ON METATYPY:
WHAT IS POSSIBLE IN LANGUAGE CONTACT?

BERND HEINE
(University of Cologne)

1. Introduction

Ever since contact linguistics developed into a subdiscipline of linguistics, a main issue of research has been with what is possible and what is not when people speaking different languages interact. One position on this issue, maintained by Thomason and Kaufman (1988) and adopted by others is that there are essentially no linguistic constraints on language contact and that "virtually anything can (ultimately) be borrowed", as Harris and Campbell (1995: 149; see also Curnow, 2001; Thomason, 2001) put it. According to another position, contact-induced change, like any other linguistic change, is constrained by principles of grammaticalization (Heine and Kuteva (2005; 2008). Finally, there is also the position that there is at least one domain of language structure that is immune to transfer in language contact, namely what tends to be referred to as "core grammar" or "core syntax" (Sanchez, 2004; Montrul, 2004; Silva-Corvalán, 2007; see Siemund, 2008: 9; Doğruöz & Backus, 2007: 7).

In line with the "everything-goes" hypothesis of Thomason and Kaufman (1988; see also Thomason, 2008) it has been claimed that the theoretical endpoint of contact can be a situation where the languages in contact become structurally and semantically "the same", in that either language A develops a shape that is indistinguishable from that of language B, or alternatively that languages A and B assimilate to one another as a result of language contact to the extent that they both lose their original shape and acquire a new, identical shape. Whichever of these two possibilities may apply, the result would be the same, namely one and same "shape" shared by two different languages. That such a situation may arise has been argued for in various works on sprachbunds and other areal groupings, and a central notion in such discussions being that of metatypy (Ross, 1996; 1997; 2001).

An ideal case of metatypy would be one where there is a group of genetically unrelated or only remotely related languages having the properties listed in (1).

(1) Properties characterizing metatypy
    a Languages A and B share the same organization of semantic structure.
    b The two share the same patterns in which morphemes are concatenated to form sentences, phrases, and words.
    c There is only one difference between A and B: Each has a distinct set of form-meaning units but, on account of (a) and (b), each unit of A has an exact structural equivalent B, and vice versa.
    d Hence A and B are entirely intertranslatable, to the extent that the task of the translator or language learner is confined to inserting the appropriate lexical and grammatical forms to move from A to B, and vice versa.

In accordance with the descriptions provided by Ross (1996; 1997; 2001), metatypy can be defined as the wholesale restructuring of a language's semantic and syntactic structures as a result of language contact, leading to a new typological profile in the replica language on the one hand, and to a large degree of direct intertranslatability between the model and the replica language on the other (see e.g. Ross, 1996: 182). Metatypy thus constitutes the extreme case of what in some theoretical frameworks of language contact phenomena is described as "convergence". The question that we are concerned with here is: Do such cases of metatypy exist?

Ever since Gumperz and Wilson (1971) published their seminal paper on the linguistic situation in the Indian village Kupwar, a number of cases of metatypy have been claimed to exist; for example, Ross (1997: 146) proposes a catalogue of twelve linguistic communities that are said to have undergone metatypy, in particular the following:

– The Indian village Kupwar (Gumperz & Wilson, 1971),
– Northwestern New Britain (Thurston, 1987; 1982),
– the Gangou dialect of Chinese and the Mongolic language Minhe Monguor (Yongzhong et al., 1997),
– Arvanítika, the Albanian dialects spoken in central Greece, and Greek (Sasse, 1985),
– the Oceanic language Takia and the Papuan language Waskia of Papua New Guinea (Ross, 1996; 2001).

In order to test the limits of what is possible in situations of intense language contact we will now look at two case studies of intense language contact, one involving Molisean in southeastern Italy and the other Hup of Amazonia in northwestern Brazil. Our interest is centrally in changes in *typological profile*, that is, with a significant restructuring of a grammatical system (Aikhenvald 2006a: 18) which, in the wording of Heine and Kuteva (2006, chapter 7), concerns cases where a language as a result of grammatical replication experiences a number of structural changes to the effect that that language is structurally clearly different from what it was prior to language contact. We will, however, not be able to deal with language structure as a whole; rather, we will be restricted to grammatical replication, that is, to contact-induced transfer of meanings and structures from one language (=

the model language), to another (= the replica language; Heine and Kuteva, 2005).

2. Molisean

Spoken by a community of Croatian speakers who emigrated around 1500 from the Hercegovinian Neretva Valley because of the Turkish invasion of the Balkans and settled in southeastern Italy, Molisean is nowadays spoken in two villages, Acquaviva and Montemitro, of Molise Region in the Campobasso Province. After contact both with the local varieties of Italian and with Standard Italian over a period of half a millennium, their language has been massively influenced by this Romance language (for a survey, see Breu, 1998; see also Breu, 1999; 2003a; 2003b; 2003c; 2004).

Together with Upper Sorbian and Lower Sorbian of eastern Germany, Molisean forms one of what Breu (2003a) refers to as the Slavic "micro--languages"[1]. There are a number of differences between these micro--languages, however. First, Molisean does not dispose of a standard form, and second, the model language is German in the case of the two Sorbian languages but non-standard varieties of Italian spoken in the Molise region of the Campobasso Province, since about 150 years also Standard Italian. Otherwise, however, the situation of the two languages is fairly similar. The two model languages are with reference to the subject matter of the following discussion structurally alike, and contact between model and replica languages has in both cases a long history.

2.1. Restructuring processes

The influence of both regional varieties of Italian and Standard Italian has led to a number in restructurings in the Slavic minority language. One of them appears to have been in the direction of a slight shift from a Slavonic--type synthetic to a more analytic morphological format, a paradigm example being provided by the marking of the comparative of inequality (Breu, 1996: 26): Speakers of Molisean have given up the conventional Slavic synthetic construction by replicating the analytic Italian construction, using *veče* as degree marker on the model of Italian *più* 'more'. Thus, while Standard Croatian uses the synthetic form *lyepši* 'more beautiful', Molisean has *veče lip* 'more beautiful' instead. One might argue that this renewal would have happened anyway without necessarily requiring a language contact hypothesis, as it has happened in many Indo-European languages over the last centuries and millennia. But there is one piece of evidence which supports the contact hypothesis. While Italian, like all other Romance languages, has given up the use of synthetic degree markers, there are a few synthetic forms left in Italian, and it is exactly in these cases that the synthetic forms have

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[1] We are not able to do justice to the fine-grained analysis presented by Breu (2003a); the reader is referred to that work for many more details.

also survived in Molisean at least as optional variants. Thus, where Italian has *migliore* or *più buono* 'better', Molisean as well has this variation: *bolji* or *veče dobar* 'better', and in exactly these cases there is also a third form, consisting of the old comparative form with the new degree marker: *veče bolji* ('more better'). This coexistence seems to suggest that there was a four--stage evolution of the kind sketched in (2), which is in accordance with what one commonly finds in cases of grammaticalization.

(2) A four-stage scenario of evolution from synthetic to analytic comparative construction
  1 There is a synthetic form (e.g., Molisean *bolji* 'better').
  2 An analytic degree marker is added (*veče bolji*).
  3 Redundancy is eliminated in that after the degree marker the positive (basic) form is used (*veče dobar* 'more good').
  4 The old synthetic form disappears (this stage has not been reached in our example).

Another kind of process in Molisean concerned semantic restructuring on the model of Italian, which can be illustrated with the following example. The regional Italian verb *portare* is polysemous, meaning both 'to carry' and 'to drive a car', while prior to contact with Italian, Molisean *nosit* only meant 'to carry'. Molisean replicated the Italian polysemy by adding a second meaning to *nosit,* which now also means both 'to carry' and 'to drive a car'.

But there are also more complex processes of semantic restructuring that Molisean underwent on the influence of the Italian model language. The meaning 'earth' is expressed in Italian by *terra* and in Molisen by *zemlj^a*. Now, in regional Italian 'wet dirt' is *fango* while in pre-contact Molisean there was a noun *kaš^a* 'mush'. The process triggered by language contact is described by Breu (2003a: 357-8) in the following way:

> Since the hypernym *terra* 'earth' could be used regionally for *fango*, *kaša* was also treated as an equivalent of *terra*. For reasons of semantic adaptation, this pertained not only to its special meaning 'wet dirt', but also to the whole extent of the meaning of *terra*, therefore to 'ground' and to 'earth' or 'world' as well. On the other hand, Slavic *zemlja* had existed previously as the general word for 'earth', and was now used as a synonym for *kaša* in the meanings 'ground' and 'earth'. It is however still distinct from *kaša* in not meaning 'wet dirt'. Surprisingly, speakers show no tendency to resolve this complicated situation.
>
> Breu (2003b: 358)

The process of differentiation in the three codes is summarized in (3); the resulting situation can be summarized thus: There is no equivalence between the model and the replica language: Whereas *fango* is monosemous, its "equivalent" *kaš^a* is triply polysemous, and whereas *terra* is associated with three meanings, its "equivalent" *zemlj^a* has only two meanings.

(3)	*Model language:* Italian	**Pre-contact replica language:* Pre-contact Molisean	*Replica language:* Modern Molisean
	fango 'wet dirt'	*kaš^a* 'mush'	*kaš^a* 'wet dirt', 'ground', 'earth'
	terra 'wet dirt', 'ground', 'earth'	*zemljⁱ* 'earth'	*zemljⁱ* 'earth', 'ground'

2.2. Nominal structure

One salient effect of language contact within the noun phrase can be seen in the rise of an indefinite article in a language that historically had no form of articles: Molisean has developed an indefinite article which shows roughly the same degree of grammaticalization from the numeral 'one' to article as the model language Italian. The reader is referred to Breu (2003a) for examples; suffice it to illustrate the more advanced stages of development. In the examples below, sentences from Molisean (M) are given, followed by an Italian (I) and an English translation (there are no interlinear glosses, the markers in question are printed in bold, ø stands for lack of article). The (4a)-example illustrates the article use with an abstract noun, while (4b) shows a generic use, where use vs. non-use of the indefinite article appears to be lexically determined. Note that in both examples the replica and the model languages agree to the extent that both can be used with and without article.

(4)   Molisean (Breu, 2003a: 42; = (5) of section 5.2.2)
a   M   Jo, sa jima **na** / **ø** strah!
           I   Ahi, ho avuto **una** / **ø** paura!
                      'Boy, was I scared!'

b   M   Ona je **na** študentesa. / **ø** profesoresa.
           I   Lei è **una** studentessa. / **ø** professoressa.
                      'She is **a** student / **a** professor.'

As these examples show, Molisean speakers have carried their numeral through all stages of grammaticalization, developing an indefinite article that is largely equivalent to the Italian model, even if the replica category is not entirely identical with the model category; there are some contexts where the replica language does not use the article, or else the article is accepted by some speakers but not by others. Thus, in some generic uses, Italian has an article while Molisean speakers preferably do not use one.

A second area where contact affected the structure of the noun phrase is that of gender distinctions (Breu, 1994; 1996). Like other Slavic languages,

Croatian is a three-gender language distinguishing masculine, feminine, and neuter, while Italian has only two genders, lacking a neuter category. Molisean has been heavily influenced by Italian, and one of the results of contact was that Molisean lost the neuter gender of nouns, in that neuter nouns were assigned as a rule to the masculine gender – thereby achieving structural equivalence with Italian. Now, similar cases of gender loss are not uncommon in Indo-European languages, in particular in the Romance languages, and one might therefore wonder whether the Molisean loss of the neuter gender was necessarily due to Italian influence. As Breu convincingly shows, however, contact must in fact have been involved. For example, while Italian has lost its neuter gender, the variety of Italian spoken in the Molise area has retained relics of the neuter gender in specific contexts, and Molisean has also retained its neuter gender in the corresponding contexts, namely with adjectives and pronouns in impersonal utterances. Loss in this case led to a reorganization of gender assignment in the replica language.

The development from synthetic to analytic morphological marking that we observed above also extends to case marking, where old case suffixes tend to be replaced with adpositions. When this happens, the existing case suffixes are first strengthened by adpositions (which take their own case suffixes) before they give way to adpositions and eventually may be lost. Slavic languages express case distinctions by means of case suffixes while Italian uses prepositions instead. Now, in the contact situation of southern Italy, speakers of Molise Croatian tend to add prepositions having functional equivalents in corresponding Italian prepositions to nouns marked by case suffixes. One example concerns attributive possession, where a new, analytic construction [possessee *do* possessor.GEN] was created on the model of Italian [possessee *di* possessor]. In this process, the Croatian allative preposition *do* 'to, toward' (governing the genitive case) was selected as an equivalent of the Italian possessive marker *di* (Breu, 1990b: 54; 1996: 26-7). The overall evidence suggests that we are dealing with the first step on the way towards a renewal of case marking, where the Slavic case suffixes have not been lost but appear to be giving way to prepositions as the primary means of marking case distinctions under the influence of Italian.

Another example concerns comitative-instrumental syncretism. In the same way as some other Slavic languages in contact with Germanic or Romance languages has Molisean extended the use of its comitative preposition *s* to also mark instrumental participants (Breu, 1996: 26-8). Accordingly, a Standard Croatian instrumental phrase as in (5a) is expressed in Molisean as in (5b) on the model of Italian, cf. (5c).

(5) Instrumental marking in Standard Croatian, Molisean, and Italian (Breu, 1996: 26)
a   Standard Croatian   nožem   'with a knife'
                                          (knife.INSTR)

b   Molise Croatian   **s**   nožem   'with a knife'
                        (with knife.INSTR)

c   Italian   **con**   un coltello   'with a knife'
                          (with   a   knife)

In this way, Molisean speakers established structural isomorphism in a double sense: First, they introduced a comitative-instrumental polysemy identical to the one of the model language Italian and, second, they introduced a preposition where the model language also has a preposition.

2.3. Verbal structure

Molisean has inherited a Southern Slavic 'want'-future tense, based on the grammaticalization of a verb of volition ('want' + main verb). In the Italian dialects surrounding the Molisean area there is a future tense based on the grammaticalization of a possession verb ('have' + main verb), and Molisean speakers have created a second future tense by means of their possession verb *imat* 'have, must', thereby acquiring a 'have'-future like the Italian model language. The two Molisean futures are however not identical in meaning, differing in the modality expressed: Whereas the 'want'-future expresses probability, cf. (6a), the 'have'-future is a necessity future, cf. (6b). To conclude, the resulting situation in the replica language is one which differs not only in its semantics but also in its morphosyntax both from the model language and from the situation of the Slavic replica language prior to language contact, cf. the summary in (7) (Breu, 2003b: 369--70); we will return to this general issue in section 4.

(6) Modern Molisean (Slavic; Breu, 2003b: 370)
a   ču po rabit.   'I will (probably) go to work.'
         Probability future
b   mam po rabit.   'I will (definitely) go to work.'
            Necessity future

(7)	Model language: Italian of Molise	*Pre-contact replica language: Earlier Molisean	Replica language: Modern Molisean
		'want'-future'	'want'-future: probability
	'have'-future'		'have'-future: necessity

The tense-aspect system of Molisean provides a second example of grammatical replication. Italian has a kind of progressive construction of the type *sta arrivando* 'is arriving' corresponding to but being less grammaticalized than the English progressive construction. Breu (1992: 117) argues that speakers of Molisean are trying to replicate this construction by using their adverb *sa* 'now' frequently whenever Italian speakers use the progressive construction, equating (8a) with (8b) of their Slavic language, thereby establishing a kind of formula of equivalence between the two languages.

(8) (Breu, 1992: 117)
   a Italian   sta arrivando   'he is coming'
   b Molisean   sa gre   'he is coming' (lit.: 'now he comes')

Temporal adverbs for 'now' occasionally give rise to progressive aspects (Bybee, Perkins & Pagliuca 1994; Heine & Kuteva 2002), but the grammaticalization process leading to the Molisean use pattern[2] is clearly different than the one that gave rise to the Italian progressive construction. Thus, according to the description proposed by Breu (1992) we are dealing with an instance of evolutionary non-equivalence but synchronic translational equivalence, in that the meanings of the two constructions are treated as equivalents.

2.4. Word order

There are no indications that the linear arrangement of words in Molisean has been affected dramatically in the contact situation, but the following example suggests that Italian influence also extended to word order: As Breu (1996) shows, nominal attributes in the Slavic language experienced a change from preposed to postposed position, thereby matching the structure of the Italian model language. That we are dealing with a change that was contact-induced is suggested e.g. by the fact that Italian may use word order to express a functional distinction between a differentiating (postposing) and descriptive (preposing) use of attributes. Exactly this distinction has been replicated by Molisean speakers, cf. (9).

(9) Molise Croatian (Breu, 1996: 31)
   a jena   hiža   mala   'a big house (not a small one)'
       one   house   big

   a jena   mala   hiža   'a big house'
       one   big   house

3. Hup

The linguistic area of the Vaupés River Basin in northwestern Brazil and adjacent Colombia is made up of languages mostly belonging to the (presumably) genetically unrelated East Tucanoan and Arawak families. In spite of their different genetic affiliations can the languages of the Vaupés basin be said to share one and the same overall typological profile, as is suggested by the analysis by Aikhenvald (especially 2002; 2006b). Properties defining this profile are in particular (a) a nasalization as a prosodic feature

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[2] Note that the Molisean progressive constitutes a recurrent use pattern which has not developed into a conventionalized construction.

and a voiced alveolar stop and liquid as allophones, (b) four to five categories of evidentials, (c) classifiers used with demonstratives, numerals, and in possessive constructions, (d) a nominative-accusative profile which includes one case form marking topical non-subjects, (e) one locative case covering all of direction, location, and source, (f) verb compounding or contiguous verb serialization to express aspect and changing valency, and (g) identical formations, e.g., 'father of goods' = 'rich man' (Aikhenvald, 2006a: 13).

The North Arawak language Tariana is not only the best described language of the Vaupés basin (Aikhenvald, 2003c), it is also one of the few languages of the world for which there exists a fairly comprehensive documentation on language contact, thanks to the pioneering work of Alexandra Aikhenvald (1996; 2002; 2003a; 2003b; 2006b). The present section however is not on Tariana; rather, we are concerned with another language of the Vaupés basin which has more recently become better known through the work of Patience Epps, and our account is based on her analysis (Epps, 2006).

Hup, spoken by some 1500 people, belongs to the Nadahup (or Makú) family, and the members of this family differ in a number of ways from the other peoples of the region. Whereas the Tucanoan and Arawak peoples are river-dwelling agriculturalists, the Hup and other Nadahup peoples are traditionally semi-nomadic hunter-gatherers, and they do not participate in the linguistic exogamy system characterizing Tucanoan and Arawak peoples. At the same time, they have long been engaged in an active sociolinguistic relationship with the river dwellers and, in the course of this relationship, have been deeply influenced by the languages of the river dwellers, most of all by Tucano and other East Tucanoan languages – to the extent that their grammars have been restructured, as we will see below.

To our knowledge, there are no details on the sociolinguistic history of contact between Tucanoan languages and Hup. What is obvious, however, is that modern Hup speakers do not really welcome the influence from other languages:

> Hup speakers are generally conscious of keeping their language distinct from Tucano, and react negatively toward some types of language mixing. Accordingly, Hup has resisted the direct borrowing of Tucanoan (and other non--native) forms, favoring various other strategies for coining new words. In its grammar, on the other hand – of which speakers are less consciously aware [...] – Hup has undergone significant diffusion, apparently with considerable innovation and restructuring of categories to fit the Tucanoan model. As one would expect given the present sociolinguistic situation, this diffusion appears to have been entirely unilateral from Tucanoan into Hup [...].

> Epps (2006: 269)

We will now discuss the main effects of this diffusion, where we are restricted to those effects that can be assumed to have had some bearing on the

typological profile of the language[3]; for more detailed discussion, see Epps (2006; see also Aikhenvald, 2006a).

3.1. Nominal structure

The following examples may illustrate how the structure of the noun phrase of Hup was transformed by contact with Tucanoan languages. Tucanoan languages have a system of noun classification, categorizing inanimate concepts by shape and animate ones by gender distinctions. As a result of contact with Tucanoan languages, Hup speakers are developing an incipient system of noun classification, categorizing inanimates on the basis of shape and animates on the basis of gender specifications, where shape-based classifiers arise in Hup via the grammaticalization of words for plant parts. The Hup classifiers are not only semantically similar to those of Tucano and other languages of the Vaupés area; like in these languages, the classifiers and gender markers also occur with numerals, demonstratives, adjectives, relativized verbal nouns, and on nouns as derivational markers.

As would be expected from a young noun class system, the Hup system is not nearly as strongly grammaticalized as the Tucanoan model systems are; for example, only a subset of Hup nouns take the classifiers (Epps, 2006: 275).

In a similar fashion, the numeral system of Hup appears to have been shaped by contact with Tucanoan languages. For example, the numeral for 'four' is based on the concept of social relationship and a nominalized form in both: Tucano *ba pâ-ritise* (companion-NOMZ), Hup *hi-bab-ní* (FACT--sibling-be.NOMZ).

Furthermore, both Hup and the East Tucanoan languages have a number system of "split plurality" determined by animacy and marked by bound suffixes/enclitics, and use a singulative suffix to refer to individual insects such as ants, wasps, bees, etc., and they also share a structurally similar associative plural (Epps, 2006: 276).

On the model of Tucanoan languages, Hup has also developed a Tucano-type case marking structure, where the subject is not marked while a single marker (the suffix *-ǎn*) is used for a variety of non-subject participants, including direct objects and recipient and beneficiary indirect objects. Note further that, like in Tucano, this non-subject case suffix can also occur directly on verb stems to present object relative clauses.

Another case feature that Hup must have acquired as a result of language contact in the Vaupés area can be seen in what Aikhenvald (2006a: 16) calls a "catch-all locative case", namely the suffix *-Vt*, which encodes

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[3] Hup shares many of the feaures discussed below with Tariana, a fact that is ignored here in order to save space. The reason for this typological similarity between the genetically unrelated Hup and Tariana languages is due to the fact that both have undergone the same kind of Tucano-ization process, which has been reconstructed in great detail by Aikhenvald (2002; 2006a; 2006b) has shown convincingly.

not only location but also direction to and from and, to some extent, also temporality.

3.2. Verbal structure

In the same way as the nominal structure has the verb phrase of Hup been deeply affected by contact with Tucanoan languages. Aikhenvald (2006a: 29) observes, for example, that the frequency of use of serial verb constructions accounts for their spread from Tucanoan languages into Hup. In East Tucanoan languages there exists an extremely productive process of what Epps calls verb compounding where in a sequence [main verb – dependent verb] the latter frequently encodes information on aspect, aktionsart, or causality. This construction type appears to have been replicated in Hup (Epps, 2006: 281). Thus, whereas Nadahup languages not or less affected by contact would use a prefix to indicate causation, Hup speakers created the same kind of serializing construction as found in Tucano:

(10) Tucano (Tucanoan; Epps 2006: 282)

koô-	re	da'dá-	duti-	ya.
3.SG.F-	NON.A/S	work-	request-	IMP

‘Order her to work.’

(11) Hup (Nadahup; Epps 2006: 282)

tíh-	ǎn	biʔ-	yæ̃h.
3.SG-	NON.A/S	work-	request.IMP

‘Order her to work.’

But perhaps more dramatic are the contact-induced changes in the domain of evidentiality and tense marking. One noteworthy typological feature of East Tucanoan languages is the presence of a complex system of evidentiality, distinguishing four to five evidential concepts, expressed by portmanteau forms encoding person, tense, and number. By contrast, the Nadahup family, to which Hup belongs, has no system of this kind, even if a reported evidential category can probably be reconstructed back to the language ancestral to the family. As a result of contact, Hup speakers have grammaticalized a five-way system of evidentiality that is strikingly similar to that of their Tucanoan neighbors. Once again, Hup speakers have drawn on their own lexical resources; for example, the non-visual evidential enclitic =hɔ̃ appears to be a grammaticalized form of the verb hɔ̃ h- ‘produce sound, make noise’, and the inferred evidential =cud probably goes back to the verb cud- ‘be inside (i.e. be hidden)’. And like in East Tucanoan languages did the evidentials in Hup presumably develop via the grammaticalization of compounded verbs (Epps, 2006: 278, 282). Note that in the same way as the Hup system of noun classification is weakly grammaticalized, so is the Hup evidential system, which has not nearly reached the high degree of grammaticalization characterizing the corresponding Tucano system.

Indicating tense distinctions explicitly tends to be minimal in the Nada-hup languages, including Hup. The East Tucanoan languages, in contrast, mark present, recent past and distant past tense obligatorily by means of verbal portmanteau suffixes, in addition to distinguishing several future tenses with suffixes. Presumably under the influence of Tucanoan models, Hup speakers have developed means of expressing tense distinctions, such as an obligatory future tense suffix, and they have created a combination of tense and evidentiality marking that is reminiscent of the portmanteau tense--evidential markers found in Tucanoan languages (Epps, 2006: 280).

3.3. Syntax

Contact-induced grammatical transformation has also affected the sentence syntax of Hup, and East Tucanoan influence can be held responsible for a development from head-marking to dependent-marking and from verb--medial (AVO) towards verb-final clausal syntax, as well as for a range of additional syntactic patterns (Aikhenvald, 2006a: 16, 18; Epps, 2006: 284-5).

The examples discussed above by no means exhaust all the evidence produced by Epps (2006) to demonstrate that Hup shows a definite structural movement in the direction of the Tucanoan model languages. In concluding we may mention a few instances of semantic replication illustrating the nature of the process[4]: Both Tucano and Hup use the expression 'bone-son' for the cultural hero or deity, 'deer' for the tripod used in manioc processing, 'star-saliva' for dew, etc. Having undergone a range of contact-induced grammaticalizations and other replication processes, the result is that Hup has acquired a typological profile that clearly contrasts with that of its Nada-hup relatives that did not participate in the Tucano-ization process.

4. Conclusions

Aikhenvald (2006a: 4) proposes the important notion of "layered languages", applying this term to situations where, as a result of intense language contact, innovations are constantly being added to languages in the course of their development, "as if piling tier upon tier of 'naturalized' foreign elements", where "the inherited 'core' is discernible underneath the subsequent 'layers' of innovative influence from outside." She finds instances of layering e.g. in the Amazonian languages Tariana and Hup, which show a layer of Tucanoan influence, the Tetun Dili language of East Timor with a Romance layer, or the Indo-Aryan Romani language with its layers from Greek and other European contact languages (Aikhenvald, 2006a: 5-6). Our interest here was not so much with separating layers of diffusion from the "core" of genetically inherited linguistic substance but rather with find-

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[4] Note that these instances of hypothesized replication were not all restricted to Hup; rather, other languages of the Vaupés area also participated in at least some of them.

ing out whether, or to what extent, the "core" of the structure of a language has been affected by layering, i.e. by the interaction with another language.

As the two case studies presented above suggest, language contact can have far-reaching consequences for the languages concerned: All three major domains of grammar, the noun phrase, the verb phrase, and clausal structure, have been affected by language contact: Molisean and Hup experienced a number of structural changes to the effect that these two replica languages are structurally clearly different from what they were prior to language contact; thus, they acquired a new typological profile in accordance with the definition that we proposed in section 1. But has layering proceeded to the extent that these languages are suggestive of any form of metatypy in the sense defined above (cf. (1))?

In section 1 we raised the question of whether genuine cases of metatypy do exist. There are in fact cases that are said to exhibit a fairly high degree of approximation, most of all the ones we mentioned at the beginning of this paper, namely the Indian village Kupwar, Northwestern New Britain, the Oceanic language Takia and the Papuan language Waskia of Papua New Guinea, the Gangou dialect of Chinese and the Mongolic language Minhe Monguor, or Arvanítika, the Albanian dialects spoken in central Greece, and Greek. Unfortunately, there is no detailed linguistic description for any of them, let alone any historical account of the grammatical replication processes. But what these situations have in common is that one or more languages were restructured on the model of other languages, and all languages show structural approximations of varying degrees towards the ideal type of metatypy. At a closer look, however, none of these cases appears to correspond to the characteristics of metatypy enumerated in (1) in every respect.

And the same applies to the two cases looked at in this paper: Both Molisean and Hup have changed in all main domains of their structure in the direction of the respective model languages, they have acquired new use patterns and constructions while existing structures were modified – with the effect that Molisean now differs dramatically from its fellow Slavic languages and Hup from its relatives within the Nadahup family. But in neither case did a genuinely metatypic situation arise: Molisean has remained a Slavic language, and rather than becoming a Tucanoan-type language, Hup has not ceased to be a Nadahup language. While both experienced a change in their typological profile (see section 1), massive language contact did not have the effect that the status of the two replica languages changed dramatically, neither with regard to their genetic affiliation nor to their overall morphosyntactic structure.

This raises the question of how the status of the two replica languages can be described: Is it possible to define their structure along a continuum extending from the pre-contact replica language to the model language, or along a scale of relative degrees of "metatypicity"? While it does not seem possible to answer this question satisfactorily given the limited data that are available, there is reason to doubt whether the answer will clearly be in the affirmative, for the following reason: When speakers in situations of lan-

guage contact aim at establishing translational equivalence between the replica and the model languages, this does not necessarily lead to structural isomorphism, that is, towards metatypy; rather, the result may be that these speakers create structures that have equivalents neither in the model language nor in the replica language. A number of examples from language contact between Molisean and Italian that were discussed in section 2 (for more example, see Heine forthc.); the following may illustrate the problem involved: In an attempt to establish semantic equivalence between their noun *zemlj^a* 'earth' and the Italian noun *terra* 'earth', speakers of Molisean created a complex lexical structure that is equivalent neither to the situation of pre--contact Molisean nor to that of the model language Italian or any of its regional varieties.

To conclude, as we saw in the preceding paragraphs, language contact may lead to massive transfer of linguistic structures from one language to the other. But we are not aware of any case where in such a situation the languages concerned really became structurally identical or nearly identical. Molisean has not turned into a Romance language nor has Hup turned into a Tucanoan language. What the evidence available clearly suggests however is that, as a result of language contact, both languages have become structurally more complex than they were prior to language contact.

Abbreviations

F = feminine; IMP = imperative; INSTR = instrumental; NON.A/S = non-subject; SG = singular; 3 = third person.

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