

Where is Time? Evidence from an Amazonian language and culture

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Time is mysterious, its status in the physical universe being uncertain and contested. Time seems to be fundamental to both biology and to the world of human experience. It seems certain that human beings in all cultures experience time, and have ways of referring to relations between events in time. At the same time, cultural conceptions of time vary considerably.

It has been proposed by some cognitive scientists that there is a natural, universal cognitive domain of time, whose linguistic organization is universally derived via metaphoric mapping from the lexicon and grammar of spatial motion. We challenge this account on the basis of our research on the Amondawa language and culture of Amazonia. Amondawa does not employ cardinal chronologies such as ages of individuals, or ordinal chronologies such as yearly or monthly calendars, since the Amondawa number system has only four numerals. An abstract term for time does not exist in Amondawa. The word *kuara* (“sun”) is preferentially used to denote time intervals in general, since it is the movement of the sun which governs the passage of both the time of day and the seasons. The system is based not on countable units, but on social activity, kinship and ecological regularity, and does not permit conventional “time-reckoning”. This does not mean that Amondawa speakers have no time awareness, or that they are unable to talk about events and activities occurring in time. But they do not talk *about* time, or frame relations between events in terms of a notion of time separate from the events and activities.

We advance three conclusions. First, time-based time interval systems are constituted by the use of linguistically organized, materially-anchored symbolic cognitive artefacts. Second, the conceptual domain of “time as such” is not a human cognitive universal, and concepts of time are not universal properties of the human brain.

Concepts of time are cultural and historical constructions, constituted by schematic time-based time interval systems, reflection upon which is language and culture dependent. Third, because the cognitive domain of “time as such” is a cultural, historical and linguistic construction, the hypothesis that it is universally constructed by metaphoric mapping from the conceptual domain of space is false. Rather, it is the cultural, historical and linguistic construction of the domain of “time as such” that potentiates the linguistically widespread recruitment of spatial linguistic resources for the structuration of the temporal domain.

References

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