

*On the Null Subjects of Chinese Weather Verbs**

By Stephen Hayle

In her article *On Null Subjects*, Suner (1982) analyzes the nature of null subjects occurring in certain Spanish sentences. In this paper I will undertake similar analyses to determine the identity of null subjects found in Chinese sentences featuring the weather verbs *xia yu* (to rain) and *xia xue* (to snow), as exemplified in (1) and (2). (Note that tonal markings are omitted throughout in the Chinese examples.)

- (1) Jintian xia yu. (2) Dongtian xia xue.
Today fall rain Winter fall snow
It is raining today. It snows in the winter.

Essentially, the question to be answered is whether the null subjects in sentences like (1) and (2) are examples of NP trace or PRO.

I shall deal first with the feasibility of a NP trace analysis of these sentences, as illustrated below:

- (3)a. Jintian [_{NP} e_i] xia yu_i.
b. Dongtian [_{NP} e_j] xia xue_j.

Under this analysis, the NPs *yu* and *xue* appear in subject position in deep structure and are postposed by a special rule. However, such an proposal creates a peculiar situation in which the trace is not proceeded or c-commanded by its antecedent—thus making the possibility of binding problematic. Suner (p.69) resolves a similar problem in Spanish by arguing that Spanish is a language in which the empty element may be bound in subject position through the AGR feature of INFL. This solution is not available in Chinese, since Chinese lacks the agreement feature—as witness below:

- (4)a. Wo shuo. b. Ni shuo. c. Ta shuo.
I say. You say. He says.

Therefore, the trace cannot be coindexed with the verb and binding cannot occur. This conclusion is in accordance with the general observation that Chinese sentences do not exhibit subject-verb inversion.

The second possible analysis of sentences like (1) and (2) is that they are semantically and syntactically subjectless. Following Suner's line of argumentation (p.63-64, and footnote 20, p.68), let us examine whether it is possible to form grammatical sentences by embedding

xia yu/xue phrases within matrix sentences featuring raising verbs (5 and 6), control verbs (7 and 8), causative verbs (9), and perception verbs (10):

- (5) Hui xia xue. (6) Kaishi xia yu.
It can snow. It is beginning to rain.
- (7) *Ta mingling xia xue.
He orders it to snow.
- (8) Wo xiangxin zai xia yu.
I believe it is raining now.
- (9)a. * Kexuejia shi xia xue le.
The scientists made it snow.
- b. Kexuejia shi tiankong xia xue le.
 (the marker le indicates completed action or a new state)
The scientists made it (the sky) snow.
- (10) Haizimen zai kan xia yu.
The children are watching it rain now.

We observe that *xia yu/xue* can occur with raising verbs, which does not conflict with the analysis, since raising verbs do not require a subject in their embedded phrases (Suner, p. 64). However, grammatical sentences can also occur with some control verbs, causative verbs and perception verbs. How are we to explain these phenomena? Perhaps like the Spanish weather verbs which Suner analyzes (footnote 20, p. 68), *xia yu/xue* have PRO as their subject. Examination of the characteristic subcategorizations of the verbs *kan*, *xiangxin*, and *shi* provides supporting evidence for a PRO analysis.

The verbs *kan* and *xiangxin* characteristically c-select a NP or S', as illustrated in (11) and (12):

- (11)a. Wo [_{VP}kan le [_{NP}ta]].
I saw him
- b. Wo [_{VP}kan le [_Sta kai che]].
I saw him drive a car.
- (12)a. Wo [_{VP}xiangxin [_{NP}ta]].
I believe him.
- b. Wo [_{VP}xianxin [_Sta shi hao ren]].
I believe she is a good man.

The verb *shi* c-selects a S', as illustrated in (13):

- (13) Ta [_{VP}shi [_Stade pengyou huijia]].
He made his friend go home.

Given this data, it seems evident that verbs embedded under *kan*, *xiangxin*, and *shi* must have subjects, since they must be full-fledged S's. In the case of certain verbs, as in (11) through (13), the subjects will be lexical. In the case of verbs like *xia yu/xue*, the subject will be phonetically empty but syntactically present—i.e., PRO. The verb *shi* presents a somewhat unusual situation in that it appears to require a lexical subject for its embedded sentences, even in the case of *xia yu/xue*. It should be noted that sentence (9)b. represents a rather unusual, although grammatical, usage of the verb.

In conclusion, a PRO analysis of the null subjects in (1) and (2) appears the most consistent with the facts of Chinese syntax. Such an analysis is corroborated by the behavior of certain other Chinese verbs which may occur with or without lexical subjects:

- (14)a. Zou le.
I'm going/you're going/let's go.
 b. Ta zou le.
He's going.
 (15)a. Xia ban le.
I'm getting off work/you're getting off work
/let's get off work
 b. Hongxing xia ban le.
Hongxing is getting off work.

Note that the very indefiniteness of subject reference in (14)a. and (15)a. suggests PRO with arbitrary control. The only difference between the verbs in (14) and (15) and *xia yu/xue* is that the latter must, for some reason, always appear without a lexical subject.

Notes

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References

Suner, M. (1982) On Null Subjects. *Linguistic Analysis* 9: 55-78.