

## Chapter 5

### Experimental evidence for character grammar

[Myers, J. \(May 2019\). \*The grammar of Chinese characters: Productive knowledge of formal patterns in an orthographic system\*. London: Routledge.](#)

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#### Abstract

This chapter provides evidence for the productivity of Chinese character grammar from psycholinguistic and neurolinguistic experiments. A review of the experimental literature from a grammatical perspective shows that character knowledge is abstract (non-iconic, amodal, and specialized in its neural processing). This literature also demonstrates productive knowledge of character morphology: uninterpretable constituents, semantic radicals, and phonetic components are all mentally activated during reading and writing, as are the meanings and pronunciations associated with the last two. Semantic radicals are also treated in a more affix-like way than phonetic components, as a closed class with positional preferences. Experiments on character phonology are currently far more limited, though previously conducted experiments provide clues about character prosody and character phonetics. New experiments presented in the chapter try to investigate character phonology more systematically by soliciting acceptability judgments for non-lexical characters and stroke groups. The results show that readers know that thin constituents favor the left over the right, that they do not reduce regularly on the right, and that reduplication shape is restricted, findings that are all consistent with the prosodic template. Further experiments show that readers also know that stroke size (prominence), curving, and hooking all obey their own productive generalizations as well.