Dissertation Information

Title: A Selectionist Model of The Genesis Of Phonic Texture: Systemic phonology and universal darwinism

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Linguistic Subfield(s): Phonology;

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Abstract: This thesis develops notions of phonological function and structure from a Systemic theoretical perspective and provides a framework for modelling language as a complex adaptive system evolving according to Darwinian principles.

In discussing function, a distinction is made between phonological systems and structures that signal lexicogrammatical positions and those that do not; the former are described as cohesive in function, the latter as structural only. The phonological texture of a language is said to derive from its evolving structural and cohesive resources.

In discussing structure, alphabet-derived particulate phonological models are complemented with those of wave and field. Cycles of phonological prominence (tonic, rhythmic, moraic) are interpreted, on the quantum physics model, as probability waves that measure the syntagmatic location of a phonological particle (tone group, foot, syllable). Several types of field are introduced: quantum, charged, vector and phonogenetic, the last parallel to (biological) morphogenetic fields. Directionality in phonological vector fields is related to the linguistic notion of phoricity.

Comprehensive descriptions of the articulatory textures of Irish (and, in the Appendix, of Australian English) are used to illustrate the theoretical model of function and structure. The model of structure is briefly extended to English lexicogrammar in the concluding chapter.

The Darwinian framework for modelling language draws on Darwinian models of the brain and culture by Edelman and Dawkins, respectively. Neurological systems, functioning through the selection of randomly adaptive variant neuronal groups in populations, are taken to be the substrate from which language, functioning through the selection of randomly adaptive variants in populations, emerges. The relation between lexicogrammatical and phonological systems is held to be proportional to that between genetic information and DNA molecules.

In the concluding chapter, the model is extended briefly to higher levels of linguistic organisation, such that discourse-semantic systems are interpreted as evolving through the selection of randomly adaptive variants in populations.
A Selectionist Model of The Genesis Of Phonic Texture: Systemic phonology and universal darwinism. Add Dissertation. Author In discussing structure, alphabet-derived particulate phonological models are complemented with those of wave and field. Cycles of phonological prominence (tonic, rhythmic, moraic) are interpreted, on the quantum physics model, as probability waves that measure the syntagmatic location of a phonological particle (tone group, foot, syllable). Several types of field are introduced: quantum, charged, vector and phonogenetic, the last parallel to (biological) morphogenetic fields. Directionality in phonological vector fields is related to the linguistic notion of phoricia. Sydow, Momme von (2001) Sociobiology, universal Darwinism and their transcendence: An investigation of the history, philosophy and critique of Darwinian paradigms, especially gene-Darwinism, process-Darwinism, and their types of reductionism towards a theory of the evolution of evolutionary processes, evolutionary freedom and ecological idealism. In part III universal 'process-Darwinism' is elaborated based on the historical interaction of Darwinism with non-biological subject areas. Building blocks for this are found in psychology, the theory of science and economics. Additionally, a metaphysical argument for the universality of process-Darwinism, linked to Hume's and Popper's problem of induction, is proposed. In part IV gene-Darwinism and process-Darwinism are criticised. A selectionist model of the genesis of phonic texture: Systemic phonology & universal Darwinism. Sydney: The University of Sydney dissertation. Chris Cléirigh. Detailed description of the grammars of a wide range of languages is necessary as input to high level generalisations about "the general nature of any grammar" (Dixon 1984: 5). I will chronicle Halliday's phonological and grammatical descriptions of Chinese (1.1.1), English (1.2.1), and the protolanguage of one specific child (1.3.1).