Stellingen behorende bij het proefschrift *Finding the Right Words: Implementing Optimality Theory with Simulated Annealing* van *Tamás Bíró*:

1. Heuristic optimisation algorithms, such as simulated annealing, are adequate models of the computation performed in the human brain (section 2.1.1).

2. It is possible to account both for linguistic competence and for linguistically motivated performance phenomena by distinguishing between the grammar and its implementation. The *Simulated Annealing for Optimality Theory Algorithm* (SA-OT) is such an implementation of *Optimality Theory* (OT) (section 2.1.3, Table 2.1).

3. The OT harmony function (the violation profiles) can be represented both using polynomials and using ordinal numbers (Chapter 3).

4. If based on a sound OT grammar, varying the parameters of SA-OT can account for speech-rate-dependent phenomena (Chapter 5), allomorphy-dependent phenomena (section 7.1), as well as for further variations in language (Chapter 6).

5. Some SA-OT models do not converge towards 100% precision with the increase of the number of iterations (Chapter 6).

6. SA-OT can supply constraint ranking arguments (section 7.1) and arguments for including never winning candidates in the candidate set (sections 6.5 and 7.1).

7. Nature does not compete with scientists in reaching ever higher precision, as long as communication is efficient enough (section 5.4). Hence, *errare humanum est* (section 8.3).

8. For a theoretical linguist educated in the 1990s, Chomsky (1957) corresponds to the Big Bang. The first humanoids preparing tools appeared in the 1960s. The first civilisations are discernible as early as the 80s, but our historical knowledge covers rather the 1990s only. Pāṇini, *Grammaire de Port-Royal*, Neogrammarians and Saussure belong to previous big bangs from which hardly any traces have survived.

9. "*Mag ik met de heer T. S. Bíró spreken?*" is a sentence hard to translate to most languages, due to the unparallelled use of *voorletters* in Dutch.

10. "The success of cognitive science, like that of many other sciences, will, I belive, depend upon the construction of a solid body of [mathematical] theoretical results: results that express in a mathematical language the conceptual insights of the field; results that squeeze all possible implications out of those insights by exploiting powerful mathematical techniques." (Paul Smolensky: *Information Processing in Dynamical Systems: Foundations of Harmony Theory*, 1986:194)

11. The Aleph should rotate 90 degrees in *Letteren Nieuws*.

12. "Santa Claus brings not only chocolate." (Vica Czachesz, at the age of six, on December 6, 2004, in the morning.)

13. "[G]ossip is perhaps among the most fundamental human activities, as important to survival and reproduction as most other cognitive capacities and emotional dispositions." (Pascal Boyer: *Religion Explained*, 2001:123 / 2002:141)

14. The role of humour in academic writing is to force the reader to perform a complex mental computation, and thereby to transfer new information from semantic memory to episodic memory.