Interaction of Writing, Speaking, and Meaning A Frame-Based Approach to Chinese Character Formation

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The Chinese writing system is famous for its structural properties reflected by a complicated interaction of phonetic and semantic elements. Due to these properties it is sometimes called a 'phoneto-semantic writing system' (yìyīn wénzì 意音文字, cf. Zhou 1957: 60), since the Chinese characters can be segmentized into elements carrying phonetic as well as semantic functions. This system evolved from a complex interaction between the Chinese language spoken at different times of its history, the socio-cultural background of the ones who modified and created characters in different epoches, and general patterns of reasoning and conceptualization like metonymy and metaphora. Due to the fact that the evolution of the Chinese writing system is well-documented throughout its history and the processes of character formation are fairly transparent, the Chinese writing system offers rich evidence for the investigation of basic patterns of concept formation in the history of the Chinese language.

Being part of a complex semiotic system, a Chinese character can be defined by its (written) *form*, its (basic) *meaning*, and its *reading*, i.e. the way it is pronounced. Thus, the character $c\check{a}i \not \mathbb{R}$ 'to pluck' is defined by its written form $\not \mathbb{R}$, its meaning 'to pluck', and its reading [tshai²¹⁴]. While, from a synchronic viewpoint, the relation between form, meaning and reading is strictly arbitrary for this character, the process by which the character was first coined shows a clear path of motivation, in so far as the form represents a pictograph of a hand which is plucking a kind of plant, as can be seen from the earliest version of the character as it is reflected in the Oracle Bone Script (around 1200 BC): \checkmark

While this example shows a clear and straightforward pictographic motivation, most processes of character formation are much more complex. The development of the character $c\ddot{a}i$ 菜 'vegetable' may serve as an example: The formal part of this character (菜) consists of the element $c\breve{a}o$ ⁺⁺ 'grass' and the above mentioned character $c\breve{a}i$ 菜 'to pluck'. The traditional way to explain the formation of this character is to describe it as some kind of phoneto-semantic compound, where the upper part reflects the meaning of the character, being related to 'grass' in a broader sense, and the lower part its reading, which is, apart from the tone, identical. Yet a closer diachronic analysis reveals that also the morphemes are etymologically related: According to recent proposals in Chinese historical linguistics, $c\grave{a}i$ 菜 'vegetable' goes back to Old Chinese *m-s²rə?-s 'plucked (things)', which is a derivation of Old Chinese *m-s²rə? 'to pluck', the ancestor of $c\breve{a}i$ 菜 'to pluck' (cf. Sagart 1999: 68). Hence, not only the modern characters exhibit striking resemblences, also the morphemes which they denoted can be shown to share a common history, the former being derived from the latter. The complex interaction of change in form, reading and meaning is illustrated in Figure 1 ¹.

In this talk, we use a frame approach to model certain patterns of interaction between the writing, the sound, and the conceptual system of Chinese. More precisely, we use frames in the sense of Barsalou

¹The Old Chinese readings follow Baxter and Sagart (2011), for a detailed description of the methods which are employed to reconstruct Old Chinese, cf. Baxter (1992).

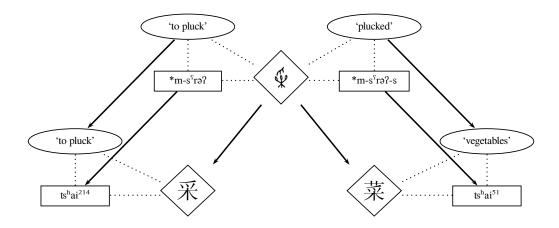


Figure 1: The Interaction of Word and Character Formation

(1992), which are understood as recursive attribute-value structures. The attributes in Barsalou frames are the general properties or dimensions by which an object (or category) is described, where the frame specifies concrete or more general values for the attributes (cf. Petersen 2007: 151). We will show that these phenomena are not specific for languages which use logographic writing systems such as Chinese, but can also be found in languages with phonographic writing systems which primarily refer to the sound system of the respective language.

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