Testing Whorf without words

How deep are effects of language on thought? Does language only influence the kinds of mental representations that people build during language use, or might habitual thinking for speaking also influence the structure of mental representations we form when we're not using language? A series of low-level psychophysical experiments investigated relationships between language and nonlinguistic cognition, using the domains of space and time as a testbed. The first experiments demonstrated that English speakers' nonlinguistic mental representations of space and time are related as predicted by linguistic metaphors. The second set showed that nonlinguistic time representations differ across speakers of different languages, consistent with their language-particular metaphors. The third set of experiments demonstrated that experience using language can cause differences in nonlinguistic mental representations of time to arise. Results show that, beyond influencing thinking for speaking, language can also influence the nonlinguistic representations people build for remembering, acting on, and perhaps even perceiving the world around us. Where the semantics of languages differ, speakers' underlying conceptual and perceptual representations may differ correspondingly, such that members of different language communities develop distinctive conceptual repertoires.