All nouns have only one maximal projection (elementary tree) whether they occur in an N or an NP context. In French, the top <det>=+ feature on the noun is dependent on the context: 'voir *sorcifflre' / 'une sorcifflre' vs. 'changer quelqu'un en sorcifflre' / '*une sorcifflre' (see: 'a witch' / 'change someone into a witch').

Syntactic properties of the wole NP can more easily be made dependent on the lexical value of the determiner. We thus present a feature system for distinguishing determiners on the basis of the syntactic properties of the NP they introduce (extractable or not, topicalizable or not). These features also serve to rule out some combinations of determiners.

Japanese Tree Adjoining Grammar and its Application to On-Line Help System NeoAssist

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ne of the greatest obstacles faced when attempting to develop a text generation anism for a language like Japanese is the unpredictability caused by the rela- free word order and by the case assignment. It is, thus, necessary to develop rammatical formalism which gives an account of some linguistic phenomena iar to Japanese. This paper proposes the Japanese Tree Adjoining Grammar G for short) which has more powerful mechanism for treating the word order ion than that of the original Tree Adjoining Grammar (TAG for short).
rst of all, by using a set of linear precedence statements, we can define word variation in Japanese, there still remains a linguistic phenomenon which can e explained in the framework of TAG. For example, embedded sentences in ese do not normally carry any sign (i.e. *which*, *where* in English) to mark beginning. As a result, the beginning of a deeply embedded sentence can look y like the beginning of a simple top-level sentence. Furthermore, no other cannot be inserted between the embedded sentence and the antecedent. In to explain this linguistic phenomenon in JTAG, we will introduce the new precedence relationship '$\leq$'. The new relationship $x \leq y$ (x strongly precedes ntroduced so as to prohibit some words or phrases from moving into a phrase ase.
cond, Japanese postnominal suffixes, by themselves, do not always provide necessary information for case assignment. In other words, the postnominal of the same deep case interpretation changes depending on the aspectual es (stative, transitive, process, completive, momentary), voice, or volition. In to solve the problem of case assignment, we will extend the notion of an

elementary tree by introducing a set of feature-value pairs, so that JTAG is able to express control and feature constraints. Control constraint is used to deal with Equi-NP Deletion and Passive transformation. Feature constraint is used to constrain a feature of a node whose value is expected to be defined by a separate specification.

As a result, JTAG can formally deal with some linguistic phenomena often found in a typical Japanese text: passivization, topicalization, relative clauses, embedded sentences, etc. The framework of JTAG is now used as a text generation mechanism in an intelligent on-line help system NeoAssist. However, JTAG is still in its evolving stage, and it needs further refinement. For example, we could include in the framework of JTAG some semantic constraints such as 'a sentence can be transformed into the passive one, if the subject of the sentence is volitional'. Such a semantic constraint could be specified by using feature constraints described above. We have not yet explored what kind of features and their values should be prepared to express semantic constraints. We could also augment JTAG with the mechanism to deal with given and new information. This problem is closely related with the context of a sentence, we must develop the mechanism along with the selection mechanism of auxiliary trees. Such refinements and improvements will continue.

Coordination in TAG in the manner of CCG (Combinatory Category Grammars) : Fixed vs Flexible Phrase Structure

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So far there is no good account of the coordination phenomena in the natural language in the framework of TAG. The best account of coordination so far is provided by CCG. Lexicalized TAGs are very close to CCG except for the fact (and a very crucial fact) that the elementary trees of TAG (lexicalized TAG) do not have a curried representation. The categories in CCG are represented as curried functions. In my talk at the Dagstuhl workshop on TAG, I tried to show that this crucial difference can be exploited for constructing a CCG-like account for coordination in TAGs without - giving up the phrase structure defined in the set - of elementary trees. In CCG there is no fixed phrase structure, almost any contiguous sequence of lexical items (words) can be grouped together as a constituent, thus creating groupings which ordinarily will not be considered as constituents. There are a number of questions about my approach that need to be settled, in particular, it is necessary to investigate the power of the resulting system and to make save that no additional complexity is added while trying to get rid of the multiplicity of constituents in CCG.Interaction with the participants promised me a lot of new ideas about how to settle these questions.