Sonia Cristofaro (University of Pavia)

1 Typology and diachrony: some conclusions and prospects

(1) Typology and diachrony (particularly grammaticalization studies): In principle, these are closely related domains:

- Typologists working within the functional-typological paradigm generally assume that recurrent cross-linguistic patterns (typological universals) are a result of specific historical processes that lead to these patterns being created, transmitted and conventionalized in the evolution of individual languages (as opposed to inbuilt constraints leading to online production of particular structures).

- Also, typologists are aware of several possible historical origins for individual patterns (e.g. alignment, possession, word order).

- Scholars of grammaticalization have highlighted that the development of grammatical categories follows similar pathways from one language to another, and research language change in classical historical linguistics is also often typologically oriented (see e.g. (Harris and Campbell 1995)).

- But the results of these two research traditions have not been really integrated:

  – Evidence about (at least some of) the possible diachronic origins for particular universals usually plays no role in the explanation of these universals. Classical typological explanations are usually goal- (or result-) oriented, in the sense that they assume that particular grammatical patterns develop (or, possibly, are transmitted or maintained) because their synchronic properties comply with some particular principle (usually principles of optization of linguistic structure).

– Scholars of grammaticalization and historical linguists in general, on the other hand, usually do not address the implications of their findings for the explanation of language universals involving the relevant constructions. Explanations of the development of grammatical structure within this research tradition are usually source oriented, in that individual constructions are assumed to arise through processes related to particular source constructions and the contexts in which they are used, rather than properties of the resulting constructions. These explanations, however, are usually not related to (goal-oriented) typological explanations for the same phenomena.

(2)　Some general theoretical implications of adopting a source oriented approach to the explanation of recurrent cross-linguistic patterns:

- Hypotheses about the motivations for individual patterns cannot be made by only looking at the synchronic properties of the pattern, because the pattern may be a result of processes unrelated to these properties.

- Individual patterns may not be amenable to a unified explanation, because they emerge as a combined result of distinct, independently motivated processes. They may be a case of **convergent evolution** (Blevins 2004): different developmental pathways from different sources give superficially similar results (though note that this notion originates in biology, where it is assumed that an additional factor, natural selection, leads to differential transmission rates for particular traits due to their inherent properties and independently of their origins.

- One general consequence of this is that **grammatical categories and patterns** are at least in part an epiphenomenal result of the evolution of pre-existing elements, rather than being there because they serve some specific function. For example:

  - Case marking for core argument roles is widely believed to be there because it makes it possible to distinguish between these roles, but specific case markers (and the resulting distinctions) are a result of processes of context-driven reinterpretation of pre-existing elements, which are not used in order to distinguish the relevant roles.

  - Inverse marking is believed to be there in order to signal particular participant combinations, but the markers are actually a residue of elements used for other functions.

(3)   'As traditionally understood, universals of language are cross-linguistic generalizations concerning synchronic grammars, and their explanations usually appeal to functional principles thought of in a synchronic domain. It sands to reason, however, than any synchronic pattern must have a diachronic dimension, since that pattern had to cme into being in some way ... That is, all explanations of synchronic universals must have a diachronic dimension ... the logical consequence is that the true universals of language are not synchronic patterns at all, but the mechanisms of change that create these patterns ... the grammars of individual languages are emergent from the processes of change that are operative in all languages at all times. In this view, the true universals of language are the mechanisms of change that propel the constant creation and re-creation of grammar.' (Bybee 2006: 178)

(4)   Does all this really mean that principles related to the synchronic properties of particular patterns (particularly principles of optimization of linguistic structure, such as economy or processing ease) have no role in the shaping of these patterns?

- **In theory**, such principles could still play a role .

- One possibility would be that particular principles provide an additional motivation for particular diachronic processes. For example:

  - overt markers for less frequent categories or situations (nominal A arguments, pronominal P arguments, alienable possession, third person acting upon first or second) develop through several processes of reinterpretation of different source elements, but these processes could all somehow be additionally motivated by the relative need to give overt expession to those categories.

- – Phonological erosion of markers used for more frequent categories could additionally be motivated bu the lower need to give overt expression to those categories.

- – The processes of reinterpretation leading to the development of particular word orders (NRel, NG) could additionally be motivated by the relative degree of processing ease of the resulting configurations.

- These assumptions, however, are not part of any standard account of the relevant processes in historical linguistics, and for most processes we do not have any kind of direct evidence for the relevant scenario.

- Alternatively, particular principles could be responsible for differential transmission rates for particular grammatical configurations within a speech community depending on whether or not the configurations comply with the principle:

– For example, it could be the case that, while the development of overt marking for particular categories is independent of the relative frequency of those categories, overt marking for less frequent categories is more easily transmitted than overt marking for more frequent categories precisely because the latter are less in need of disambiguation (note, however, that this predicts that configurations where more frequent and less frequent categories are both overtly marked should not occur, or be relatively rare, which is not the case).

– Likewise, particular word orders could develop independently of the relative processing ease of the resulting syntactic configurations, but processing ease could lead to differential transmission rates for different word orders.

- This would be the equivalent of the technical distinction between proximate vs. ultimate explanations in evolutionary biology (Scott-Phillips, Dickins, and West 2011, among many others): the development of particular traits is independent of the fact that those traits confer an evolutionary advantage to the organisms carrying them, but this provides the ultimate explanation for their distribution in a population.

- In evolutionary biology, however, this idea is based on the fact that particular traits are demonstrably adaptive to the environment, in the sense that they make it more likely for the organisms carrying them to survive and pass them on to their descendants.

- For languages, there is generally no evidence that particular functional properties of grammatical constructions (e.g. the fact that they conform to a principle of economy) are adaptive, in the sense of these properties making it demonstrably more likely for the construction to be transmitted from one speaker to another. This is a crucial difference between linguistic evolution and biological evolution, and there is a long tradition of linguistic thought in which the transmission of individual constructions within a speech community is entirely determined by social factors independent of particular functional properties of the construction.

(5)　Diachrony, typological explanations, and language description:

- Typological explanations are usually based on the synchronic data provided by reference grammars.

- At the same time, synchronic patterns in individual languages are often interpreted in terms of the principles proposed by typologists.

- But the (scanty!) diachronic evidence available suggests that the motivations for particular synchronic patterns cannot be read off from the pattern in itself, because (i) the pattern may be motivated in terms of the properties of particular developmental processes and source constructions independent of the synchronic properties of the pattern, and (ii) particular patterns may originate from different developmental processes and source constructions, hence the pattern in itself may not provide evidence for any of these processes or constructions in particular.

- So

  - it would be crucial for descriptive grammars to provide as much diachronic evidence as possible (sometimes the diachronic evidence is actually there, if one knows what to concentrate on: (7)-(9));

    – at the same time, explanations for individual patterns attested in the language need not be based on general typological explanations for that pattern, because evidence about how the pattern actually developed in the language may point to different explanations for the pattern, both in the relevant language and in other languages ((10)-(11)).

(6)   Accusative case marking: Restrictions in the distribution of accusative case marking are usually accounted for in terms of the relative need to disambiguate particular types of P arguments, but diachronic evidence suggests that they are rather related to the distribution of the element that gives rise to the accusative marker.

        ● Sometimes evidence about the origins of the accusative marker is actually there, but the grammar doesn't make the connection ((8), (7)).

- Sometimes evidence about the origins of the accusative marker is there, and provides counterexamples to the typological explanation:

  – Romanian ((9)): the accusative marker develops for pronouns, which are the only forms in the language that have distinct accusative forms. In this case, then, the fact that the marker is restricted to pronouns cannot be related to the need to disambiguate P arguments. Since the marker was a topic marker, however, this provides an explanation for why it is restricted to pronouns.

- So, when dealing when restrictions in the distribution of accusative case marking in particular languages, one should try and look for all the available evidence about the origins of the marker.

Tubu (Saharan, Chad)

(7)   (a) *səŋá ga   gɔ́yintu*

             he   ACC take.3PL

             'They took him' (Lukas 1953: 161)

    (b) *gadú   nta ga*

             warthog you as.for

             'Oh warthog! As for you ...' (Lukas 1953: 161: the cnnection with the use in (a) is made in König 2008: 41-2)

Kanuri (Saharan, Nigeria)

(8) Kanuri (Nilo-Saharan)

    (a) *Músa shí-***ga***   cúro*
        Musa 3SG-OBJ saw
        'Musa saw him' (Cyffer (1998: 52))

    (b) *Káno-ro leji-ya*   *ráwanzә́ súr-in*
        kano-to   go.3SG-DEP.FUT uncle   see-IMPF
        'When she goes to Kano, she will see her uncle' (Cyffer (1998: 70))

    (c) *wú-***ga**
        1SG-as.for
        'As for me' (Cyffer (1998: 52))

Romanian (Romance)

(9) **Pe   mine**   *nu   m-a   văzut*
    TOP/ACC 1SG.OBJ NEG 1SG-AUX see.PTCPL
    'He didn't see me.' (Pensado 1995: 219)

(10) Inverse marking: The use of inverse affixes is explained by assuming that the situation where a 3rd person participant acts upon a 1st or 2nd person participant is less natural than the reverse situation.

- However, this is problematic because inverse morphology can also be used to encode opposite situations (either 1st person acting upon 2nd, or 2nd acting upon 1st) from one language to another, or even within the same language (Zúñiga 2006, and Lockwood and Macaulay 2012). This is at odds with the idea that certain situations are generally perceived by speakers as more natural than others.

- What little is known about the origins of inverse morphology suggests that the use of inverse morphemes is independent of the naturalness of different situation types, and provides a straightforward situation for the distribution of the morphemes: morphemes derived from cislocatives can be used for any situation involving speech act participants, and morphemes derived from 3rd person forms can be used for situations involving 3rd person and speech act participants, or possibly speech act participants only (e.g. 'Somebody Verbs me' = 'You Verb me').

- Linguists describing inverse morphemes in particular languages (for example, Algonquian languages) often provide elaborate explanations of why the morphemes are used in the way they are used in the language, for example by assuming that speakers of different languages attribute different degrees of naturalness to particular situations (e.g. in some languages 1st person acting upon 2nd is more natural than 2nd acting upon 1st, while in other languages the reverse holds: this, however,

doesn't account for why in some languages inverse morphology is used for both of these situations). But what we really need in order to understand these phenomena are hypotheses about the origins of the inverse morpheme.

(11) Possessive constructions:

- The available evidence about the origin of overt possessive morphemes shows that they typically develop from expressions incompatible with some types of inalienable possession, for example locative expressions ('the courtyard's at X's home'= 'X's courtyard', but ? 'the hand at X's home') or expressions involving demonstratives ('That horn (of) the boy', 'The horn (is) that (of) the boy' , but ? 'That arm of John's', ? 'That mother of John's', ? 'The arm is John's', ? 'The mother is that of John's'). This suggests the restictions in the distribution of these morphemes originate from the nature of their source, rather than the

nature of inalienable as opposed to alienable possession.

- Grammars often try to account for the distribution of particular possessive constructions in terms of what counts as alienable vs. inalienable possession in the language, and sometimes make hypotheses about why this distinction varies from one language to another. But distributions are at least partially explained by the origins of individual morphemes, so we need more data about that.

(12) Diachronic evidence, then, is highly relevant both to the development of general explanatory principles for cross-linguistic patterns and to a proper understanding of the nature of the constructions attested in individual languages.

Abbreviations

ACC   accusative

AUX   auxiliary

DEP.FUT   dependent future

IMPF   imperfect

NEG   negation

OBJ   object

PL   plural

PTCPL   participle

SG   singular

TOP   topic

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