This paper investigates two less-studied interrogative sentences in Japanese: alternative questions and $wh$-scope marking questions, as illustrated in (1) and (2), respectively. I will argue that $wh$-phrases that occur in these constructions have a layered internal structure, each element of which is taken to correspond to a particular object in semantic representation in the form of the tripartite quantified structure.

In Japanese, unlike in English, the question with the NP disjunct *coffee or tea* in the object position cannot have an alternative question reading. The English example in (3) is ambiguous, giving either a yes-no question reading (3a) or an alternative reading (3b). The corresponding example in Japanese, on the other hand, has only a yes-no reading, as in (4). To obtain an alternative reading, an overt $wh$-phrase *docchi* ‘which’ must appear in addition to the associated NP disjunct, as illustrated in (1).

Next, the scope of a $wh$-phrase in Japanese is usually marked by a question particle such as *ka* (in an embedded clause (5a)) or *no* (in a matrix clause (5b)). In addition to the long-distance $wh$-question (5b), we have another question-forming strategy as in (2). The sentence in (2) consists of two clauses each containing a $wh$-phrase. A characteristic of this type of question is that its felicitous answer involves supplying the value for the $wh$-phrase *dare* like (5b). The contrast in (6) indicates that this type of question is not a sequence of questions or some kind of integrated parenthetical constructions. What is interesting here is that although the verb *omou* cannot take a question complement (5c), the sentence (2) requires a question as an embedded clause. In fact, if the embedded complementizer is changed into a declarative complementizer -to, the sentence is degraded as illustrated in (7). This reminds us of the obligatoriness of partial $wh$-movement in German as in (8). These considerations indicate that sentences like (2) belong to the same type of questions called “$wh$-scope marking” or “partial $wh$-movement” constructions. Other properties concerning “$wh$-scope marking” constructions such as “anti-locality”, the incompatibility with verbs selecting a question, and “negative-island” effect corroborate this point.

Both alternative questions and $wh$-scope marking questions display a peculiar word order restriction, as shown in (9) and (10), respectively. To derive the restriction, I propose the specific internal structure of relevant $wh$-phrases. Notice that the disjunctive phrase functions as a restriction that limits the presupposed set for the possible answers. Likewise the embedded clause in $wh$-scope marking constructions also limits the presupposed set for the possible answers. Now we can sketch the syntactic structure of the $wh$-phrase that reflects its semantics. First a variable (Nishigauchi 1986) is merged with the element that functions as a restrictor. Then a $wh$-operator that binds the variable, is merged. Following Watanabe (2006), I assume that there is a Case Phrase above the NP projection and below the DP projection, resulting in the structure in (11). I also assume that the restrictive phrase must move to the specifier of Case phrase for Case theoretic reasons. Then it intervenes between the licensing complementizer and the $wh$-word, as illustrated in (12), blocking the movement of the $wh$-word over the restrictor NP. The same holds true for the case of $wh$-scope marking constructions. Notice that when the restrictor NP does not contain a disjunctive phrase, the $wh$-phrase can be raised over the restrictor, as in (13), where the $wh$-phrase is linked to the following NP by genitive marker –no. We find further evidence for the blocking effect in right-dislocated structures. When the restrictor NP or CP is right-dislocated and removed from between the $wh$-phrase and its licensing complementizer, sentences become acceptable, as in (14).

In summary, assuming that the operator and the restrictor are configurated, like (11), within a single $wh$-phrase, we can offer a unified account for both alternative and $wh$-scope marking questions. The analysis in this paper also lends an indirect support for Tsai (1999)'s proposal that licensing of Japanese $wh$-phrases occurs at the phrasal level. Although there remain many questions that cannot be addressed in this paper, the questions it raises are likely to lead us to a better understanding of the nature of $wh$-phrases in Japanese.

Data
(1) John-wa coffee ka ocha ka docchi-o nonda no
    John-TOP coffee or tea (or) which-ACC drank Q
‘Which of these two things did John drink: coffee or tea?’
anata-wa John-ga dare-o aisiteiru ka doo omotteiru no?
you-Top John-Nom who-Acc love Q WH think Q
‘Who do you think that John loves?’

Did John drink coffee or tea?

- ‘Is it true or false that John drank any of these two things, coffee or tea?’
- ‘Which of these two things did John drink: coffee or tea?’

John-wa coffee ka ocha-o nonda no?
John-TOP coffee or tea-ACC drank Q
‘Is it true or false that John drank any of these two things, coffee or tea?’

Who do you think that John loves?

- ‘Who do you think that John loves?’

Who do you think that John loves?

‘You know who John loves.’

‘You think who John loves.’

‘Which dessert did John eat?’

