Bridging in Chinese and Frame Theory

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Bridging, also known as associative anaphora or indirect anaphora, is a fascinating and complicated usage of the definite article. A bridging-NP does not refer to an entity which is familiar in the current discourse, but to a new entity which stands in a particular relationship with a familiar one. In the literature bridging is often regarded as a frame-based usage of the definite article (Hawkins, 1978; Sanford & Garrod, 1981; Löbner, 1998).

In Chinese there are two ways to formulate a simple definite description: to use a bare noun in some particular syntactical position, on the one hand; or to use the unstressed distal demonstrative *na* to build a determinate NP, on the other hand. It is often claimed in the literature that the first way is the most common way and the second way is marked and optional (Chen, 2004). I call the first way the unmarked definite expression and the second way the marked definite expression.

In many cases of bridging both definite expressions are acceptable, as shown in (1). The acceptability of the unstressed distal demonstrative *na* in such context allows us to regard it as an article-like determiner but not as a real demonstrative:

(1) Wo kan le   yi ben shu. **(Na ge) zuozhe** shi   ge   deguoren.
    I   read perf.mark. one class. book na class. author copula class. German
    "I read a book. **The author** is a German."

But in some cases, the marked definite expression, which is supposed to be optional, becomes obligatory, and the unmarked definite expression is not really available, see (2):

(2) Hansi bei shahai le.   **#(Na ba)   dao** zai anfaxianchang bei zhaodao le.
    Hans pass. murder perf.mark. na class. knife at crime-scene pass. find   perf.mark.
    "Hans was murdered. The knife was found at the crime scene."

In some other cases, the unmarked definite expression, which is supposed to be common, becomes obligatory, and the marked definite expression is not acceptable, see (3):

(3) Na'er you yi   jian   wuzi. **(#Na shan) men** shi   kai   zhe   de.
    There exist one class. house na class. door copula open   durative   part.
   "There is a house. The door is open."

Based on the above observations I carried out two experiments. The first experiment was conducted in order to find out which factor causes the contrast in (2). I adopted the attribute-value-set from Barsalou (1992) and the differentiation between core- and non-core-frame-element from FrameNet as test-parameters, combined them into a two-dimensional table and filled every cell in the table of every test-frame with two frame elements, as shown in (4):

(4) "murder" as an example of the test-frames

	attribute	value
core FE	the murderer	the cold-blooded man
	the murder weapon	the knife
non-core FE	the motive	the rancor
	the scene	the dark basement

For each frame element I formulate two Chinese sentences, once with the unmarked definite expression, and once with the marked definite expression. All the sentences were judged by the participants according their acceptability.

Concerning the result illustrated in (5) I will claim, that the attribute-value-set is the cause of the contrast in (2) and that it therefore should be regarded as linguistically relevant, while the differentiation between core- and non-core-frame-element is not really significant for bridging in Chinese:

(5)
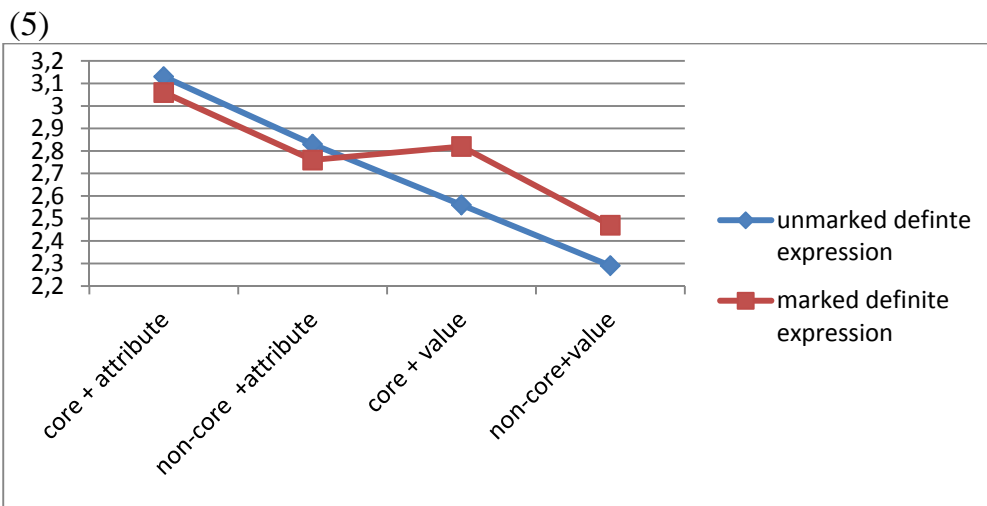
The second experiment is designed in order to test whether the part-whole-relationship is the cause of the contrast in (3) and is configured in the same way as the first experiment. Concerning the result in (6) I will claim that the part-whole-relationship is linguistically relevant in respect of bridging in Chinese, and therefore, it should be taken into consideration in the representation of frames:

(6)
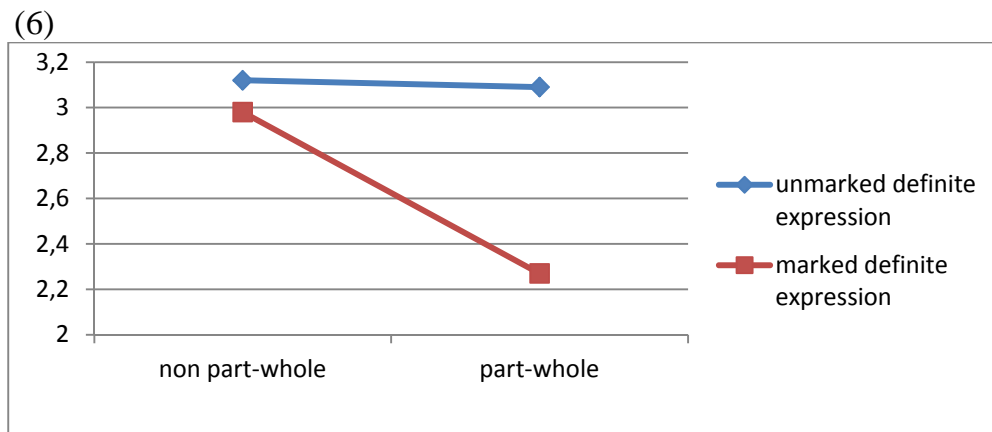
Based on the observations in Chinese and the experiments above I will propose a new classification of bridging which is based on the morpho-syntactic contrasts and

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not on semantic intuitions. I differentiate three types of bridging from each other: the first type is based on the part-whole-relationship, so that the referent of the bridging-NP is typically in the exemplified situation of the antecedent concept, and prefers the unmarked definite expression in Chinese; the second type is based on a non-part-whole attribute, so that the referent of the bridging-NP is typically not in the exemplified situation of the antecedent concept, and accepts the marked as well as the unmarked definite expression in Chinese; the third type is based on a non-part-whole value and can only be formulated with the marked definite expression.

In view of the standard analysis of bridging as a frame-based usage, the current representation of frames needs to be modified in order to accommodate the different types of bridging. Therefore, I will propose a modification of frame theory by regarding both the attribute-value-set and the part-whole-relationship as linguistically relevant. I define the frame elements which stand in a part-whole-relationship to the antecedent concept as internal frame element and the others as external frame element. The internal frame elements are always attendant in the exemplified situation of the concept and are thus the easiest frame elements to be referred to with a definite NP. The external frame element is divided into attribute and value. The attribute is not necessarily attendant in the exemplified situation of the concept but stand in an immediate semantic relation to the concept so that it can be referred to with a definite NP without too much effort in the course of interpretation. The value is the widest frame element of a concept which has no direct relation to the concept. The interpretation of a definite NP based on a value is only possible after reconstructing an attribute so that this value can be understood as a specified example of that attribute. An example of the concept *car* is illustrated in (7):

(7) The frame of *car* as an example
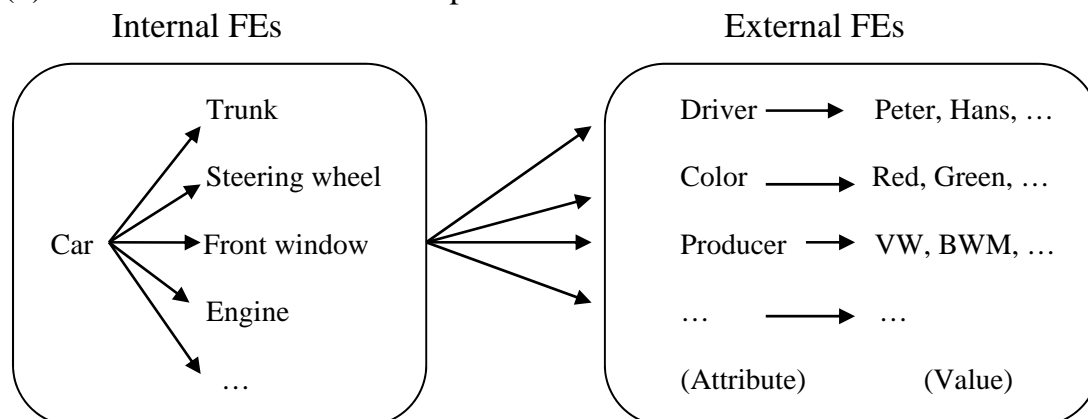
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