraposed noun phrases can appear not only before postpositional phrases, but also before verb phrases. (17) is from Dan-Gwetaa: ‘someone took that child’ – literally, ‘someone – that child – took him’. Again, we see a dislocated noun phrase, now in the position before the verb phrase and after an auxiliary.

The striking fact about these constructions is their distribution across the languages, and in particular, the way that distribution lines up with restrictions on clause-internal correlatives. First of all, both are attested in Southeastern Mande, and Southeastern Mande basically fall into two groups. In Wan and Mwan, the clause-internal dislocation is restricted to postpositional phrases: the extraposed noun phrase can only appear before a postpositional phrase. In such languages, the correlative also appears only before a postpositional phrase. In (18), I’ve tried inserting a correlative before a verb phrase in Wan, and this doesn’t work, independently of the pronoun you use in the main clause.

In Tura and most dialects of Dan, an extraposed noun phrase can appear before a verb phrase. And these are precisely the languages where the correlative clause can also appear in that position. (19) is from Tura, and that language differs from Wan in the acceptability of correlatives that precede verb phrases.

This correlation between restrictions on the position of the correlative and restrictions on extraposition suggests a diachronic connection. And there is one dialect of Dan that violates that correlation, and provides further insight into the history of the two constructions. It's Kla-Dan, which allows extraposition in both positions but doesn't allow correlatives to appear before the verb phrase. So we can sketch a historical scenario to relate the two properties in (20) – it appears that clause-internal positions are first introduced for topicalization and then extended to correlatives, and the process starts with postpositional phrases. In Wan and Mwan, we get nominals before postpositional phrases, and the same position has become generalized to clauses. In Kla-Dan, the nominal position has become extended to verb phrases, but the correlatives are still found only before postpositional phrases. And at the next stage, the correlatives also start appearing before verb phrases, and that's what happened in Tura and the other dialects of Dan.

Now, it's nice that we can relate the unique structure with clause-internal correlatives to another syntactic property. But the clause-internal nominal extraposition is also a very unusual feature, so the question is, why it developed in the first place. Crucially, we can see that the process starts with postpositional arguments, so the construction is first introduced with postpositional phrases. Perhaps there is something unusual about the structure of postpositional phrases in the Southeastern Mande languages that triggered the development of a special topic position in front of it. And that's where we come to my Rarum 3. I do indeed want to argue that Mande postpositional phrases are rather special, in that they are extremely loosely connected to the rest of the sentence.

Mande languages are characterized by typologically unusual word order: rigid S-OV-X. All subjects and objects precede the verb, but all other arguments and adjuncts follow the verb. This word order is due to a rather peculiar syntactic feature: the unusually high attachment of postpositional phrases. In particular, postpositional phrases do not form a syntactic constituent with the verb, they are adjoined to the entire finite clause. I can't go into all the details of this property, but I will just illustrate it with some examples. In (21), the matrix verb 'start' takes a non-finite complement. Such complements appear just before the verb, like objects: 'He began to do the work'; the embedded verb is transitive, its object appears before it. In (21b), the embedded verb is intransitive, and it takes an oblique argument: 'She began to climb onto the tree'. Surprisingly, the oblique argument appears at the end of the clause, after the matrix verb, and not next to the embedded verb. There is no way it can be inserted next to the verb with which it is associated semantically: (c) is impossible.

The discontinuous position of the postpositional argument is described in (22): the postpositional phrase adjoins to the entire finite clause, very high up in the structure; it can't be embedded in the non-finite complement together with its verb. Another type of example is provided by sentences like (23); I don't have time to discuss them.

The crucial thing about this discontinuous structure is the fact that it is ubiquitous – it is obligatory with all combinations of the main and the embedded verb, and it appears with other lexical heads that select for an oblique

argument, such as nominalizations. I give a generalized sentence structure in (26), just to highlight once again the unusual position of postpositional phrases.

This extremely reduced structure of verb phrases is again unusual – verb phrases can't accommodate a postpositional argument. I believe that in Mande, it developed historically due to a transfer of nominal syntax to verb phrases. This may have happened during a stage of massive reanalysis of constructions with nominalization as constructions with verb phrases, in contexts like 'I am AT eating'. And crucially, in some of the languages noun phrases don't allow for postpositional modifiers, and a nominalization can't combine with a postpositional argument. If this feature were transferred to verb phrases, we would expect exactly this kind of a discontinuous structure. I won't discuss the details of this proposal, but I just wanted to point to a potential extension of the chain of syntactic changes that ultimately led to the development of all these unusual features.

Okay, in Section 5 I've sketched a unifying scenario that I think accounts for the distribution of the three syntactic "monsters" that characterize Southeastern Mande. It looks like it all started in Proto-Mande, with the introduction of clause-level adjunction of PPs. At that stage, relativization was most likely performed by means of a paratactic construction, which later gave rise to "normal", clause-initial correlatives. In Southeastern Mande, a special topic position developed before postpositional phrases, and that position was then generalized to correlatives, as in Wan and Mwan. In Tura and Dan, clause-internal extraposition becomes generalized to verb phrases, and in some of the languages, correlatives also start appearing before verb phrases.

The good thing about this scenario is that it fits pretty well with the accepted classification of Southeastern Mande, and the historical groupings of the languages are supported independently by lexicostatistical analysis. But crucially, we could have predicted the same groupings just based on the syntax, so this is I think a rare case where the syntax may actually compete with the lexical data in its usefulness for the reconstruction. Okay, conclusions!

I have tried to present a picture of the way clusters of rare features develop through regular mechanisms of change. In our case, one typological raram – the clause-level adjunction of PPs – seems to have triggered the development of other unusual structures – the clause-internal nominal extraposition, and later, the clause-internal correlative clauses. This snowball effect suggests that we should not treat multiple unusual syntactic properties as evidence for genealogical distance between the languages. In fact, multiple individual properties may go back to a single innovation in the Proto-language. If the scenario I've sketched out is correct, we would have to distinguish between two stages in the development of Proto-Mande (as we do, for example, for Indo-European).

Most importantly, I think it all shows that along with methods of lexical reconstruction, we need to pay special attention to questions of syntactic reconstruction, and the reconstruction of syntax should take into account the fact that unusual properties tend to occur in clusters, and we should try to find ways of distinguishing between clusters of historically related properties and clusters of independent innovations. Thank you.