Università degli Studi di Ferrara

Lettere Arti e Archeologia

ANTROPOLOGIA

-

Amondawa

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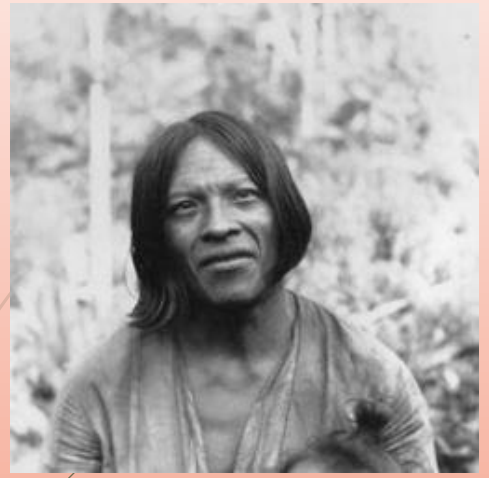
Alessandro Tinella
Sara Dainese

Gli Amondawa sono un gruppo etnico stanziato nell'Amazzonia brasiliana, in particolare negli stati della Rondônia e di Acre.
Praticano l'animismo, ovvero una religione in cui l'idea di anima viene attribuita ad oggetti inorganici ed inanimati.
La popolazione è rappresentata da circa 107 individui e parlano la loro lingua omonima, legata ai gruppi etnici di appartenenza.

http://www.felicitapubblica.it/2018/10/26/brasile-in-rondonia-abolite-11-aree-protette/

https://freeondarevolution.wordpress.com/2011/05/23/amondawa-la-tribu-che-non-ha-bisogno-del-tempo/



https://slideplayer.it/slide/926863/

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Tupi - Kawahíb: *Macro-gruppo etnico indigeno storico del Brasile; si sono diffusi in Amazzonia e in seguito nelle regioni meridionali ed atlantiche.*

https://pib.socioambiental.org/en/Povo:Uru-Eu-Wau-Wau

https://pdfs.semanticscholar.org/b4cf/32ea8528b168c99d8c81e54e74b124a7ac34.pdf

La popolazione ricorre ad alcune attività quotidiane come la caccia, la pesca e la piccola agricoltura locale.

Sistema dei nodi

Sondaggio del 2017 – Silva Sinha

- ***Piccoli sistemi numerici basati su pochissimi termini. I numeri uno e due, con varie combinazioni tra loro; termini in aiuto al conteggio come mani (meken) piedi (tea) e dita (metuti)***

https://www.beyondcontext.com/styled-8/styled-10/

https://www.focus.it/scienza/scienze/la-tribu-dellamazzonia-che-vive-senza-tempo

https://testata.decasite.com/2019/05/28/la-tribu-amazzonica-che-non-conosce-il-concetto-del-tempo/

A causa di questo sistema di conteggio così ristretto e alla mancanza di calendari o altri manufatti culturali a base numerica, la concezione di tempo è inesistente

Gli Amondawa infatti si basano sul Sole per definire le nostre 'ore' giornaliere, inoltre non presentano termini per definire l'equivalente della parola "tempo", "anno", "mese" e "settimana". Per ovviare questa mancanza utilizzano alcuni ***termini temporali*** *come "stagione secca" oppure "stagione piovosa" ed altri termini per descrivere il decorso lunare; l'anno potrebbe corrispondere al termine "stagione secca" oppure il mese equivale all'espressione circa una fase lunare.*

Other (adverbial) time referencing expressions	
Koro, koroite	Today, now, right now (fut)
Tiro	Today, now, right now (fut)
Tirove	Today, in the immediate past (earlier today)
Awo	Here, now
Ki . . . ko	Past
Poti . . . nehe	Future
Emo	Past
Ramo	Past
Ki . . . i'I	Past

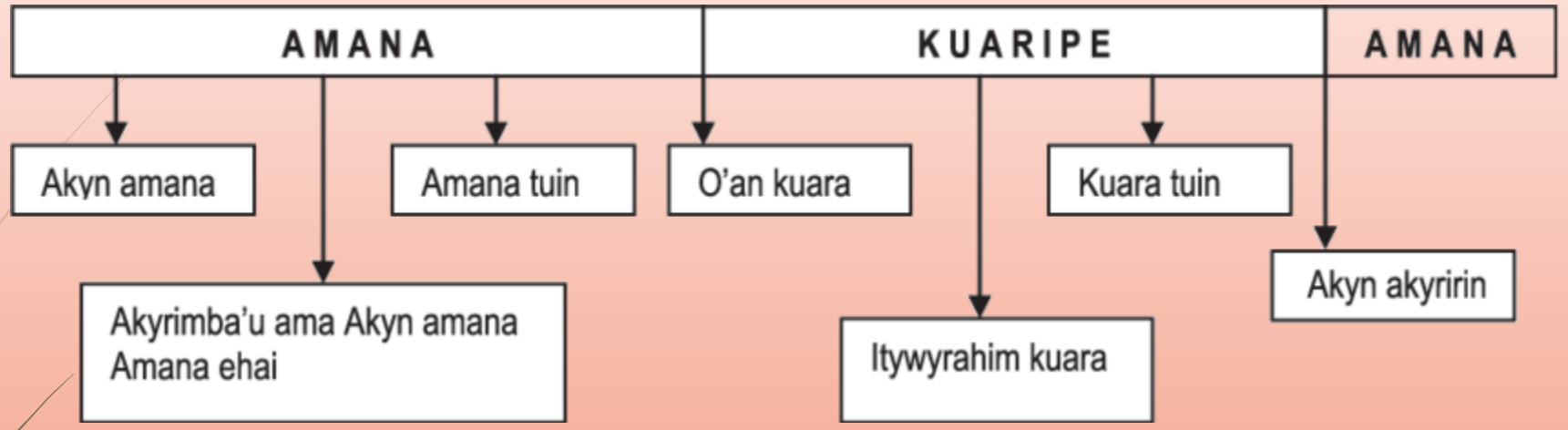
https://www.researchgate.net/figure/Amondawa-temporal-reference-terms-Nominals-with-temporal-meaning-English-translation_tbl1_271997953

Studio del 2011 - Università di Portsmouth e Rondônia

- Conferma che la popolazione non riesce a mappare nel tempo gli avvenimenti passati o futuri. Essenzialmente il tempo per gli Amondawa esiste solo in funzione di determinati eventi naturali. Esso ruota attorno ad alcuni concetti base come le fasi della vita, il giorno scandito dal dì e dalla notte ed altre nozioni sulle stagioni, sul **sole**, sulla **luna** e sulle **stelle**.

L'importanza del **Sole** (kuara) è testimoniata dal fatto che alcune attività possono essere eseguite solo in un ristretto e preciso lasso temporale (questo però non implica che l'attività si stia effettivamente svolgendo). I lassi temporali, che identificano quindi una determinata posizione del sole nel cielo, non si riferiscono ad un punto esatto nel tempo, bensì sono fasi temporali con confini vaghi tra loro.

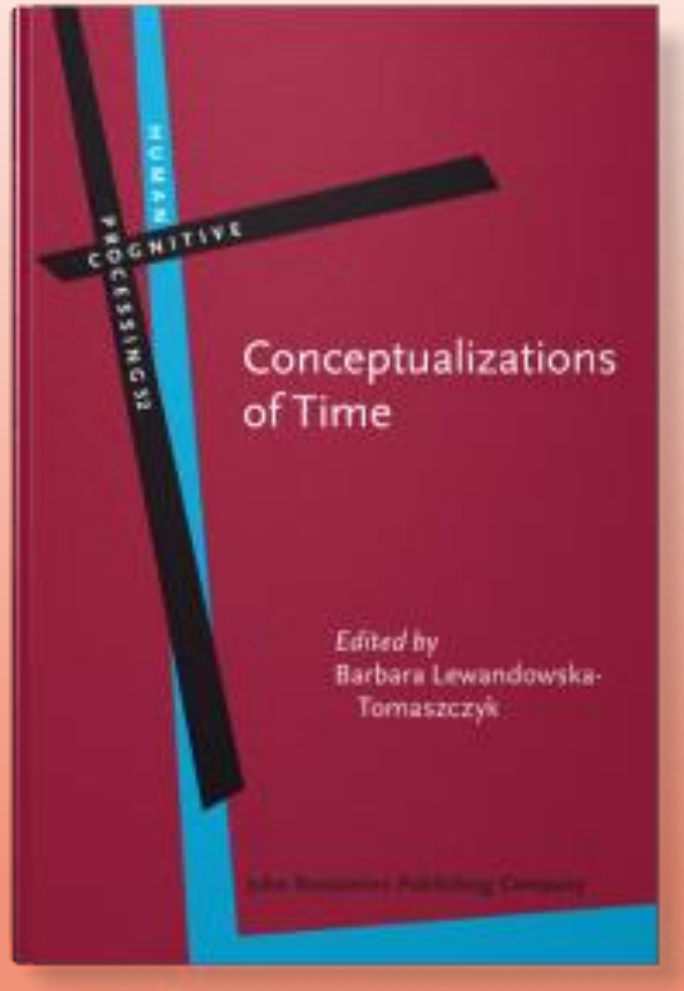
Il loro nome è ispirato da alcuni elementi quali la *luce del giorno, l'assenza di essa, l'ombra, il buio, l'intensità della luce solare, dalla posizione e dal movimento solare, la forma del sole, colore e forma della luna, l'apparente posizione delle costellazioni, il livello dell'acqua, il* ***cinguettio degli uccelli****, il brusio delle cicale, il verso delle scimmie, la maturazione della frutta della foresta e il movimento degli animali.*



L'avvenire dell'alba che è scandita dal canto del "ytywu'ajang" che indica il momento della veglia; allo stesso modo altri due uccelli "Muruwiri" e "ykiju" scandiscono lo stesso momento della giornata anche se cantando in stagioni diverse, alternandosi oppure cantando insieme definendo ***stagioni diverse.***

Conceptualizations of Time

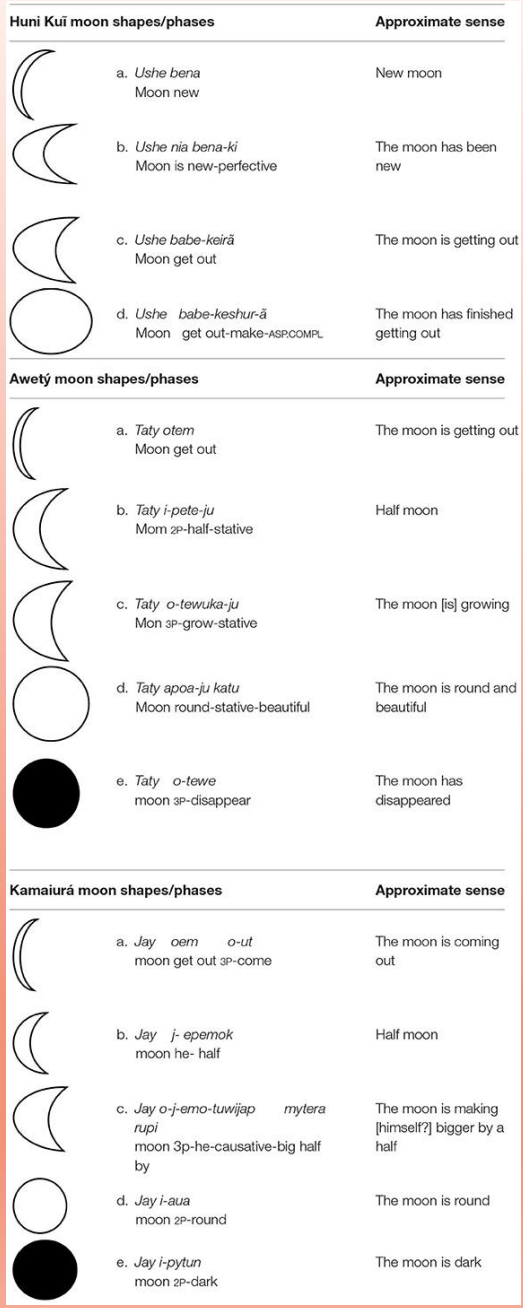
Barbara Lewandowska Tomaszczyk



Amondawa	English
Kuaripe	**Time of the sun ("SUMMER")**
O'an kuara	"The sun is born". The arrival of the sun (beginning of the time of the sun).
Itywyrahim kuara	"Burning sun". Very strong, hot sun, high summer.
Kuara Tuin *Or* *Akyririn Amana*	"Small sun". End of the time of the sun. "Almost rain". The time of falling rain is close.
Amana	**Rain / Time of the rain ("WINTER")**
Akyn Amana	"Falling rain". The arrival of the rain.
Akyrimba'U Amana *Or* *Amana Ehãi*	"Heavy falling rain". Time of the heavy rains. "Great rain". Rain of long extent and duration.
Amana Tuin *Or* *Akyririn Kuara*	"Small rain". End of the rainy season. "Almost sun". The time of the sun is close.

Un ruolo importante viene assunto dalla **Luna** in quanto assume il ruolo di idolo; gli indigeni infatti affidano ad essa tutte le loro preoccupazioni, chiedendole salute, fortuna, protezione per la famiglia e i figli.
Le notti di luna nera invece corrispondono all'abbondare della pesca e del cibo nel villaggio.

https://youmedia.fanpage.it/video/ag/UdBVduSwGMkCwk60



Huni Kuĩ moon shapes/phases		Approximate sense
	a. *Ushe bena* Moon new	New moon
	b. *Ushe nia bena-ki* Moon is new-perfective	The moon has been new
	c. *Ushe babe-keirã* Moon get out	The moon is getting out
	d. *Ushe babe-keshur-ã* Moon get out-make-ASP.COMPL	The moon has finished getting out

Awetý moon shapes/phases		Approximate sense
	a. *Taty otem* Moon get out	The moon is getting out
	b. *Taty i-pete-ju* Mom 2P-half-stative	Half moon
	c. *Taty o-tewuka-ju* Mon 3P-grow-stative	The moon [is] growing
	d. *Taty apoa-ju katu* Moon round-stative-beautiful	The moon is round and beautiful
	e. *Taty o-tewe* moon 3P-disappear	The moon has disappeared

Kamaiurá moon shapes/phases		Approximate sense
	a. *Jay oem o-ut* moon get out 3P-come	The moon is coming out
	b. *Jay j- epemok* moon he- half	Half moon
	c. *Jay o-j-emo-tuwijap mytera rupi* moon 3p-he-causative-big half by	The moon is making [himself?] bigger by a half
	d. *Jay i-aua* moon 2P-round	The moon is round
	e. *Jay i-pytun* moon 2P-dark	The moon is dark

La posizione delle **stelle** e quindi delle **costellazioni** indicano agli Amondawa quando piantare e raccogliere determinate coltivazioni e celebrare le festività. Il nome delle costellazioni vengono attribuite a delle figure mitologiche viventi nel cielo

Kamaiurá constellations

a. *Janupitá*

b. *Ekyitat/ Ekytat*

c. *Atsingau*

d. *Tukananhwa*

e. *Tukanan*

f. *Jeyke'ok*

g. *Tawarit*

h. *Enya*

i. *Tsihwet*

Drawings by Wary Kamaiura Sabino © 2016
By permission

Awetý constellations

a. *Kopýjyt*

b. *Ypek*

c. *Kauzé*

d. *Taty-ayjyt* *watu*
fire-small son big

e. *Tawat* *retá*
jaguar painting

Drawings by Dr Wary Kamaiura Sabino.

https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00454/full

Janupita: Forma di un Emu, determina l'inizio della stagione delle piogge, momento adatto per preparare il terreno per coltivare la manioca (cicala inizia a cantare);
Ekytat: Indica periodi di pioggia intensa, momento giusto per raccogliere i frutti della foresta;
Atsingau: Forma dell'uccello Guira Guira, indica che i fiumi inonderanno;
Tukananhwa: Forma di una larga e triangolare griglia che usa la popolazione per arrostire il pesce (durante la Jaruru Pira); segna la stagione delle piogge;
Tukanan: Forma di tucano, indica la fine della stagione piovosa, le acque si abbasseranno e sarà il momento della pesca e della semina;
Je'yke'ok: Riferito ad un lato del corpo che comprende il busto fino alla coscia, rappresenta la stagione secca, tempo di canti e balli (Javali festival);
Tawarit: Piccole tartarughe unite tra loro, indica il punto di mezzo della stagione secca (Jacui, festa del flauto e Jamurikuma, festa della donna);
Enya: Forma di un mortaio tradizionale, indica il tempo della brezza fresca (Jaruru Pira, festa del pesce);

Tsihwet: Forma di un'anatra, indica la fine della stagione secca, momento per preparare il terreno per le coltivazioni;
Kopýjyt: Insieme di stelle, indicano il raffreddamento dell'aria e l'arrivo delle piogge;
Ypek: Due stelle, indica l'arrivo della stagione secca;
Kauzé: Una stella che indica l'inizio del vento freddo durante la stagione delle piogge, momento della preparazione dei campi per la semina;
Taty-a'yjyt watu: Una stella che appare al mattino presto, forse si riferisce alla nostra Stella del Mattino, ovvero Venere.
Ta'wat retá: Punti del giaguaro, indicano la Via Lattea, usata per le indicazioni durante le attività notturne.

La loro vita è considerata come un susseguirsi di processi d'apprendimento mediante le diverse fasi della vita. Per ogni fase bisogna acquisire una certa conoscenza e responsabilità che viene esplicata attraverso **riti di passaggio** e di insegnamento. Successivamente al rito e all'apprendimento, l'individuo viene considerato e rispettato come "definitivamente cresciuto".

*Le **fasi della vita** sono definite dai cambiamenti fisici e biologici, per esempio le ragazze vengono ritenute individui pienamente responsabili dopo il menarca; per cui, dopo aver superato il rito di passaggio, devono imparare le abilità e le nozioni di una donna della rispettiva comunità. Allo stesso modo, i ragazzi, dopo i primi segni di pubertà dovranno affrontare il rito di passaggio.*

https://testata.decasite.com/2019/05/28/la-tribu-amazzonica-che-non-conosce-il-concetto-del-tempo/

Le fasi della vita in queste comunità non ruotano attorno all'età bensì ai cambiamenti biologici.

*La vita non segue una linea temporale ma differenti sequenze di "**stato d'essere**", secondo alcuni studiosi nella cultura e nel linguaggio Amondawa vi sono delle espressioni lessicali che identificano ogni fase*

Kuja-taimet = Neonata
Kunu'um = Neonato
Ta'yi = Bambina e bambino
Pitang = Non identificato

https://pixel.in.ua/schastlivye-chasov-ne-nabljudajut-amonda/amondawa/

Kuja-muku = giovane donna
Awowajà = ragazzo cresciuto
Kujayman = donna non sposata
Yman awawuja = Ragazzo cresciuto non sposato

Matyt = Donna adulta con figli o eventuali nipoti
Myra = Uomo adulto con figli o eventuali nipoti
Matyri = Donna vecchia
Myra'i = Uomo vecchio

- Derivazione linguistica Tupi – Kawahíb
- Sistema numerico molto ristretto
- Mancanza di manufatti culturali a base numerica
- Particolare concezione del tempo e termini temporali
- Importanza del sole, stelle e costellazioni
- Importanza delle fasi di vita e dei riti di passaggio

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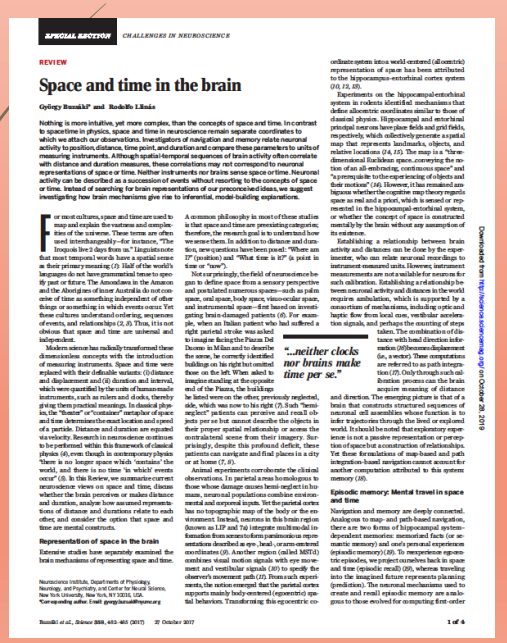
- http://periodicos.unb.br/index.php/ling/article/view/16310/14598



SPECIAL SECTION CHALLENGES IN NEUROSCIENCE

REVIEW

Space and time in the brain

György Buzsáki* and Rodolfo Llinás

Nothing is more intuitive, yet more complex, than the concepts of space and time. In contrast to spacetime in physics, space and time in neuroscience remain separate coordinates to which we attach our observations. Investigators of navigation and memory relate neuronal activity to position, distance, time point, and duration and compare these parameters to units of measuring instruments. Although spatial-temporal sequences of brain activity often correlate with distance and duration measures, these correlations may not correspond to neuronal representations of space or time. Neither instruments nor brains sense space or time. Neuronal activity can be described as a succession of events without resorting to the concepts of space or time. Instead of searching for brain representations of our preconceived ideas, we suggest investigating how brain mechanisms give rise to inferential, model-building explanations.

For most cultures, space and time are used to map and explain the vastness and complexities of the universe. These terms are often used interchangeably—for instance, "The Iroquois live 2 days from us." Linguistswrite that most temporal words have a spatial sense as their primary meaning (1). Half of the world's languages do not have grammatical tense to specify past or future. The Amondawa in the Amazon and the Aborigines of inner Australia do not conceive of time as something independent of other things or something in which events occur. Yet these cultures understand ordering, sequences of events, and relationships (2, 3). Thus, it is not obvious that space and time are universal and independent.

Modern science has radically transformed these dimensionless concepts with the introduction of measuring instruments. Space and time were replaced with their definable variants: (i) distance and displacement and (ii) duration and interval, which were quantified by the units of human-made instruments, such as rulers and clocks, thereby giving them practical meaning. In classical physics, the "theater" or "container" metaphor of space and time determines the exact location and speed of a particle. Distance and duration are equated via velocity. Research in neuroscience continues to be performed within this framework of classical physics (4), even though in contemporary physics "there is no longer space which 'contains' the world, and there is no time 'in which' events occur" (5). In this Review, we summarize current neuroscience views on space and time, discuss whether the brain perceives or makes distance and duration, analyze how saturated representations of distance and durations relate to each other, and consider the option that space and time are mental constructs.

Representation of space in the brain

Extensive studies have separately examined the brain mechanisms of representing space and time.

Neuroscience Institute, Department of Physiology, Neurology, and Psychiatry, and Center for Neural Science, New York University, New York, NY 10003, USA.
*Corresponding author. E-mail: gyorgy.buzsaki@nyumc.org

A common philosophy in most of these studies is that space and time are preexisting categories; therefore, the research goal is to understand how we sense them. In addition to distance and duration, new questions have been posed: "Where am I?" (position) and "What time is it?" (a point in time or "now").

Not surprisingly, the field of neuroscience began to define space from a sensory perspective and partitioned numerous spaces—such as palm space, oral space, body space, visuo-ocular space, and instrumental space—first based on investigating brain-damaged patients (6). For example, when an Italian patient who had suffered a right parietal stroke was asked to imagine facing the Piazza Del Duomo in Milan and to describe the scene, he correctly identified buildings on his right but omitted those on the left. When asked to imagine standing at the opposite end of the Piazza, the buildings he listed were on the other, previously neglected, side, which was now to his right (7). Such "hemineglect" patients can perceive and recall objects per se but cannot describe the objects in their proper spatial relationship or across the contralateral scene from their imagery. Surprisingly, despite this profound deficit, these patients can navigate and find places in a city or at home (7, 8).

"...neither clocks nor brains make time per se."

Animal experiments corroborate the clinical observations. In parietal areas homologous to those whose damage causes hemi-neglect in humans, neuronal populations combine environmental and corporeal inputs. Yet the parietal cortex has no topographic map of the body or the environment. Instead, neurons in this brain region (known as LIP and 7a) integrate multimodal information from senses to form parsimonious representations described as eye-, head-, or arm-centered coordinates (9). Another region (called MST/d) combines visual motion signals with eye movement and vestibular signals (10) to specify the observer's movement path (11). From such experiments, the notion emerged that the parietal cortex supports mainly body-centered (egocentric) spatial behaviors. Transforming this egocentric coordinate system into a world-centered (allocentric) representation of space has been attributed to the hippocampus–entorhinal cortex system (10, 12, 13).

Experiments on the hippocampal-entorhinal system in rodents identified mechanisms that define allocentric coordinates similar to those of classical physics. Hippocampal and entorhinal principal neurons have place fields and grid fields, respectively, which collectively generate a spatial map that represents landmarks, objects, and relative locations (14, 15). The map is a "three-dimensional Euclidean space...conveying the notion of an all-embracing, continuous space" and "a prerequisite to the experiencing of objects and their motions" (16). However, it has remained ambiguous whether the cognitive map theory regards space as real and a priori, which is sensed or represented in the hippocampal-entorhinal system, or whether the concept of space is constructed mentally by the brain without any assumption of its existence.

Establishing a relationship between brain activity and distances can be done by the experimenter, who can relate neuronal recordings to instrument-measured units. However, instrument measurements are not available for neurons for such calibration. Establishing a relationship between neuronal activity and distances in the world requires assimilation, which is supported by a consortium of mechanisms, including optic and haptic flow from local cues, vestibular acceleration signals, and perhaps the counting of steps taken. The combination of distance with head direction information (20)becomes displacement (i.e., a vector). These computations are referred to as path integration (7). Only through such additional process can the brain acquire the meaning of distance and direction. The emerging picture is that of a brain that constructs structured sequences of neuronal cell assemblies whose function is to infer trajectories through the lived or explored world. It should be noted that exploratory experience is not a passive representation or perception of space but a construction of relationships. Yet these formulations of map-based and path integration–based navigation cannot account for another computation attributed to this system: memory (18).

Episodic memory: Mental travel in space and time

Navigation and memory are deeply connected. Analogous to map- and path-based navigation, there are two forms of hippocampal systems-dependent memories: memorized facts (or semantic memory) and one's personal experiences (episodic memory) (21). To reexperience egocentric episodes, we project ourselves back in space and time (episodic recall) (19), whereas traveling into the imagined future represents planning (prediction). The neuronal mechanisms used to create and recall episodic memory are analogous to those evolved for computing first-order

A construção social e linguística das relações de intervalos de tempo e eventos temporais em uma cultura amazônica[1]

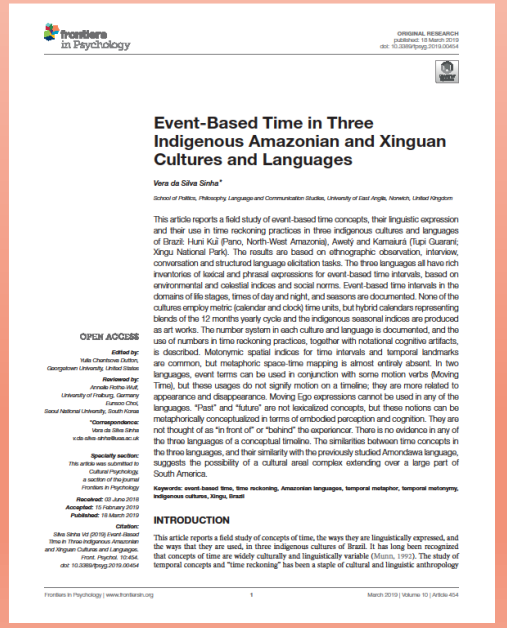
The social and linguistic construction of time intervals and temporal event relations in an Amazonian culturen

Wany Bernardete de Araujo Sampaio[2]
Chris Sinha[3]
Vera da Silva Sinha[4]
Jörg Zinken[5]

Resumo: No campo da linguística conceitual, grande número de pesquisadores e estudiosos assume que existe um domínio conceitual natural e pré-linguístico acerca da noção de tempo e que a organização linguística deste conceito é universalmente estruturada através de mapeamentos metafóricos do léxico e da gramática do espaço e do movimento. O objetivo deste trabalho consiste em reconsiderar tal concepção, com base em pesquisa realizada na língua e na cultura do povo amondawa, habitante da região central do estado de Rondônia, na Amazônia brasileira, falante de uma língua Tupi-Kawahib, da família Tupi-Guarani, Tronco Tupi. Como metodologia de trabalho foram adotadas a pesquisa observacional e a coleta de dados linguísticos em trabalho de campo. Os dados foram submetidos à análise linguística estrutural e conceitual, com vistas a localizar, no nível da construção linguística, possíveis indícios de mapeamentos espaço-temporais. A análise sugere que o mapeamento espaço-tempo, no nível da construção linguística, não é um traço da língua amondawa e que este tipo de mapeamento não é empregado quando os indígenas falam na sua língua materna.

[1] Uma versão ampliada deste trabalho foi publicada em língua inglesa, na revista Language and Cognition 3–1 (2011), pp.137–169 1866–9808/11/0003– 0137 DOI 10.1515/LANGCOG.2011.006 © Walter de Gruyter, com o título When time is not space: The social and linguistic construction of time intervals and temporal event relations in an Amazonian culture. Versão em português: Wany Sampaio. Suporte para este estudo foi provido pela União Européia, como parte do Projeto Colaborativo SEDSU, 'Stages in the Evolution and Development of Sign Use' (ZLATEV et al. 2006) sob o 6th Framework NEST/Pathfinder Program "What it Means to be Human"; pelo PIBIC/UNIR/CNPq e pela Universidade de Portsmouth. Agradecemos à comunidade Amondawa, que partilhou conosco sua linguagem e cultura. Em especial, ao Cacique Tari Amondawa e ao professor indígena Arikan Amondawa. Somos gratos também aos comentários e contribuições de Daniel Casasanto, Kevin Moore e Thora Tenbrink.

[2] Universidade Federal de Rondônia – UNIR-Brasil wansamp@gmail.com.
[3] Hunan University – China.
[4] University of East Anglia – Inglaterra.
[5] University of Portsmouth – Inglaterra.



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ORIGINAL RESEARCH
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Event-Based Time in Three Indigenous Amazonian and Xinguan Cultures and Languages

*Vera da Silva Sinha**

School of Politics, Philosophy, Language and Communication Studies, University of East Anglia, Norwich, United Kingdom

This article reports a field study of event-based time concepts, their linguistic expression and their use in time reckoning practices in three indigenous cultures and languages of Brazil: Huni Kuí (Pano, North-West Amazonia), Awetý and Kamaiurá (Tupi Guarani; Xingu National Park). The results are based on ethnographic observation, interview, conversation and structured language elicitation tasks. The three languages all have rich inventories of lexical and phrasal expressions for event-based time intervals, based on environmental and celestial indices and social norms. Event-based time intervals in the domains of life stages, times of day and night, and seasons are documented. None of the cultures employ metric (calendar and clock) time units, but hybrid calendars representing blends of the 12 months yearly cycle and the indigenous seasonal indices are produced as art works. The number system in each culture and language is documented, and the use of numbers in time reckoning practices, together with notational cognitive artifacts, is described. Metonymic spatial indices for time intervals and temporal landmarks are common, but metaphoric space-time mapping is almost entirely absent. In two languages, *ewarí* terms can be used in conjunction with some motion verbs (Moving Time), but these usages do not signify motion on a timeline; they are more related to appearance and disappearance. Moving Ego expressions cannot be used in any of the languages. "Past" and "future" are not lexicalized concepts, but these notions can be metaphorically conceptualized in terms of embodied perception and cognition. They are not thought of as "in front of" or "behind" the experiencer. There is no evidence in any of the three languages of a conceptual timeline. The similarities between time concepts in the three languages, and their similarity with the previously studied Amondawa language, suggests the possibility of a cultural areal complex extending over a large part of South America.

Keywords: event-based time, time reckoning, Amazonian languages, temporal metaphor, temporal metonymy, indigenous cultures, Xingu, Brazil

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Correspondence:
Vera da Silva Sinha
v.da-silva-sinha@uea.ac.uk

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INTRODUCTION

This article reports a field study of concepts of time, the ways they are linguistically expressed, and the ways that they are used, in three indigenous cultures of Brazil. It has long been recognized that concepts of time are widely culturally and linguistically variable (Munn, 1992). The study of temporal concepts and "time reckoning" has been a staple of cultural and linguistic anthropology