

Raising and Multiple Agree in Japanese, Icelandic and beyond

1.:A Problem of AGREE: Chomsky(1998,1999) proposes the new 'movement-less' theory of feature-checking AGREE. However, the mechanism of AGREE poses one serious but interesting problem under the theory of *Defective Intervention Constraint* (DIC)(1) (Chomsky1998,1999, Boeckx2000, Ura2000b).('>' is a c-command relation).

(1) * $\alpha > \beta > \gamma$ (α is a probe γ is the goal for α , β being inactive due to a prior AGREE)

The problem that Chomsky fails to address is that the mechanism of AGREE and DIC cannot distinguish the illicit derivation (1) and the licit derivation (2), which is considered to be a case of covert multiple feature-checking in MP (cf. Ura1996/2000a)

(2) $\alpha > \beta > \gamma$ (α is a probe and both β and γ are goals for α)

Thus under Chomsky's(1998,1999) theory of DIC, the derivation (2) is wrongly ruled out, just as (1) is proposed to be excluded in Chomsky(ibid). This is because at the stage of the derivation where α enters into AGREE with β in (2), the inactivated higher goal β should block any further Agree between the probe α and the lower goal γ due to (1).

The important question to ask is then whether there is any licit case of covert multiple feature-checking in human languages from the viewpoints of MI/DBP (Chomsky 1998,1999). As long as we find empirical evidence for covert multiple feature-checking, the mechanism of Agree and DIC in Chomsky(1998,1999) is untenable and needs refinement.

2.:Empirical Evidence for Covert Multiple Feature-Checking in Japanese: First I will show from a minimalist scrutiny that in fact there exist a number of cases of covert multiple feature checking, which necessitates a reconsideration of the mechanism of AGREE. These include, for example, multiple wh-question in wh-in-situ languages, double object constructions that mark both DO and IO with the same structural Case (Korean, Swedish, Kinyarwanda, etc.;Ura2000a), and the raising construction in Japanese. (3) is an example from the subject raising construction in Japanese (Kuno1976, Takezawa1998), which will be the main topic of this paper..

(3) John ga [yosouijouni **nihonjin ga eigo ga** hidoku] kanji-ta.
John-NOM than-expected the Japanese-NOM English-NOM bad-be-INF think-PST
'It seemed to John that the Japanese are bad at English than he had expected'

Since the infinitive T in Japanese cannot check nominative Case (Takezawa1987,1996, Ura2000ab), the nominative Case in the embedded clause must come from the AGREE with the matrix T. This AGREE, however, does not accompany MOVE as the placement of the adverb *yosouijouni*, which modifies the embedded verb, clearly indicates. Thus (3) is a licit case of covert multiple feature checking and therefore poses a serious problem for Chomsky's(1998,1999) theory of AGREE and DIC.

3.:The Proposal--MULTIPLE AGREE and DIC: To solve this paradox, I will claim that the notion of covert multiple feature-checking (i.e. pure AGREE with multiple goals without MOVE) needs to be refined. More specifically, I will claim that what looks like covert multiple feature-checking on the surface is in fact a single instance of feature-checking syntactic operation and thus propose the theory of MULTIPLE AGREE (4).

(4) MULTIPLE AGREE is a single syntactic operation that applies to all the matched goal simultaneously. (Hiraiwa2000ab)

Under the theory (4), the derivation (3) is correctly ruled in; the probe T probes down the phrase marker and first locates the closest matching goal *John*. But the probe ϕ feature being [+multiple], this does not result in immediate AGREE and rather, the probe continues its search for the next closest goal(s), locating the higher *nihonjin* and the lower *eigo*. Now AGREE applies to all of these three matching goals *simultaneously* and hence no defective intervention effect is incurred between the matrix probe T and the lowest goal (MULTIPLE AGREE). Thus an immediate consequence of our theory is that DIC is restricted only to the cases in which β and γ enters into AGREE relation at derivationally different points (therefore with different probes), distinguishing between (1) and (2).

Thus MULTIPLE AGREE correctly rules out the cases like (1) in Japanese, while ruling in the case like (2) (which is exemplified by (3) above). An example for the former comes from the ECM construction in Japanese (cf. Kuno1976).

(5) a. Mary wa [John **ga nihongo-ga** dekiru to] sinjite-ita
Mary-TOP John-NOM Japanese-NOM do-can-PRES C believe-PST

- 'Mary believes that John can speak Japanese'
- b. Mary wa [John **wo** nihongo-**ga** dekiru to] sinjite-ita
 Mary-TOP John-ACC Japanese-NOM do-can-PRES C believe-PST
- c. *Mary wa [John **ga** nihongo-**wo** dekiru to] sinjite-ita
 Mary-TOP John-NOM Japanese-wo do-can-PRES C believe-PST
- d. Mary wa [John **wo** nihongo-**wo** dekiru to] sinjite-ita
 Mary-TOP John-ACC Japanese-ACC do-can-PRES C believe-PST

Particularly interesting is (5c); the higher DP *John* has entered into AGREE relation with the embedded probe T at the stage of the embedded TP. The matrix ν thus cannot AGREE with the lower DP *nihongo* due to the defective intervention effect triggered by the inactive higher goal. However note that Chomsky's system cannot distinguish between (3) and (5c); it incorrectly exclude (3) in the same way as it rules out (5c).

In contrast our theory of MULTIPLE AGREE (4) make a prediction that multiple ECM (i.e. covert multiple feature checking) is grammatical and free from any DIC, as is correctly born out by (5d); the probe ν enters into an Agree relation with the two multiple goals derivationally simultaneously, and hence no defective intervention effect.

4.:Conclusions and Consequences: In conclusion I will show that (i):Chomsky's(1998,1999) theory of AGREE suffers a serious problem in cases of covert multiple feature checking. In particular it cannot explain multiple nominative Case checking in the raising construction in Japanese (cf.(3)); (ii):the proposed theory of MULTIPLE AGREE solves the apparent paradoxical conflict between covert multiple feature checking and AGREE/DIC in Chomsky's(1998,1999) system.

It will be also shown that the proposed theory of MULTIPLE AGREE brings an important consequence for the raising construction in Icelandic. Chomsky(1998) and Boeckx(2000) argue that the absence of plural agreement in (6) is due to the DIC triggered by the dative phrase *John*.

- (6) Me(dat) seem(*pl)/(^{ok}dflt) [t_{me} [John(dat) to like horses(pl,nom)]
 'It seems to me that John likes horses' (Boeckx2000)

One serious problem for Boeckx-Chomsky's claim is that they cannot account for the fact that (6) becomes grammatical if default agreement is used for the matrix raising predicate (cf. Boeckx2000:5). However, if the experiencer *John* incurs a defective intervention effect as they claim, then they cannot explain why the structural nominative Case on *horses* is licensed.; the nominative Case checking by the matrix T should be unavailable because of the same DIC (1) under Chomsky's(1998) assumption that structural Case is an instance of ϕ -feature checking (Agree), and hence the sentence should be predicted to be ungrammatical.with either agreement pattern...

MULTIPLE AGREE solves this problem; the ϕ -feature of the matrix T enters into an Agree relation with both the dative experiencer *John* and the nominative object *horses* simultaneously (cf.(7)).

- (7) Me(dat) T-seem(dflt) [t_{me} [John(dat) to like horses(pl,nom)]
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 ϕ -determination Case-determination (MULTIPLE AGREE)

The ϕ -agreement on the probe is inevitably determined by the closer goal *John*, resulting in default agreement in this case and plural agreement being blocked. On the other hand, for the determination of the structural nominative Case on the goal *horses*, no apparent defective intervention effect is induced by the closer *John* because the multiple Agree between the probe and the two goals is derivationally simultaneous (cf.(2) and (4)).

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