Abstract

Universal Grammar (UG) is characterized by the assumption that all human languages share a common structure with respect to their linguistic well-formedness conditions. In Optimality Theory (OT) this structure is represented by a set of linguistic candidate forms, a set of constraints and the definition of *being optimal*. The nativist view of OT assumes that such a structure is encoded in a Language Acquisition Device (LAD) provided to a learner of a language genetically.

The symbolic and the biological levels in which OT and the LAD are respectively, can be complemented with an intermediate level: the connectionist level. In this thesis, our purpose is focus on the link of the symbolic and the connectionist level with a logical stage. Through an example based on the CV Syllable Theory of OT, we build a bridge among OT-Connectionism-Penalty Logic. In particular, for the link OT-Connectionism, we take from Smolensky and Legendre (2005) a translation of the CV Syllable Theory into connectionist terms. Such a translation is called CV_{net}. For the link Connectionism-Penalty Logic, we propose a translation, expressed in the penalty knowledge base *cv*. This last translation has as purpose to simplify the encoding of the common structure $\mathcal{U}$ suggested by CV_{net}. In fact, such a translation could be seen as an alternative encoding of $\mathcal{U}$. As advantages, it has its simplicity and the enrichment of the linguistic exploration with logic's tools.