

# On a Weak-Phases Paradox

Tomonori Otsuka  
Kyushu University

Chomsky (2008) introduces a theoretical assumption of Feature Inheritance; a phase head has an Edge Feature (EF) and an uninterpretable Agreement Feature (u-AF), the latter of which is transmitted onto a head of the complement. Richards (2007) offers theoretical support for this by arguing that u-AF has to be Transferred when checked and that this requires it to be in a complement of a phase because the phase head is not transferred then.

This framework, however, causes a paradox concerning weak-phases. In Phase Theory, two types of phases exist, namely strong- and weak-phases. In weak-phases, the Phase Impenetrability Condition (PIC), which bans access of syntactic operations of a relevant phase to a complement of another lower phase, does not hold. Thus, as shown in (1), the DP's A-movement from inside of the complement of the weak-phase vP is accepted.

(1) John was hit.

<sup>ok</sup>John<sub>i</sub> was [<sub>vP</sub> [<sub>VP</sub> hit *t*<sub>i</sub>]]



PIC follows from the assumption that an upper phase cannot access a lower phase's complement since it is transferred once the lower phase is formed. Therefore, the absence of PIC violation suggests that Transfer is not triggered. Since checked u-AFs have to be Transferred, Transfer cannot be separated from feature-checking. Thus, weak-phases' not triggering Transfer implies their not involving feature-checking. This logic is schematized in (2).

(2) uninterpretable features → checking → Transfer

• If weak-phase heads involve feature-checking, they should trigger Transfer

⇒ weak-phases cannot involve feature-checking so that they cannot trigger Transfer

Legate (2003), however, shows the examples in (3) and claims that weak-phase heads have an EF. In order to be interpreted properly, wh-elements in (3) must have an intermediate copy between *every man* and *her*. (3a) has the intermediate position marked as “^,” whereas (3b) does not, resulting in an unacceptable sentence. Since these are passive sentences, this implies that the intermediate position in (3a) is the Spec-vP and therefore vP must have an EF to attract the wh-element. In addition, the inflection on V in French in (4) implies that v has a u-AF as well, since in Chomsky's (2008) framework, only phase heads can have u-features that are transmitted onto the head of the complement.

(3) a. [At which of the parties that he<sub>i</sub> invited Mary<sub>j</sub> to] was every man<sub>i</sub> ^ introduced to her<sub>j</sub> \* ?

b. \* [At which of the parties that he<sub>i</sub> invited Mary<sub>j</sub> to] was she<sub>j</sub> \* introduced to every man<sub>i</sub> \* ?

(Legate (2003))

(4) Les chaises ont été repeintés.

The chairs.fem.pl have.pl. been repainted.fem.pl

'The chairs were repainted.'

(Boeckx (2008))

Here we face a paradox; as (3) and (4) show, weak-phases do have an EF and a u-AF,

whereas (2) means that weak-phases should not involve feature-checking. In this presentation, I demonstrate that the paradox can be explained by the introduction of Feature-Copying, which is an extension of Feature Inheritance. I assume that weak-phase heads themselves do not have features but that they receive them from strong-phase heads above.

Feature-Copying

Strong-Phase	Weak-Phase	⇒	Strong-Phase	Weak-Phase
Head	Head		Head	Head
{EF, u-AF}	{ , }		{EF, u-AF}	→ {EF, u-AF}

Additionally, because weak-phase heads serve as strong-phase heads after they get features, Feature-Copying induces two possibilities; 1) a weak-phase head triggers operations simultaneously with an upper strong-phase head, 2) a weak-phase head triggers operations independently. With this mechanism, I demonstrate that a variety of phenomena can be explained. One of them is a case variety in Japanese shown in (5).

- (5) a. Taro-wa Hanako-o utsukushi-i to omot-ta.  
 Taro-TOP Hanako-ACC beautiful-be COMP consider-PAST  
 ‘Taro considered that Hanako (ACC) was beautiful’ (Ura (2007))
- b. Taro-wa Hanako-ga utsukushi-i to omot-ta.  
 Taro-TOP Hanako-NOM beautiful-be COMP consider-PAST  
 ‘Taro considered that Hanako (NOM) was beautiful’

In (5), *Hanako* can have either Nominative or Accusative case. Since Nominative case is assigned in (5b), the embedded clause must project to CP. If so, because inflectional patterns are the same in (5a, b), the null-hypothesis suggests that both embedded clauses are CP. Following Ura’s (2007) basic idea, I propose that verbs in this construction always select weak-phase CP and that the two patterns of case manifestation can be explained by the two induced possibilities of Feature-Copying noted above. Moreover, without Feature-Copying, Accusative case assignment in (5a) causes PIC violation or Improper Movement.

- (6) a. Taro-wa [VP Hanako-O<sub>i</sub> [CP [TP ~~t<sub>i</sub>~~ utsukushi-i] to] omot-ta] PIC violation  

- b. Taro-wa [VP Hanako-O<sub>i</sub> [CP ~~t<sub>i</sub>~~ [TP ~~t<sub>i</sub>~~ utsukushi-i] to] omot-ta] Improper Movement  


References

Boeckx, Cedric (2008) *Understanding Minimalist Syntax: Lessons from Locality in Long-Distance Dependencies*, Blackwell Publishing, Malden, Massachusetts.

Chomsky, Noam (2008) “On Phases,” *Foundational Issues in Linguistic Theory*, ed. by Freidin et al, 133-166, MIT Press, Cambridge, Massachusetts.

Legate, J. Anne (2003) “Some Interface Properties of the Phase,” *Linguistic Inquiry* 34, 506-516.

Ura, Hiroyuki (2007) “Long-Distance Case Assignment in Japanese and Its Dialectal Variation,” *Gengo kenkyu* 131, 1-43.

Richards, Marc D. (2007) “On Feature Inheritance: An Argument from the Phase Impenetrability Condition,” *Linguistic Inquiry* 38, 563-572.