

# 'Selfish sounds': Darwinism in linguistics

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People generally think that they are in full command of what they say. Historical linguist Nikolaus Ritt from the Department of English and American Studies at Universitat Wien (Austria), however, claims that it may actually be language which controls us, the speakers, rather than the other way round. Applying a generalised Darwinian framework to linguistics, he is particularly interested in how words and sounds change over time and how they use humans for the "selfish" purpose of getting themselves replicated.

**Nikolaus Ritt examines language change from an unconventional point of view. Contrary to established, speaker-centred theories of language change his generalised Darwinian approach does not reduce the properties of human behaviour to the intentions and goals of free-willed human agents. "The exciting aspect of this approach is that it allows one to take a consistent third-person perspective on the historical development of language", Nikolaus Ritt explains.**

## **Applying evolutionary theory to language change**

As opposed to hermeneutic theories of historical linguistics, the generalised Darwinian approach is radically analytic and regards cultural and linguistic change as something that happens with speakers' selves being only partly involved in the process, and experiencing it rather than driving it. In a way it could be said that the generalised Darwinian framework "allows one to abandon the concept of the all-powerful speaker in the same way as biological evolutionary theory allowed us to

abandon the concept of an intentional intelligent designer behind biological life."

According to Nikolaus Ritt, one of the problems which evolutionary approaches to cultural studies face is that so many other theories are already well-established in this research area. "Since these traditional concepts do reasonably well, the scientific community typically reacts sceptically. A common attitude is to say, 'Well, we already have our own ways of talking about [language](#) change. Why do we need a biologically-inspired model?'" However, there are quite a number of phenomena in the histories of languages that cannot be satisfactorily explained from traditional speaker-based perspectives.

## **The evolution of rhythmic patterns in the English language**

Good examples of such phenomena are sets of changes which are obviously directed but unfold over time spans that are impossible to even survey by individual speakers. They have come to be known as 'drifts'. A case of such a drift seems to have affected the sound shapes of English words (or better: lexical morphemes, i.e. the smallest linguistic units that carry meaning). Over time their shapes seem to have gradually evolved in a direction where they came to fit better into the rhythmical patterning that characterises English speech. "For instance, vowels in long words tended to be shortened over time, while vowels in short words tended to be lengthened. Thus, the rhythmic units they established became more uniform", Nikolaus Ritt explains.

"What is puzzling is that this development started in the 9th century A.D. and is to some extent still going on today. Traditional theories have problems with such findings, because they describe language change as being driven by speakers' needs, their goals and their intentions", says

Nikolaus Ritt. "But why should, for example, a speaker who lives in the late 19th century, be interested in finishing a process that somebody started in the 9th century, that is to say one thousand years earlier? For this reason we believe that the causal mechanisms that drive long-term changes of this kind cannot be derived from the intentions and goals of individual speakers. Instead, we think that evolutionary theory offers a promising alternative perspective."

## **Why and how sounds are "selfish"**

From the evolutionary perspective this kind of development is best understood if one regards rhythm as an environmental constant in the linguistic world in which words and the sounds they are made up of have to survive and replicate. Because of the constant environmental pressure which rhythm exerts on them, the sound shapes of English words have gradually changed to become better adapted to the rhythmically structured utterances through which they get expressed and transmitted.

"The crucial point of this Darwinian approach", says Nikolaus Ritt, "is that speakers play no central role in our explanation of this directed evolution. Of course humans are the ones who speak, and they are the ones who acquire language, but the pattern of change that has come to unfold over the centuries results from the interaction of rhythm and sounds. From this perspective, speakers only provide the machinery which 'selfish' sounds use to replicate themselves, but they do not actively steer this evolutionary process."

## **The rise of Darwinism in linguistics**

Even though Darwinists still represent a minority within the historical linguistic community, Nikolaus Ritt is optimistic with regard to the future of the evolutionary approach in his field of research. "I genuinely

think that the approach deserves to be given a serious test, and we are confident to achieve this, because English historical [linguistics](#) is at a stage where there is a huge amount of data available that can be studied quantitatively. Additionally, in the wake of the Darwin year 2009 the importance of Charles Darwin got increased recognition in many different academic disciplines. This is why our perspective on language change is also taken more and more seriously. It is a non-mainstream approach that is now making it to the limelight."

Provided by Universitat Wien

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