HPSG AND MINIMALISM

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This chapter will compare and contrast HPSG and Minimalism. It will be organized as follows:

1. Introduction

We will argue here that, while HPSG and Minimalism are very different, they have enough in common to allow meaningful comparisons. We will also spell out how the chapter is organized.

2. Differences of approach and outlook

This section will highlight the very different attitudes of the two frameworks to formalization, their different attitudes towards quantity and quality of data, their different relations to computational linguistics, and their different views of what is and is not a legitimate cross-linguistic argument.

3. Different views of grammar

This section will contrast the declarative nature of HPSG and the procedural nature of Minimalism. It will also contrast the complex systems of types and constraints that are assumed within HPSG and the few general operations that form a Minimalist grammar. It will note that there are some similarities between Minimalism and early HPSG, which had just a few general phrase types. It will also note that the Minimalist view of grammar entails that syntactic structures are confined to binary branching and that all complex expressions are headed, both positions that are rejected in HPSG and other frameworks. Finally, it will note that for Minimalism unlike HPSG, semantics and morphology are simple reflections of syntax.

4. Different views of syntactic structure

This section will discuss the fact that Minimalist syntactic structures are both too complex and too simple from the standpoint of HPSG.

4.1. The complexity of Minimalist structures

This subsection will discuss how the Minimalist Uniform Theta Assignment Hypothesis leads to abstract representations and movement processes, especially in the case of *wh*-interrogatives, passives, and raising sentences, complexities which are not necessary in HPSG. It will also note how Minimalist views of the syntax-semantics relation entail that lexical items may derive from complex expressions which in some sense represent their meanings, another position rejected in HPSG. In much the same way, Minimalist views of the syntax-morphology relation lead to functional heads corresponding to various suffixes, e.g. T(ense) and Num(ber), another complexity that distinguishes Minimalism from HPSG. The commitment to binary branching also leads to more complex structures in Minimalism than in HPSG.

Further complexity stems from the simplicity of the Minimalist grammatical system. This entails that the properties of constructions must largely derive from the lexical items that they

contain. Hence, the properties of lexical items are absolutely central to Minimalism and often this means the properties of phonologically empty items, especially empty functional heads. A large set of such elements do much the same work as phrase types and the associated constraints in HPSG. This can be seen very clearly in the area of unbounded dependency constructions.

Thus, a variety of features of Minimalism lead to structures that are much more complex than those of HPSG. HPSG shows that this complexity is unnecessary given a somewhat richer conception of grammar.

4.2. The simplicity of Minimalist structures

While minimalist structures are very complex, they are also simple in the sense that they have just a single ingredient, local trees consisting a head and a single non-head. The assumption that all structures are binary branching is incompatible with plausible analyses for VPs with two complements and verb-initial clauses, among other constructions. In a similar, way the assumption that all structures are headed has a problem with coordinate structures.

Further issues arise with the Move/Internal Merge approach to unbounded and other non-local dependencies. This approach seems quite plausible for typical examples of an unbounded dependency but compares unfavourably with the HPSG SLASH-based approach when less typical unbounded dependency phenomena are considered. In particular, the Move/Internal Merge approach has problems with unbounded dependencies which have no filler, unbounded dependencies with not a gap but a resumptive pronoun, and examples where filler and gap do not match. All these phenomena are unproblematic for the SLASH-based approach.

Thus, there is evidence that the Minimalist view of constituent structure is too simple.

5. Restrictiveness

Here, we will discuss the idea that Minimalism is more 'restrictive' than alternatives like HPSG. This relates to the Chomskyan idea that the range of possibilities in grammatical systems is defined by a set of innate parameters, but Minimalism seem to be abandoning this idea. Minimalism still imposes some restrictions on grammatical systems, e.g. the restriction of syntactic structures to local trees consisting a head and a single non-head, but such restrictions seem untenable. HPSG imposes few restrictions on the content of grammars. Probably most HPSG linguists would accept that we don't yet have enough detailed formal analyses of enough phenomena in enough languages to have any firm conclusions about these matters.