## Scrambling, PF and LF adjunction, and null operator movement in Japanese Hajime Hoji USC

In Ross 1967 and in subsequent works, 'scrambling' is included among the stylistic rules, and that conception had not been seriously challenged (at least with respect to Japanese) (with a few exceptions such as works by S.-I. Harada) until the mid 1980s when it was specifically argued, e.g., in Saito 1985, that 'scrambling' (in Japanese) is a syntactic operation and is not a semantically vacuous movement. Observationally, it was agreed upon in the 1980s that some instances of the so-called 'scrambled NP' in Japanese (and other 'scrambling languages') exhibit A-properties and others A'-properties. Various attempts have since been made to express so-called A and A'-properties of 'scrambling'.

We adopt the following thesis, put forth in Ueyama 1998, according to which the movement operations involved in the OS construction (i.e., sentences of the 'object subject order') in Japanese are not uniform, contrary to the thesis that seems to have been pursued for the past two decades by M. Saito, and a given example of the OS construction in Japanese can correspond to two distinct numerations, and hence two distinct derivations and representations. The OS order can come about as the result of the PF movement of a non-subject NP over the subject, but it can also come about with the 'base-generation' of the non-subject (such as the object) at the sentence-initial position, being related to 'its theta position' through a Predication relation with a lambda predicate containing 'the theta position' as the open position. One might suggest that the former is akin to Heavy NP shift in English, to the extent that it is analyzed as an instance of PF movement, and that the latter is not unlike what happens in the *tough* sentences in English.

We assume that UG allows of PF adjunction and LF adjunction, as an optional operation; and these are indeed the two operations that are claimed to take place under Ueyama's (1998) analysis of the OS constructions in Japanese. Adopting Fukui's (1986) thesis that Japanese lacks 'active functional categories' (which would be responsible for obligatory displacement), we further maintain that these two are the only displacement operations available in Japanese. One can then naturally wonder what might be the Japanese analogues of what is considered in Chomsky 1977 as involving wh-movement, and later considered as an instance of a null operator movement construction (such as the cleft, relative, topicalization, and comparative constructions) and how the properties of their 'Japanese analogues' can be accounted for under the general characterization of Japanese being pursued here. We will try to present a description and a basic analysis of each of these 'constructions' in Japanese and defend the thesis that they do not involve the kind of movement involved in such constructions in English as those just noted. The relevant empirical considerations here have to do with clause-boundedness, the Subjacency effects and reconstruction effects. We will note that at the moment we seem to be able to obtain clear results in regard to the relevant tests only if we consider reconstruction effects of bound variable anaphora and

quantifier scope, and furthermore, the binding reconstruction and the scope reconstruction must be of a certain type, as discussed in some depth in Hoji 2003. We will also address the issues concerning 'resumption', in relation to these, and go over empirical evidence for Ueyama's (1998) proposal, differentiating it from other analyses of 'scrambling' (e.g., Saito 2003). Among the crucial generalizations is that 'resumption' is possible in the position of the theta position corresponding to the 'scrambled NP' only in the OS construction that exhibits A-properties, presenting a serious challenge to an A-movement analysis (or its variants) of such cases, as discussed in Ueyama 1998: chap. 2 and 2003.

There has been little doubt, at least since the mid 1950s, that INFL (and COMP) (and what have subsequently been argued to 'underlie' them) play(s) a crucial role in the characterization of the formal aspects of English; cf. the Affix Hopping analysis in Chomsky 1955, 1957, the works on complementation since Lees 1960, Rosenbaum 1967, and the subsequent works. It is, however, not clear at all that INFL and COMP (or the relevant features (claimed to be) associated with them) play any crucial role in characterizing the properties of Japanese, at least in a way remotely resembling the role played by the relevant categories or features in English. Ueyama's (1998) proposal re. 'scrambling' in Japanese alluded to above and its extension to be attempted in this presentation have been developed under the general view of Japanese, proposed in Fukui 1986, that Japanese lacks 'active functional categories' altogether, predicting, among other things, the absence of any obligatory displacement in Japanese.

One might point to various arguments in the literature for the existence of formal features (strong features, the EPP feature, or the like) in Japanese. However, once we put such proposals to a minimally rigorous empirical test, checking its negative predictions, it is not clear if any such argument/hypothesis/claim remains not to be refuted/falsified/invalidated. We will provide illustration of some concrete examples. One might also wonder how valid the empirical bases are for the claims defended in this presentation, pointing to judgments reported in the literature in support of the hypotheses/claims contrary to the thesis pursued here. Among the key notions in assessing a given hypothesis and in dealing with judgmental fluctuation are *falsifiability, corroboration* (not in the sense of Popper), and *negative predictions*, and the recognition that a contrast detected in a minimal pair should be counted as significant only if the negative prediction made by the hypothesis in question is not disconfirmed. I will try to go over what is meant by this and also try to make some remarks on what role can be profitably served by research on Japanese (and other languages that share with Japanese the crucial properties noted above), given the basic correctness of the general thesis pursued here.

(I plan to post some relevant materials at my HP (http://www.gges.org/hoji/), including some empirical paradigms to be discussed in my presentation, the references, etc., as the time of the workshop approaches.)