This paper argues that wh-in-situ in Japanese in fact involves S-structure movement of an invisible entity and therefore that the Subjacency effects discovered and used as evidence for LF Subjacency by Nishigauchi (1986, 1990) and Pesetsky (1987) are due to this S-structure movement. This conclusion is forced on us by the facts that (1) in multiple questions where one of the wh-phrases is inside an island and the other is outside of it, there are no Subjacency effects, contrary to the expectation of the LF Subjacency hypothesis, and that (2) an indirect question constitutes a wh-island for overt movement even though the visible part of the wh-phrase is still in-situ at S-structure.

Since the work by Huang (1982), a common assumption has been that S-structure movement is constrained by Subjacency and the ECP, whereas LF movement is only sensitive to the ECP. There is, however, a growing body of literature including Barss et al. (1991), Bergvall (1983), Choe (1987), Longobardi (1991), Nishigauchi (1986), Pesetsky (1987), and Reinhart (1991), which argues that Subjacency applies to LF movement as well. Thus, there is an apparent conflict here between the evidence that motivates the lack of Subjacency at LF and the one that displays LF Subjacency effects. This paper attempts to resolve this paradoxical situation by focusing on the properties of wh-movement in Japanese. Specifically, it will be argued, by bringing in new data, that Subjacency should constrain only the mapping from D-structure to S-structure.

This paper basically presupposes the Barriers framework of Chomsky (1986) and some subsequent work, where Subjacency subsumes the Condition on Extraction Domain (CED), the Complex NP Constraint, and the wh-island Condition. The main logic of the discussion is the following. We first observe that there are two levels of movement in Japanese interrogatives, only the first of which obeys Subjacency. On the ground that there is a wh-island effect for overt movement in Japanese, it follows that the first level of movement is identified as S-structure movement, since the account of the wh-island effect requires the CP Spec of a wh-island to be filled at S-structure.

Section 1 clarifies the issues surrounding the LF Subjacency hypothesis and then looks at further data which are not examined in the past literature, arguing that apparent LF Subjacency effects do not manifest themselves uniformly. Section 2 attempts to establish that Japanese wh-
questions involve S-structure movement to CP Spec. We will conclude by summarizing the properties of S-structure movement involved in Japanese *wh*-questions that are relegated to future research.

1. APPARENT LF SUBJACENCY EFFECTS

In this section, we will look closely at LF Subjacency effects. The treatment of LF Subjacency effects is closely tied to the proposal of pied-piping; in cases where a violation is expected but does not show up, large-scale pied-piping of the entire island is invoked to account for the lack of the Subjacency effect. For this reason, we will start with the question of pied-piping as the background of the whole issue. Section 1.1 will list the apparent LF Subjacency effects to be accounted for. Section 1.2 will introduce crucial new data.

1.1. Pied-piping Asymmetry

1.1.1. Review

Huang (1982) argues that LF movement does not obey Subjacency by pointing out that *wh*-in-situ fails to display island effects, in contrast to overt movement. Thus:

(1) a. *What do you remember where we bought?
    b. Who remembers where we bought what?

(2) a. *Who do you like books that criticize?
    b. Who likes books that criticize who?

(1) illustrates the *wh*-island Condition and (2) the Complex NP Constraint. In (1b), the relevant interpretation, in which *what* is construed with the matrix question, is possible. He also points out that immunity from Subjacency holds for LF movement in a language like Chinese, which has no overt question movement. The sentences below are well-formed in Chinese.

(3)  
    ni xihuan [piping shei de shu]?  
    you like criticize who REL book  
    ‘Who do you like books that criticize?’