Introduction

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1. Remarks on aim and origin of the presented papers

This 18th issue of ZAS-Papers in Linguistics consists of papers on the development of verb acquisition in 9 languages from the very early stages up to the onset of paradigm construction. Each of the 10 papers deals with first-language developmental processes in one or two children studied via longitudinal data. The languages involved are French, Spanish, Russian, Croatian, Lithuanien, Finnish, English and German. For German two different varieties are examined, one from Berlin and one from Vienna. All papers are based on presentations at the workshop 'Early verbs: On the way to mini-paradigms' held at the ZAS (Berlin) on the 30./31. of September 2000.[1] This workshop brought to a close the first phase of cooperation between two projects on language acquisition which has started in October 1999:

a) the project on "Syntaktische Konsequenzen des Morphologieewerbs" at the ZAS (Berlin) headed by Juergen Weissenborn and Ewald Lang, and financially supported by the Deutsche Forschungsgemeinschaft, and

b) the international "Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition" coordinated by Wolfgang U. Dressler in behalf of the Austrian Academy of Sciences.

The main research goal of the Berlin Project is to argue for the importance of the acquisition of the verb and of its (basic) grammar for the development of language-specific structural properties, especially the order of verb-governed arguments as well as its impact on the acquisition of case assignment. The hypotheses are based on functional and constructivist approaches (cf. Dressler & Karpf 1995, Karmiloff-Smith 1992, Tomasello 1992) and will have a critical look at the respective results in the frame of generative linguistics (cf. Wexler 1994, Weissenborn 1990, Clahsen 1988).[2] A central and typically early acquired feature of verb grammar is agreement. Agreement provides direct relation to one of the verb-governed elements, the subject. Thus the first step in project work had been to analyse the acquisition of early verb inflection and its impact on the acquisition of the subject and its structural properties. Finding out unambiguous correlations in these acquisition processes requires crosslinguistic examination. The project itself is concentrated on three languages which differ typologically in the respective structures: English, German, and Russian. Cooperations like the one presented in this volume give the possibility to broaden the typological horizon.

The international project on pre- and protomorphology aims at a theory-guided comparative analysis of longitudinal data sampled from about age 1;2 to 3;0. It encompasses nearly two dozen, predominantly morphology-rich languages among the Indo-European, Finno-Ugric

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[1] The workshop had been prepared in tight cooperation of the two project members. The authors would like to thank especially Natalia Gagarina (Berlin) and Sabine Klampfer (Vienna) for their contributions to the methodological and theoretical guidelines of the workshop.

[2] For a first study on correlations of the acquisition of verbs, pronominal forms, and subjects cf. Bittner (2000).

and Semitic language families, plus Bask, Georgian, Turkish, and the Meso-American languages Yucateco Maya and Huichol. The project tries to answer basic questions such as:

A) How can we explain that young children appear to acquire very different morphological systems in similar ways?

B) Should we, therefore, assume a sizable number of innate, specifically morphological principles of universal grammar?

C) But how then can we account for the great time lags in the emergence of morphological structures (e.g. with Turkish vs. English children)?

D) And why is then hypothetically innate grammatical morphology (as opposed to extragrammatical morphology) nearly absent in certain isolating languages?

E) On the contrary, if we negate innateness of morphology, how then can we explain not only the similarity of development, but also of structural principles, of target morphologies?

The approach towards answering such questions is based on Natural Morphology and constructivism or compatible approaches (cf. the volumes edited by Dressler 1997a, Dziubalska-Kolaczyk 1997 and Gillis 1998). So far publications have focused on declension of nouns (for number and case) and on diminutive formation. Thus this volume is the first to focus on verbs.

Both projects are interested in the development of verb inflection, in typological research and in modeling and explaining the developmental processes in the framework of functional theoretical concepts. Thus it proved useful to combine forces. By looking at the emergence and acquisition of verb inflection we aim to shed more light on the first grammatical steps in language development and in the process of constructing grammar.

One of the central theoretical questions is: in which respect could we think of language development as divided into a pre-grammatical (pre-morphological), proto-grammatical (proto-morphological) and a grammatical (morphologically productive) phase? The more concrete question in analysing the data has been what is common (universal) and what is different (language specific) in the development of verbs and verb inflection up to the emergence of the first recurrent inflectional contrasts or, in other words, up to the emergence of the inflectional paradigm of the verb in the analyzed languages.

Part 2 of the introduction will give a short description of the theoretical base of our research, part 3 will give definitions of the grammatical terms used in common.

A necessitiy of the first phase of our cooperation was to determine the methodological guidelines of common research. Anybody involved in language-acquisition or typological research knows both the importance of common methodology of data analyses, in order to make the developmental processes comparable, and the difficulties involved in getting several researchers (who deal with different languages) to agree on strictly parallel working procedures. Discussion on this common base is still going on and probably will be virulent up to the end of our joint work. The main purpose of the first phase, however, has been to arrive at a detailed analysis of verb-inflection development in each language under discussion, particularly in regard to the following aspects:

- prerequisites for acquiring paradigmatic contrasts
- order of emergence of inflectional categories
- development from rote learning to morphological generalizations and productive use of morphological rules or patterns
- demarcation of the assumed phases of pre- and protomorphology

Despite the fact that these points have been discussed by all contributors of this volume, each of them has given special attention to some methodological or theoretical aspects. For some

of the investigated languages the question arises whether the lemma or a special part of the lemma should be considered as the relevant base for inflection in child language and what the consequences for the assumption of mini-paradigms will be (cf. Gagarina for Russian, Wójcik for Lithuanien, Bittner for German). Klampfer discusses possibilities of a more qualitative than a quantitative determination of true mini-paradigms as well as methodological tools to measure the lexical and morphological development in a comparable way. Special emphasis on pre-morphological processes in developing inflectional distinctions have been given by Aguirre and Laalo. The importance of rote learning and its typological determination by the input as well as by child specific strategies are discussed by Kilani-Schoch and Aguirre. Also Katičić is confronted with this question by the striking emphasis of her Croatian child on auxiliaries and suppletive verb forms. The importance of both general pragmatical and typological conditions in the order of emergence of inflectional categories come to light when comparing especially the papers on the typologically most different languages (cf. Pfeiler on Yucatec Maya, Laalo on Finnish and Guelzow on English). Kilani-Schoch and Bittner discuss assumptions on the developmental steps from rote learning to productive morphology. Both of them favour an explanation which assumes a gradual and progressive development in morphological generalisation.

2. Theoretical background of the contributions

The epistemological approach of the cross-linguistic project is characterized by the use of functional explanation (cf. Dressler 1995). The linguistic approach is either based on, or at least compatible with, the model of Natural Morphology (cf. Kilani-Schoch 1988, Dressler et al. 1987, Dressler 1997b, 1999, Dressler & Karpf 1995), with its distinction of grammatical morphological rules vs. extragrammatical operations (of "expressive" morphology), as represented by young children's onomatopoetic reduplications, truncations and fillers. Moreover this model distinguishes gradually prototypical vs. non-prototypical morphology (cf. Dressler & Merlini Barbaresi 1994): prototypical verbal categories are person, number, tense, mood and voice, whereas non-finite categories are non-prototypical. On the level of universal preferences, the parameters of iconicity, morphotactic and morphosemantic transparency, indexicality, and (bi)uniqueness are the most relevant.

According to the concept of language types as ideal constructs which are more or less approached by actual languages (cf. Skalička 1979, Kilani-Schoch 1988, Dressler et al. 1987), we can provisionally assign the languages of this volume to a gradual continuum between two ideal language types, as far as verb morphology is concerned:[3]

1) agglutinating type <---> inflecting type: Finnish - Yucateco Maya - the other languages
2) inflecting type <---> isolating type: Lithuanian - Russian - Croatian - Spanish - Yucateco Maya - German - French - English.

Our developmental approach does not assume an innate morphological module but is constructivist, i.e. based on the model of self-organising processes (autopoiesis, cf. Karmiloff-Smith 1992, Karpf 1991, Dressler & Karpf 1995). Children interact selectively with the environment, their selection of data from the environment (first intake, then output) is carried out on the basis of the criteria available in each phase. Important constructivist principles are those of pattern selection and of self-organisation: increasing complexity leads to successive

[3] Note that the nominal and the verb system may behave very differently in typological variation, e.g. French is very isolating in the noun (even more so than English), but weakly inflecting in the verb (here English is more isolating).

dissociations of more global systems into more specific, complementary systems, which gives rise to modularity or at least compartmentalisation (as division of labour).

We divide morphological development into the three main phases of premorphology, protomorphology, and morphology proper (or modularised morphology), with the following theoretical claims:

a) We can consider the premorphological phase of language acquisition as the phase before the detection of grammatical morphology. Extragrammatical (or "expressive") morphological operations and precursors of later grammatical rules consisting only of rote-learned forms occur. The selection of grammatical precursors is based on principles of naturalness and constructivism. In the premorphological phase, no system of grammatical morphology has yet become dissociated from a general cognitive system that handles, inter alia, words of whatever form. This global system becomes dysfunctional, when children are in growing need of a rapid expansion of their lexical inventories and when (in many languages) expanding syntax needs morphological marking of syntactic categories.

b) During the protomorphological phase of language acquisition, children detect and reconstruct or construct creatively morphological patterns of analogies or of first rules. In order to handle theincreasing morphological complexity, a primitive system of morphology dissociates from phonology, syntax and the lexicon. In this period also most interindividual variation is to be expected.

c) In the first phases of morphology proper (also called "modularised morphology" by those who believe in a modular compartmentalisation of adult language), the child's systems approach qualitatively, if not quantitatively the adult models. In passing over to this stage, the two main functions of word formation, namely lexical enrichment and motivation need to be served. This leads to ever greater complexity, paralleled and even more increased by the accumulation of inflectional devices. In order to serve the different functions of inflection and word formation, the primitive morphological system must dissociate, giving rise to separate submodules of inflection and word formation. In this way morphology becomes modularised. Hence morphology proper initiates when the basic language-specific properties of target morphology are acquired and structurally differentiated (i.e. compartmentalised) into verbal vs. nominal inflection vs. word formation.

3. Brief definitions of central terms used in the contributions

The following alphabetically ordered terms are used in common by all contributors to the present volume.

Extragrammatical operations: extragrammatical operations are operations which resemble morphological rules but whose only unifying property is that some principle of morphological grammar is violated

Frozen forms or ***formulaic forms*** are a subset of rote-learnt, contextually/situationally bound, morphologically non-distinctive forms (cf. Kilani-Schoch, this volume, for further citeria)

Isolated paradigm: an isolated paradigm is a paradigm which differs morphologically or morphonologically from all other paradigms.

Lemma: with the term lemma we assign the abstract base of a lexical entry, i.e. the correlation of (specific) lexical meaning with (specific) phonological material which create the lexical sign.

Macroclass: a macroclass is the highest, most general type of inflectional classes, which comprises several classes or (sub)classes or microclasses and whose nucleus is prototypically a productive microclass.

Microclass: a microclass is a set of those paradigms which share exactly the same morphological and morphonological generalisations

Mini-paradigm: a mini-paradigm is an incomplete paradigm corresponding to a non-isolated set of minimally 3 accurate and distinct inflectional forms of the same verbal lexeme produced spontaneously in contrasting contexts = incomplete paradigm.

Modularised morphology: Morphology proper (also called "modularised morphology" by those who believe in a modular compartmentalisation of adult language) initiates when the basic language-specific properties of target morphology are acquired and structurally differentiated (i.e. compartmentalised) into verbal vs. nominal inflection vs. word formation.

Paradigm: a paradigm comprises all inflectional forms (types) of one lemma.

Premorphology: The premorphological phase of language acquisition is the phase where morphological operations occur - both extra-grammatical (or "expressive") ones and precursors of later grammatical rules. These precursors consist of rote-learned forms whose selection is based on principles of naturalness and constructivism.

Protomorphology: The protomorphological phase of language acquisition is the phase where children start to construct creatively morphological patterns of analogies and of first rules. In this period also most interindividual variation is to be expected.

Rote learned forms: early inflectional forms which don't show recurrent inflectional contrasts with other forms of the same lemma are regarded as rote learned (cf. Kilani-Schoch, this volume).

Token: every occurence of a form of a lemma is counted as a single token.

Type: a type is a grammatical form of a lemma, i.e. an inflectional form in our investigation.

Steps: the term steps is used here to refer to successive segments of development within one grammatical (sub)system as opposed to phases which hold for several systems

References

Bittner, Dagmar (2000): Are there correlations in the acquisition of definite pronouns and finite verbs in German? In: ZAS Papers in Linguistics 15, 199-217.

Clahsen, Harald (1988): Normale und gestörte Kindersprache. Amsterdam/Philadelphia: Benjamins.

Dressler, Wolfgang (1995): Wealth and poverty of functional analyses, with special emphasis on functional deficiencies. In: Miller, Sh. & J. Mey (eds.): Form and Function in Language. Odense: Odense University Press. 11-39.

- (1997a, ed.) Studies in Pre- and Protomorphology. Wien: Verlag der Osterreichischen Akademie der Wissenschaften.
- (1997b): Universals, Typology and Modularity in Natural Morphology. In Raymond Hickey & Stanislaw Puppel (eds.), Language History and Linguistic Modelling. Berlin, New York: Mouton de Gruyter, 1399-1421.
- (1999): What is natural in Natural Morphology. Travaux du Cercle Linguistique de Prague/Prague Linguistic Circle Papers, vol. 3, 135-144.
- / Karpf, Annemarie (1995): The theoretical relevance of pre- and protomorphology in language acquisition. Yearbook of Morphology 1994, 99-122.
- / Willi Mayerthaler / Oswald Panagl / Wolfgang U. Wurzel (1987): Leitmotifs in Natural Morphology. Amsterdam: Benjamins.

- / Lavinia Merlini Barbaresi (1994): Morphopragmatics. Berlin: Mouton de Gruyter.

Dziubalska-Kolaczyk, Katarzyna (1997, ed.): Pre- and Protomorphology in Language Acquisition. Papers and Studies in Contrastive Linguistics 33.

Gillis, Steven (1998, ed.): Studies in the Acquisition of Number and Diminutive Marking. Antwerp Papers in Linguistics 95.

Karmiloff-Smith, Annette (1995): Beyond Modularity: a developmental perspective on cognitive science. Cambridge, Mass.; London: The MIT Press.

Karpf, Annemarie (1991): Selbstorganisationsprozesse in der sprachlichen Ontogenese: Erst- und Fremdsprache(n). Tübingen: Narr.

Kilani-Schoch, Marianne (1988): Introduction a la morphologie naturelle. Bern: Lang.

Skalička, Vladimir (1979): Typologische Studien. Braunschweig: Vieweg.

Tomasello, Michael (1992): First verbs. A case study of early grammatical development. Cambridge: Cambridge University Press.

Weissenborn, Jürgen (1990): Functional categories and verb movement: The acquisition of German syntax reconsidered. In: Rothweiler, M. (Hrg.): Spracherwerb und Grammatik. (Linguistische Berichte, Sonderheft 3/1990), 190-224.

Wexler, Ken (1994): Optional infinitives, head movement, and the economy of derivations. In: Lightfoot, D./N. Hornstein (eds.): Verb Movement. London: Cambridge Univ. Press. 305-350.