In this paper, I argue that the indirect object of a ditransitive verb is always base-generated higher than the direct object. The word order alternation between the arguments in Japanese is the result of scrambling. I present new evidence for this approach from the Chain Condition effect in the sense of Rizzi (1986). I show that we observe the Chain Condition effect with the reflexive anaphor karezisin ‘himself’ when the word order is that of direct object-indirect object but not vice versa, which supports the movement analysis of the word order alteration. It has been observed that we do not obtain the Chain Condition effect with the reciprocal anaphor otagai ‘each other’. I argue that this observation follows from the syntax and semantics of the reciprocal anaphor, and hence, does not constitute evidence against the movement analysis.

1. Introduction

As is well known, word order in Japanese is relatively free. For example, in a simple transitive construction, the order of subject and object relative to each other is not fixed, as shown in (1).

(1) a. Osamu-ga Hiroshi-o hometa. Subject-Object
    Osamu-Nom Hiroshi-Acc praised
    ‘Osamu praised Hiroshi.’

In a ditransitive sentence, there are six possible ways of ordering the various arguments, as shown in (2). These are all logical ways of ordering the subject (S), indirect object (IO), which is marked Dative, and direct object (DO), which is marked Accusative.

(2) a. Osamu-ga Misa-ni Hiroshi-o syookaisita. S-IO-DO
    Osamu-Nom Misa-Dat Hiroshi-Acc introduced

b. Osamu-ga Hiroshi-o Misa-ni syookaisita. S-DO-IO
    Osamu-Nom Hiroshi-Acc Misa-Dat introduced

c. Misa-ni Osamu-ga Hiroshi-o syookaisita. IO-S-DO
    Misa-Dat Osamu-Nom Hiroshi-Acc introduced
A different way of looking at this is as follows: the surface word order of DPs/arguments is independent of the Case marking in Japanese.\(^1\)

In English, the word order is not as flexible. In the early 1980s, some researchers proposed that, unlike English, Japanese does not have hierarchical structure (Hale 1980, 1983). According to this approach, the surface word order of a Japanese sentence is reflected in the base-generated structure, and moreover, the structures are assumed to be flat. There is no movement of objects over subjects when they appear in the object-subject order. The proposed structures for the examples in (1) are shown in (3).

Saito and Hoji (1983), Saito (1985), and Hoji (1985) show that Japanese phrase structure is hierarchical. Moreover, they argue that there is a VP node in Japanese, and that the indirect object is base-generated hierarchically higher than the direct object in the double object/ditransitive construction (Saito 1985, Hoji 1985). The relatively free surface word order in Japanese, they propose, is a result of a movement operation called *scrambling* (Ross 1967). According to this view, which I will call the Movement Hypothesis, (1a) and (2a) are the base-generated structures, and we obtain (1b) and (2b) through (2f) by applying scrambling to (1a) and (2a). That is, in the case of (1b), (2c), (2d), (2e), and (2f), we move the object over the subject to adjoin to the S/IP/TP (IP-adjoined scrambling). In the case of (2b), on the other hand, the direct object moves over the indirect object, adjoining the VP (VP-adjoined scrambling).