# *Evolutionary linguistics and historical language studies*

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## 1. Rationale (Agenda, research questions and relevance to evolutionary linguistics)

The workshop is intended to foster dialogue between practitioners in the field of historical language studies and practitioners of evolutionary linguistics. Its agenda is motivated by the fact that the two fields of linguistic research have, during the last decades come to diverge in terms of focus and methods almost to the extent of being constructed – quite explicitly so, for example, in McMahon & McMahon's recent *Introduction to Evolutionary Linguistics* (2012) - as entirely different academic disciplines. This development is not entirely felicitous as there are many obvious overlaps and connecting points between the historical and the evolutionary linguistic research programmes.

Thus, both historical and evolutionary linguists deal with systems that maintain and/or change their properties in processes involving the transmission of constituents, the emergence of variation, and the selection of some variants over others. (cf. e.g. Croft 2000, or Lass 1997) Historical linguists focus on the (mentally or behaviourally instantiated) properties of specific human languages that are passed on through communication and language acquisition. Evolutionary linguists focus both on the biologically (i.e. genetically and physiologically) instantiated properties of the human language faculty that are transmitted genetically and expressed in development, and/or on typical design properties of all (or most) human languages that may emerge through processes involving iterated social learning.

Thus, there are good reasons and good opportunities for a profitable exchange of concepts, methods, and insights.

Most obviously, for example, the study of historical language development depends on a solid understanding of the biologically evolved underpinnings of the human language faculty, as they naturally constrain the design space within which the histories of specific languages may unfold, and/or may specify pathways of likely developments. Enriched by approaches and methods from comparative biology (e.g. Fitch 2010), genetics, neurology, psychology and computation, evolutionary linguistics promises to deepen our understanding of the biological basis of human languages considerably. (e.g. Hurford 2007 or 2012).

Likewise, evolutionary linguistic research on the types of linguistic structures that can emerge in purely cultural evolution through iterated social learning is concerned with mechanics that must necessarily be involved in the historical transmission of full-fledged languages as well.

In terms of methods, the inherently interdisciplinary character of evolutionary linguistics has lead to an impressive enrichment of the methodological toolkit employed in the study of linguistic phenomena, e.g. through the increased employment of computational methods (agent-based modelling (cf. e.g. Steels 1997, Kirby 2002), quantitative cladistics (cf. e.g. Nichols & Warnow 2008), population dynamics and game theory (cf. e.g. Novak & Krakauer 1999), etc.), or iterated-learning experiments involving both human (cf. e.g. Kirby, Cornish & Smith 2008) and animal subjects .

On the other hand, historic language studies have produced a large and impressively detailed body of knowledge about the development of actual historical languages, as well as some of the most reliable methods for establishing (glosso-)genetic relationships among their constituents (c.f. Hock 1991). There is no other area of research in the domain of human culture that has collected, systematically analysed and interpreted a comparable body of data. Thus, historical linguists are in an

excellent position to provide solid empirical testing grounds for hypotheses developed in research on the biological and cultural evolution of language.

Furthermore, in more than 150 years of (historical) linguistic research a considerable number of problems that raise themselves from an evolutionary perspective have already been addressed and sometimes discussed in impressive depth. Thus, evolutionary linguistics, as a comparably young and refreshingly innovative endeavour, is likely to profit from the collective experience gained in a closely related field of studies with a somewhat longer history.

In short, there are very good reasons for both evolutionary and historical linguists to get and/or keep in touch with another. – Against this background, the proposed workshop solicits contributions in which historical and evolutionary linguists show and/or discuss how assumptions, methods and insights developed in either of the two domains can be made relevant in the other. While contributions may address methodological issues, questions of conceptualisation, or specific empirical problems, they should strive to be maximally accessible to colleagues beyond the specific area of specialisation they represent.

**2. Key References:**


1. Christiansen, Morten H. & Simon Kirby. 2003. *Language evolution* (Studies in the evolution of language 3). Oxford, New York: Oxford University Press.
2. Croft, William. 2000. *Explaining language change: An evolutionary approach* (Longman linguistics library). Harlow, England, New York: Longman.
3. Fitch, W. T. 2010. *The evolution of language*. Cambridge, New York: Cambridge University Press.
4. Hock, Hans H. 1991. *Principles of historical linguistics*, 2nd edn. Berlin, New York: Mouton de Gruyter.
5. Hurford, James R. 2007. *The origins of meaning* (Studies in the evolution of language 8). Oxford, New York: Oxford University Press.
6. Hurford, James R. 2012. *The origins of grammar* (Studies in the evolution of language 2). Oxford, New York: Oxford University Press.
7. Kirby, Simon. 2002. *Natural language from artificial life*. Artificial life 8(2). 185–215.
8. Kirby, Simon, Hannah Cornish & Kenny Smith. 2008. Cumulative Cultural Evolution in the Laboratory: An Experimental Approach to the Origins of Structure in Human Language. *Proceedings of the National Academy of Sciences of the United States of America* 105(31). 10681–10686.
9. Lass, Roger. 1997. *Historical linguistics and language change* (Cambridge studies in linguistics 81). Cambridge, New York: Cambridge University Press.
10. McMahon, April M. S. & Robert McMahon. 2012. *Evolutionary linguistics* (Cambridge textbooks in linguistics). Cambridge [England]: Cambridge University Press.
11. Nichols, Johanna & Tandy Warnow. 2008. Tutorial on Computational Linguistic Phylogeny. *Language and Linguistics Compass* 2(5). 760–820.
12. Nowak, Martin A. Natalia L. Komarova & Partha Niyogi. 2002. Computational and evolutionary aspects of language. *Nature* 417(6889). 611–617.
13. Nowak, Martin A. & David C. Krakauer. 1999. The Evolution of Language. *Proceedings of the National Academy of Sciences of the United States of America* 96(14). 8028–8033.
14. Sole, R. V. B. Corominas-Murtra & J. Fortuny. 2010. Diversity, competition, extinction: the ecophysics of language change. *Journal of The Royal Society Interface* 7(53). 1647–1664.
15. Steels, Luc. 1997. The Synthetic Modeling of Language Origins. *Evolution of Communication* 1(1). 1–34.
16. Yang, Charles D. 2000. Internal and external forces in language change. *Language Variation and Change* 12(03). 231–250.

**3. Provisional Schedule:**

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| 0900 – 0915 | Introduction |
| 0915 – 0935 | Paper 1 |
| 0935 – 0955 | Paper 2 |
| 0955 – 1015 | Paper 3 |
| 1015 – 1035 | Paper 4 |
| 1035 – 1105 | Discussion of papers 1-4 |
| 1105 – 1125 | Coffee Break |
| 1125 – 1145 | Paper 5 |
| 1145 – 1205 | Paper 6 |
| 1205 – 1225 | Paper 7 |
| 1225 – 1245 | Paper 8 |
| 1345 – 1315 | Discussion of Papers 5-8 |
| 1315 – 1345 | Final Discussion and Closing of the Workshop |

**4. Submissions:**

Due to the fact that the workshop proposal already had to include a list of contributors, and because it is limited to half a day, the number of slots that are still available is highly limited. Emails expressing interest in participation should be directed to evolang@univie.ac.at before September 30th 2013, and should include an abstract of up to 500 words excluding references. Notifications of acceptance will be sent out within two weeks.