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Isomorphic processes

Grammaticalization and copying of grammatical elements

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The paper outlines the main principles of grammaticalization, the Code-Copying Model, and the emergence of isomorphic structures in language contact. It offers a number of examples of code-copying and grammaticalization, and a summary of the author's approach to contact-induced change and grammaticalization. In particular, it argues that grammaticalization – in the usual sense of a process by which lexical items lose some or all of their lexical meaning and become grammatical markers – cannot be shared by codes as a result of code-copying. At the same time, it contends that shared grammaticalization in the sense of a parallel development of elements is clearly possible.

Keywords: code-copying, contact-induced change, grammaticalization, target of copying, isomorphism

1. Isomorphism

The present paper is intended as a contribution to the discussion of cases of isomorphism in which two or more languages share specific ways of creating grammatical markers. Such instances may be attributable to language contact, inheritance, i.e. common ancestorship, or universal principles of grammatical change. The paper will focus on the relations between grammaticalization and grammatical copying. These relations raise intricate questions, which have been discussed in highly stimulating publications such as Aikhenvald (2002, 2003), Aikhenvald & Dixon (2001), and Heine & Kuteva (2003, 2005).

2. Grammaticalization

Grammaticalization is taken here to be a process leading from lexemes to grammatical markers:¹ an operation by which content words lose some or all of their lexical properties and come to fulfill grammatical functions. Lexical items may thus develop into function markers such as auxiliaries, case markers, inflections, sentence relators, etc.; for examples from the Turkic-speaking world, see Johanson (2011). Grammaticalization involves an input and an output, i.e. a Source of Grammaticalization and a Target of Grammaticalization:

SOURCE OF GRAMMATICALIZATION > TARGET OF GRAMMATICALIZATION

Copying leading to grammatical function markers involves the following operation: copies of free or bound markers of a Model Code are inserted into the frame of a Basic Code, into specific slots, “insertion points”, which are normally filled by their indigenous equivalents. This operation is based on the speakers’ subjective assessment of equivalence, that is, of what is felt to be analogous, not necessarily on typological equivalence in any precise linguistic sense. The frame provided by the Basic Code accommodates the copies, which thus become part of the recipient system and may even replace their indigenous equivalents. There is thus, again, an input and an output, a Source of Copying and a Target of Copying:

SOURCE OF COPYING



TARGET OF COPYING

3. Code-Copying

Figure 1 illustrates the descriptive resources of the Code-Copying Model. The globe symbolizes a global block of material, semantic, combinational, and frequential properties. M(aterial) properties concern the shape, S(emantic) properties the content, C(ombinational) properties word-internal and word-external combination patterns, and F(requential) properties the frequency of use.

In the case of Global Copying, a unit of a Model Code, e.g. a morpheme or a morpheme sequence, is copied as a whole global block of material, semantic, combinational, and frequential properties. Grammatical markers may also be created by means of Selective Copying, which is more relevant for the topic of the present paper. In this case, individual material, semantic, combinational, or frequential

1. Or from less grammatical to more grammatical functions.

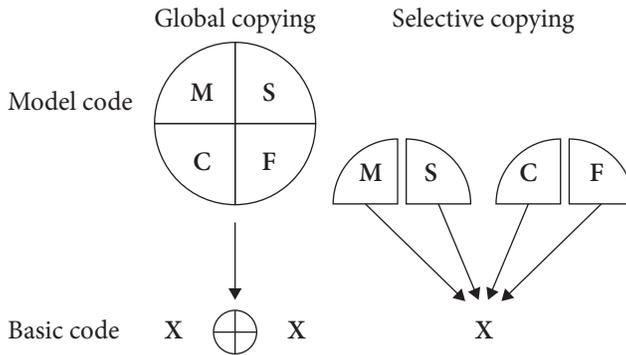


Figure 1. Synoptic representation of Global and Selective Copying (cf. Johanson 2008: 65)

properties of a Model Code item are chosen and copied onto corresponding items of a Basic Code. These moves can be characterized as a kind of drag-and-drop operations, though they always imply differences between the original and the copy.

4. Combined schemes

Combining the scheme of Grammaticalization with the scheme of Selective Grammatical Copying, we get the following picture:

$$\begin{array}{c} \text{SOURCE OF GRAMMATICALIZATION} > \text{TARGET OF GRAMMATICALIZATION} = \\ \text{SOURCE OF COPYING} \\ \Downarrow \\ \text{TARGET OF COPYING} = \text{COPY} \end{array}$$

What happens? Basic Code users are confronted with a certain grammaticalized element of a Model Code. On the basis of some conceptual similarity, they establish, consciously or intuitively, an equivalence relation between this grammatical element and a suitable Target of Copying in their own code. They copy semantic and combinational properties of the Model Code item onto a matching Basic Code item. The Basic Code item can now be used with a meaning and a combinability similar to that of the Model Code item; compare Aikhenvald's concept of "grammatical accommodation" (2002: 5, 239; 2007: 24).

Selective Grammatical Copying usually occurs when Basic Code users have reached a relatively advanced level of acquisition of the Model Code. The copiability correlates with the stage of grammaticalization as reflected in different degrees of saliency of meaning and shape. Relatively salient items with more specific

meanings and more elaborated shapes seem to be more easily copiable than less salient items with more generalized meanings and reduced shapes.

5. Lexical and grammatical Targets of Copying

The Target of Copying may be a lexical element of the Basic Code that seems to match the Model Code item and onto which its properties can be copied most naturally. This Model Code item is reanalyzed and remodeled, i.e. assigned the relevant properties.

Here is a simple example: A grammaticalization process in a Model Code may have the lexical element meaning ‘two’ as input and a grammatical dual marker as output. Basic Code users establish an analogy with the lexical element for ‘two’ in their own code and copy properties of the Model Code dual marker onto it as a Target of Copying. A result of this kind of copying measure can be observed in Tayo, a French-based creole in New Caledonia, whose speakers have copied properties of Melanesian dual markers onto their own morpheme *-de* ‘two’, copied from French *deux* (Corne 1995).

The Target of Copying may also be an indigenous grammatical element of the Basic Code. One example is given in Csató (2000: 274): properties of a Slavic marker with instrumental and comitative function (‘by means of’ and ‘together with’) are copied onto the corresponding instrumental marker *-bA* in the Turkic language Karaim. As a result of copied semantic and combinational properties, this marker has extended its grammatical use and can be used in comitative function as well.

6. Copying grammaticalization processes

In their highly valuable endeavors to relate grammaticalization theory to contact-induced change, Heine & Kuteva (2003, 2005) contend that contact-induced grammatical change is essentially subject to the same principles of grammaticalization as changes that are not induced by contact. The authors suppose that speakers can “replicate a grammaticalization process they assume to have taken place in language M”, i.e. in the Model Code (2005: 92).

If we stick to the definition of grammaticalization in the specific technical sense of a process in which lexical items lose some or all of their lexical properties and become grammatical markers, it is, however, clear that this process is not shared by the Model Code and the Basic Code as a result of copying. Basic Code users cannot copy diachronic processes that have already taken place.

The Model Code element is copied at a certain stage of its code-internal development along a specific grammaticalization path. The Target of Copying, on the other hand, has its own history and occupies a certain position in the internal development of the Basic Code. Each instance of copying is a product of this coincidence. The elements involved are the result of processes that have been reached prior to the moment of coincidence. The copying act immediately turns the Target of Copying into a grammatical marker similar to that of the Source of Copying. What is copied is the *result* of a grammaticalization process, not the process itself. Diachronic processes are not copiable, even if they happen to be recoverable by the speakers themselves or by linguists. If the copying act could capture a grammaticalization process, it would be a backward move, a violation of the unidirectionality principle assumed for grammaticalization paths.

7. Awareness of sources

In view of the generally long and complex grammaticalization processes, often extending over centuries, the Basic Code speakers are mostly not aware of the processes in the Model Code. In certain cases, the relation may be clearer because the lexical source is still detectable or even synchronically present in the Model Code. Basic Code speakers with a good knowledge of the Model Code may then be able to equate it with an lexical element in their own code. They may, for example, choose their numeral for ‘two’ as the Target of Copying in order to create a dual marker. This establishes an analogous relation, an isomorphic relationship.

But even if Basic Code speakers are aware of the completed grammaticalization process, this is irrelevant for their act of copying. The only thing copied is the output of the process. The only thing shared by the items of the two codes is similarity in meaning and combinability. The copying act captures a synchronic cut in the developments of the two items. The Target of Copying has not undergone any process by which it has become increasingly grammatical. It is immediately used as a grammatical marker without such a process. While grammaticalization is mostly a long way to create grammatical markers, copying is a kind of shortcut, an operation leading directly to the goal.

The impression that the copy relates to the Source of Copying in the same way as the Source of Copying relates to the Source of Grammaticalization is illusory. The grammatical marker is created in analogy with the relation between the Target of Grammaticalization and its Source. It is an *analogical* creation, and the Source of Copying is nothing more than a *simulated* Source of Grammaticalization. The relation helps the Basic Code speakers to find a matching Target of Copying, but the copying act does not repeat the gradual process from less grammaticalized to

more grammaticalized stages. The analogy concerns grammatical markers which are similar in function, possibly also in material shape, but differ in origin.

8. Life after copying

To sum up: Contact-induced copying does not lead to shared input and output of grammaticalization. But there is also a life after copying. Fresh copies often represent less advanced stages of grammaticalization than their models with respect to semantic, combinational, and frequential properties. Their use is often pragmatically determined; they often have lower text frequencies than their originals; their use is often optional rather than obligatory; and they often have a lower degree of combinability, being less generally applicable to contexts. It is sometimes even difficult to decide whether fresh copies already represent fully grammaticalized categories. As Heine & Kuteva note, “Wherever there is sufficient evidence, it turns out that the replica construction is less grammaticalized than the corresponding model construction” (2005: 101).

Once copied, however, the items may continue developing their grammatical functions. This is a matter of internal developments in the Basic Code. The development is code-internal and gradual. In their further development, the copies may undergo grammaticalization processes of their own, acquiring features typical of more advanced stages, becoming increasingly similar to their models. Heine & Kuteva remark, “Contact-induced language change is a complex process that not infrequently extends over centuries, or even millennia” (2005: 5). In my understanding, it is rather the code-internal, gradual processes subsequent to the copying acts that are complex and long-running. The copies may develop more general grammatical meanings, be used in wider ranges of contexts, get an increased degree of obligatoriness, undergo erosion in the sense of loss of phonetic substance, etc. This makes it increasingly difficult to decide which of two similar grammatical elements that have emerged in chronologically remote contact situations was originally the model and which one was the copy.

Shared evolution in the sense of parallel, isomorphic development of grammatical elements is thus perfectly possible. Codes in contact may evolve in analogous ways, acquiring shared types of grammatical markers. Long-lasting intense contacts involving extensive copying may create convergent structures that make the codes more compatible and intertranslatable. Through gradual processes of this kind, typical of Sprachbund areas, the interacting codes develop shared types of grammatical markers.

9. “Inherited grammaticalization”

The output of a grammaticalization process in an ancestral code may be inherited and developed further by its daughter codes. “Inherited grammaticalization” can only mean inherited and developed *results* of grammaticalization. The daughters do not inherit or repeat any process, but may reflect processes that once took place in the ancestral code and represent them analogically. If a given element of the ancestral code had both a lexical and a grammatical function, this ambiguity may be mirrored in the daughter codes. The emergence of Romance future markers is a well-known case of inheritance. French, Italian, Spanish, and Portuguese possess lexical verbs meaning ‘to have’, e.g. Italian *avere*, all going back to Latin *habere*. This verb was the Source of Grammaticalization for the creation of future markers in Vulgar Latin (*cantari habet* ‘has to be sung’). The daughters inherited the outcome of a completed grammaticalization process, but they certainly did not share the process.

Developments of this kind may result from parallel linguistic “drift” in the sense of Edward Sapir (1921: 171–172). Sapir correctly observed that languages that have long been disconnected often “pass through the same or strikingly similar phases”. A number of genealogically related languages may display a specific type of grammaticalization, which is too late to belong to the common ancestry and cannot be explained by copying. The reason for its appearance might be a tendency that occurs independently in each of the languages, but along parallel lines of development. The codes in question may have undergone certain structurally favored changes, cases of analogical grammaticalization, but it remains inexplicable how the same grammaticalization processes would have occurred repeatedly and independently in the individual daughter codes (see Joseph, this volume; Csató, this volume).

Time erases most traces of old grammaticalization and copying processes, but it might sometimes still be possible to decide whether the isomorphic creation of grammatical markers is a result of remote linguistic relationship, contact, or universal metaphoric tendencies. The considerations put forward in the present paper are not at variance with Robbeets’ conclusions (this volume) regarding the parallel creation of grammatical markers in the Transeurasian languages and the possible genealogical relations between these languages.

The argumentation includes examples of relatively rare processes that may have been completed or that are on their way towards completion in a hypothetical ancestral language. Languages displaying functionally equivalent and phonetically similar bound grammatical markers may have inherited results of old grammaticalization processes. If the ancestral language possessed co-occurring input and output forms of the relevant grammaticalization processes, this situation may be preserved as a

variation in the descendant languages. If the mother used the word for ‘one’ both as a numeral and as an indefinite article, the daughters may maintain this variation. Most Turkic languages use of the item *bir* both as a numeral (‘one’) and as an indefinite article. This duality is neither the outcome of contact-induced interdialectal copying, nor a case of shared or inherited grammaticalization, but rather the inherited *result* of a grammaticalization process in the ancestral language. The complete result has been preserved as an isomorphic relation. The indefinite use does not occur in Chuvash and Yakut. This might be caused by non-Turkic contact influences, but it might also be a case of inherited variation in two languages that left the common area of grammaticalization before the process had been brought to completion.

Functionally equivalent and phonetically similar bound grammatical markers witnessing of inherited result of rare grammaticalization processes are strong arguments for genealogical relatedness. A candidate is the Transeurasian pattern involving markers that may be interpreted as causative or passive formatives: ‘to let do’ or ‘to be done’, signaling that the range of the action transcends the domain of the first actant, which is then interpreted as the source (“initiator”) or the goal (“patient”) of the action (Johanson 1974, 1998: 55–56). This pattern is likely to have existed in a possible Transeurasian proto-language. It is, however, also found outside the Transeurasian group, e.g. in Caucasian languages.

10. Summing up

In this paper, I have argued that grammaticalization – in the usual sense of a process by which lexical items lose some or all of their lexical meaning and become grammatical markers – cannot be shared by codes as a result of code-copying. A copying procedure means that a copy of an element of a Model Code is inserted into a Basic Code according to some equivalence relation with a Target of Copying. Inserted copies are part of the Basic Code and immediately subject to its internal processes. The Target of Copying is reanalyzed and remodeled, often undergoing a development to a structurally more integrated element.

The model element is copied at a specific stage of its code-internal development. The Target of Copying also has its own history and occupies a certain position in the code-internal development. Each instance of copying is a product of this coincidence. Basic Code speakers cannot “replicate” processes that have taken place in the Model Code. Diachronic developments are not copiable, even if they are known to the Basic Code speaker or to the linguist analyzing the situation.

On the other hand, it was also maintained that shared grammaticalization in the sense of a parallel development of elements is clearly possible. Fresh copies, which often represent less advanced stages of grammaticalization than their

models, may develop further, becoming increasingly similar to their models. Long-lasting intense contacts involving extensive copying processes may create convergent developments and highly isomorphic structures that make codes more compatible and intertranslatable. Through gradual isomorphic processes, typical of intense communication areas, e.g. so-called linguistic areas, the interacting codes may develop shared construction patterns and morphosyntactic markers.

References

- Aikhenvald, Alexandra Y. 2002. *Language Contact in Amazonia*. New York NY: Oxford University Press.
- Aikhenvald, Alexandra Y. 2003. Mechanisms of change in areal diffusion: New morphology and language contact. *Journal of Linguistics* 39(1): 1–29.
- Aikhenvald, Alexandra & Dixon, R. M. W. 2001. *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2007. Grammars in contact: A cross-linguistic perspective. In *Grammars in Contact: A Cross-Linguistic Typology* [Explorations in Linguistic Typology 4], Alexandra Y. Aikhenvald & R. M. W. Dixon (eds), 1–66. Oxford: Oxford University Press.
- Heine, Bernd & Kuteva, Tania. 2003. On contact-induced grammaticalization. *Studies in Language* 27(3): 529–572.
- Heine, Bernd & Kuteva, Tania. 2005. *Language Contact and Grammatical Change*. Cambridge: Cambridge University Press.
- Corne, Chris. 1995. A contact-induced and vernacularized language: How Melanesian is Tayo? In *From Contact to Creole and Beyond*, Peter Bakker (ed.), 121–148. London: University of Westminster Press.
- Csató, Éva. 2000. Syntactic code-copying in Karaim. In *The Circum-Baltic Languages: Their Typology and Contacts* [Studies in Language Companion Series 54], Östen Dahl & Maria Koptjevskaja-Tamm (eds), 265–277. Amsterdam: John Benjamins.
- Johanson, Lars. 1974. Zur Syntax der alttürkischen Kausativa. *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Suppl. II: 529–540.
- Johanson, Lars. 1998. The structure of Turkic. In *The Turkic Languages*, Lars Johanson & Éva Á. Csató (eds), 30–66. London: Routledge.
- Johanson, Lars. 2008. Remodeling grammar: Copying, conventionalization, grammaticalization. In *Language Contact and Contact Languages* [Hamburg Studies on Multilingualism 7], Peter Siemund & Noemi Kintana (eds), 61–79. Amsterdam: John Benjamins.
- Johanson, Lars. 2011. Grammaticalization in Turkic languages. In *The Oxford Handbook of Grammaticalization*, Heiko Narrog & Bernd Heine (eds), 752–761. Oxford: Oxford University Press.
- Sapir, Edward. 1921. *Language: An Introduction to the Study of Speech*. New York NY: Harcourt, Brace & World.

