

Computing Minimalism: Simple doesn't mean easy

Sandiway Fong (University of Arizona)
sandiway@email.arizona.edu

Simplicity and efficiency are hallmarks of the computational system in the Minimalist Program. In particular, core operations, such as recursive Merge, should be the simplest possible mechanisms at the relevant level of abstraction. This principle ensures that core computation always enjoys priority in terms of design complexity over other operations. According to Chomsky (2011), language is first and foremost a thought system, and any conflict with parsing in terms of complexity is always resolved in favor of core computation. Put another way, in this framework, core computation is optimal, and parsing efficiency will fall wherever it must. This talk discusses what this might mean for faithful computer implementations of linguistic theories in the Minimalist Program. In particular, we will describe a system, currently under development, that implements the recursive Merge and probe-goal agreement system of Chomsky (2001), extended for syntactic Binding theory along the lines of Kayne (2002) and *tough*-constructions (Hicks 2009). This system will be compared and contrasted with a corresponding computational implementation of Government-Binding (GB) theory (Fong 1991).

References

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Acknowledgement

Parts of this talk represent joint work with Jason Ginsburg (University of Aizu).