

Time, temporality and cultural rhythmic: An anthropological case study

Time & Society

2016, Vol. 25(3) 613–633

© The Author(s) 2015

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0961463X15579802

tas.sagepub.com



Gonzalo Iparraguirre

University of Buenos Aires, Argentina

Abstract

This article presents the introduction and the update of an ethnographic research on temporality among indigenous groups, published in 2011 in its full version as a book in Spanish. It seeks to prove the usefulness of the conceptual distinction between *time*, defined as the phenomenon of becoming in itself, and *temporality*, defined as the human apprehension of becoming in a cultural context. Furthermore, the existence of non-hegemonic temporalities is exemplified by a case study of ordinary temporality with Mocoví indigenous societies in Argentina's Chaco region. The methodology built for studying temporality in different social groups, termed here as *cultural rhythmic*, is also introduced. By studying different rhythmic experiences integrated in the participant observation, the rhythmic method enables us to interpret social facts that are implicit in the everyday practices of organisation, in the economic–political relations, and in the group's worldviews.

Keywords

Time, temporality, cultural rhythmic, indigenous Mocoví people, anthropology

Introduction

The purpose of carrying out an anthropological research on the concepts of time and temporality, and their practical implications in the everyday life of different social groups through cultural rhythmic methodology, derives

Corresponding author:

Gonzalo Iparraguirre, Agencia de Extensión Rural Tornquist, Instituto Nacional de Tecnología Agropecuaria (INTA), Av. Tornquist 137, Tornquist (8160AQA) Argentina.

Email: gonipa@gmail.com

from my own interest in establishing an interdisciplinary dialogue between philosophical and scientific studies of time.

The main aim of this research, carried out between 2005 and 2010, was to demonstrate that it is possible to apprehend time in a different way to that currently conceived by western scientific thinking, and that it is therefore possible to think time from new interpretations. To accomplish that, the social construction of temporality in Mocoví indigenous groups, with regard to the temporality exerted and imposed by different hegemonic processes from western societies, was ethnographically investigated (Iparraguirre, 2011). Fieldwork was undertaken among Mocoví communities in southwestern Chaco province, Argentina (Figure 1).

The central hypotheses guiding this work state that the western conception of time (western temporality) is not the only one; therefore, it is possible to be reformulated by first starting with the conceptual distinction between the phenomenon of becoming (time) and the interpretation of becoming (temporality). That western temporality has become a hegemonic temporality, since the cultural construction of being the only possible way of conceiving time, has been naturalised and maintained by the vast majority of scientific thinking in general and within the current anthropological knowledge in particular. Finally, that the study of cultural practices indicative of notions of time may be addressed and understood as cultural rhythmic. As a concept, *rhythmic* is understood as the set of life rhythms of a social group that enables us to acknowledge its social, economic and worldview organisation. As a methodology, *cultural rhythmic*s contribute to the understanding of the relationship between life rhythms and processes of the social dynamics, when articulating from an ethnographic praxis notions of time (temporality) and space (spatiality), expressed in the discourses, imaginaries and life rhythms of social groups. While the concepts of spatiality and temporality may be equally analysed, there is not enough space in this article for focusing on the former too.

The coexistence of the Mocoví and hegemonic temporalities was researched based on five different categories of cultural rhythmic, all described at the end of this article: (1) the daily rhythm of life; (2) the relationship between seasonal cycles, celestial bodies and language; (3) the relationship between music, myths and narrative; (4) the articulation of the economic, political and work rhythms and (5) the contradictions between urban and virtual rhythmic.

Time and temporality

To clarify the possible meanings of frequently used concepts in science, such as temporality and time, it is necessary to set up a thorough distinction

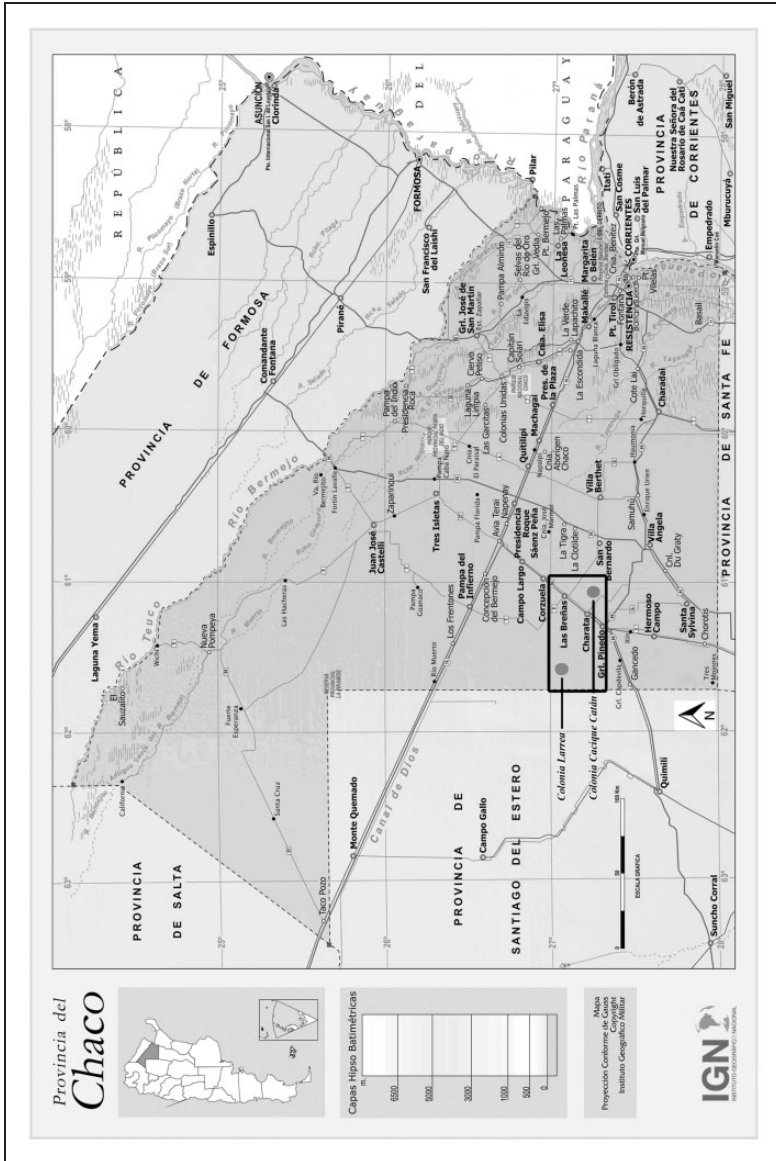


Figure 1. Location of the research area in the province of Chaco, Argentina. Map by Instituto Geográfico Nacional (Argentina).

between both of them, vital to the comprehension of a study on temporality. These notions have been indistinctly used in western thinking since the 16th century, period in which there is a rise of philosophical and scientific works focusing on the problems of their definitions and implications in the understanding of the phenomenon (Kant, 1996; Newton, 2004). I begin with the definitions built according to the bibliographical overview, which structure the semantic axis of the research from which other definitions and their theoretical backgrounds are evaluated.

I define *temporality* as the apprehension of becoming, which every human being accomplishes through his cognitive system in a cultural context, and *time* as the phenomenon of becoming in itself, which the human being is capable of apprehend as temporality. The importance of distinguishing these concepts arises initially from the reading of *Being and Time*, by the philosopher Martin Heidegger, published in 1927, in which the author presents a definition of temporality different than the *vulgar conception of time*, as he terms the notion of time conceived as a succession of homogeneous instants. Heidegger suggests that ‘the existential and ontological constitution of the totality of the Da-sein is grounded in temporality’ (Heidegger, 1996: 398) and relates this concept to the *being-toward-death* and the daily nature. This ontology defines in Heidegger the comprehension of all relative to the meaning of the being and his existence, terms that are not much often used in anthropology, but are present in constructs such as *human-being*, *social being*, or as it was pointed out by Pablo Wright in his work *Being-in-the-Dream*, where a *being-in-the-world* prior to the being-there is suggested, since we ‘are settled in the world even before being able to think about it’ (Wright, 2008: 34).

Now considering the definition of time, this resumes on one hand the famous ideas of the philosopher Immanuel Kant, who clearly and concisely systematised conceptualisations on time and space, arriving at a metaphysical limit, which none of the thinkers who followed him reached. In his Critique of Pure Reason, immense work written in 1781, Kant says:

Time is not an empirical concept that has been derived from any experience... Time is a necessary representation that grounds all intuitions... Time is therefore given *a priori*... Time does not inhere in objects, but merely in the subject who intuits them. (Kant, 1996: 47–50)

On the other hand, I resume the meaning of the term *phenomenon* formulated in *Being and Time*, to assert that time *is* a phenomenon. Heidegger says: ‘The confusing multiplicity of “phenomena” designated by the terms *phenomenon*, *semblance*, *appearance*, *mere appearance*, can be unravelled only if the concept phenomenon is understood from the very beginning as the self-showing in itself’ (Heidegger, 1996: 27). Therefore, the idea of

time as phenomenon of becoming in itself rises from the set of formulations made by both thinkers. I resume initially the aprioristic definition of time to argue that whenever temporality is mentioned, it is referred to a cultural construction, thus derived from a subject's experience, hence not an *a priori* intuition. Time, then as phenomenon, is intrinsic to every human being; on the other hand, temporality, besides being intrinsic to every human being, acquires instead a cultural character since it depends on an experience in context, thus constituting an interpretation. This is why the analysis of temporalities through rhythms and rhythmicity allows carrying out cross-cultural studies since it is possible to understand universal as well as particular aspects at the same time.

For this reason, I propose to refer here to temporality but not to time when alluding to *notions of time* of a socio-cultural group. Notions of time, as conceptualisations on the *time phenomenon* placed in a socio-historical context, are temporalities. The distinction is useful for not to reduce the phenomenon (time) to only one interpretation (temporality). This is precisely what happens with the hegemonic temporality, and what this study proposes to be reconsidered. The indistinct use of time and temporality in the knowledge provided by official education at all levels, and the socio-economic context of the capitalist mode of production, contribute to naturalise an equal meaning for both, therefore naturalising the hegemonic temporality as the *only* possible way of thinking the time phenomenon. This happens everyday in our society and in particular, in the scientific praxis of any discipline (Iparraguirre and Ardenghi, 2011). It is naturalised that time can be a measure, a duration, a period, an epoch, an age, a season, the hour, a distance, a division, the calendar and several other interpretations without a necessary connection between them. To distinguish *temporality* from *time* seeks to denaturalise this univocal logic, to be able to understand cultural diversity from multiple significations. If a notion of time is naturalised, it becomes naturally unique; then all knowledge built from that notion acquires a univocal epistemological character.

The review of the philosophical and scientific bibliography (Bergson, 2004; Bohm, 1998; Dilthey, 1944; Gunn, 1986; Hawking and Penrose, 1996; Heidegger, 1996; Husserl, 1959; Kant, 1996; Newton, 2004; Prigogine and Stengers, 1998), among others, enables us to understand that behind the notion of linear time imposed by the western knowledge, through different hegemonic processes, a notion of *hegemonic temporality* was generated and raised to the character of notion of official time for its homogenisation and imposition. This univocity and homogeneity are due to the official character that the western linear temporality has originated and developed by different hegemonic processes during the past 2500 years (Table 1).

Table 1. Major western thinkers and ideas on time constitutive of the hegemonic temporality.

Thinker/social group	Ideas on time	Constitutive temporalities of the hegemonic temporality
Pre-Socratics	Becoming and transience The mutable and immutable The temporal and the eternal Parmenides and Heraclitus	Hellenic temporality Linear temporality Non-linear temporality
Aristotle	Distinction of time and time-consciousness Time relative to movement	Aristotelian temporality
Plotinus	Time as final datum of existence Time is given Change reveals time, though it does not produce it	Differentiated subjective and objective temporalities
Medieval thinkers St Augustine	Time is irrelevant History as progress towards the Divine Contempt for the temporal process of history Distinction of past, present and future	Christian temporality Teleological temporality (the future reaches the present)
Modern thinkers Newton Kant	Present as accumulative passage from the past to the future Time's arrow in one direction toward the future <i>A priori</i> intuition	Capitalist temporality Linear-mechanistic temporality Abstract temporality (mathematical)
Dilthey, Bergson, Husserl, Heidegger. Einstein	Experience and consciousness of time Duration and simultaneity Spatialisation Relativity of the spacetime	Western-official temporality (philosophical and scientific) Cosmological temporality

Hegemonic temporality

The term *hegemony* derives from the Greek *eghestai*, which means *to lead, to be the guide, to be the leader*. By hegemony, the ancient Greeks understood the supreme command of the Army, *egemone* was the conductor, the guide and also the chief of the Army. With regard to the relationship of this concept with the meaning given here to the term *official*, I consider the definition of the Dictionary of the Spanish Royal Academy: 'That which

is by virtue of office, thus that has authenticity and emanates from the authority derived from the State, and not particular or private' (Real Academia Española, 2001). From this definition, I resume the absence of indication to the *historical moment* referred to that authenticity, therefore suggesting a *generic temporality*, an abstract present thought for any society, without any reference to a socio-historical context for the exercise of the State's authority. It is precisely this abstract and depersonalised character of the validity of a law or knowledge what I seek to describe when using the term *official* attached to the concept of hegemony.

The concept of *hegemonic temporality* seeks to replace the concept of *western temporality* with which the notion of *linear time* is usually generalised in western societies and in the current scientific knowledge. Based on a historical overview, it is understood that this generalisation of the linear time hides inside the categorisations of temporality associated with processes of hegemonic character such as the temporality exerted and imposed by a unique calendar in the Roman Empire; the Christian temporality imposed by the Catholic Church through its doctrine of eternal salvation; the ideals of time measurement from mechanical clocks in Modernity; the imposition of the monotheist and mercantilist logic in the colonisation of the Americas; the establishment of the capitalist mode of production; the industrialisation and the rise of nationalism.

The hegemonic temporality is thus defined as the conceptualisation of the linear time conceived by western societies through different processes of officialisation with the character of a univocal notion of time. Furthermore, a hegemonic temporality is that which imposed to others seeks to naturalise its conception as the only possible one. This process of homologation between what is naturally and univocally given builds up the naturalisation of a notion, which, when massively imposed, is conceived as an official notion in the *habitus* (Bourdieu, 2006).

Originary temporality

The concept of *originary temporality* has its roots in the ethnographies carried out by anthropologists that include analysis of different notions of time. The study of cultural constructions of temporality has been a recurrent issue in anthropology, although being explicitly written only a few times. Reference to time conceived by the studied groups has been present from the first ethnographies, though always indirectly or subsumed in another subject. Several authors consider Emile Durkheim and Marcel Mauss the pioneers of the anthropological studies on time, known today as *Anthropology of Time* (Carbonell, 2004; Gell, 1992; Hodges, 2008, 2009, 2010; Iparraguirre, 2011; Munn, 1992; Terradas, 1998). To Gell,

'anthropology of time can be traced in a well-known passage of *The Elemental Forms of Religious Life* where the social origin of the time category is presented' (Gell, 1992: 3). The author suggests that Durkheim, in spite of the metaphysical confusions he opened when studying time from the social, was the first one to do it and influenced authors who followed him. He opened to anthropology and sociology, the study of a problem always dealt by Philosophy (Gell, 1992: 3). In that sense, it may be said that Durkheim is the interphase between the philosophical thinking of time and the anthropological one, a change that made possible to begin to distinguish time from temporality, even though none of the authors who has followed in his footsteps has explicitly written of the necessary distinction between the two concepts.

The choice of the term *originary* for describing this non-hegemonic temporality responds to the meaning of the second of the definitions: 'originary (from Latin *originarius*) 1. Adj. That which gives origin to someone or something. 2. Adj. That which brings its origin from some place, person or thing' (Real Academia Española, 2001). Hence, *originary temporality* is defined as all notion of time built by a social group, which does not conceive it as a unique and univocal notion. It is not about formulating a temporality for each ethnic group by the mere fact of being able to distinguish them, since this would be an unreasonable relativism. It is about denaturalising the official notion reproduced by the State, as well as by the scientific thinking, and that therefore do not enable us to grasp other temporalities within the nation-state. The *rhythmical otherness* is only possible to be understood if the hegemonic temporality is decentred from its unique and omnipresent position.

As a rhythmical concept, the *originary temporality* makes possible to understand the existence of different temporalities coexisting with the hegemonic temporality of a society (Table 2). The anthropological bibliography shows multiple cases of *originary temporality* mainly described by their distinction from the researcher's temporality, or from the scientific notion of the anthropological discourse (Bourdieu, 2006; Bouysse-Cassagne et al., 1987; Day et al., 1999; Evans-Pritchard, 1977; Fabian, 2002; Fischer, 2002; Geertz, 1990; Gell, 1992; Glennie and Thrift, 1996; Hall, 1983; Hallowell, 1955; Hubert, 1990; Leach, 1971; Lévi-Strauss, 1993; Malinowski, 1973; Mauss, 1979; 2007; Rigby, 1985).

In this sense, the concept of *originary temporality* seeks to identify every *temporality* through the rhythmic characterising the cultural practices of the group. Having exposed these definitions, it is stressed the need for working with three simultaneous concepts in order to study the cultural rhythmic that make possible to grasp notions of time: temporality, hegemonic temporality and *originary temporality*.

Table 2. Comparison of both temporalities in different historical contexts.

Historic context	Hegemonic temporality	Mocoví Temporality
Epoch of the ancient ones	Absent in pre-conquest periods Present in following periods up to current times	Nomadic rhythms of life Native methods of social organisation and stars reading
Colonisation and religious missions	Imposition of work rhythms and forced sedentarism Indoctrination into a life of enclosure and agricultural work Christian worldview	Encounter of ways of life based on different logics Resistance to imposed work rhythms and to Christian worldview Continuity of hunting and nomadic life customs among certain groups
Argentine State	Domestication of the space Territorial and ideological expansion of the nation Official history Conquest of the word and the body	Resistance and tactics of invisibilisation Identity conflicts Frontiers relations, ousting from ancestral land Silenced history
Present (Epoch of the new ones)	Capitalist rhythms of life, work, production and market Virtual rhythmic of mass media Bureaucracy and politics	Coexistence of native methods of organisation and linear methods (calendars, clocks) Overlapping of historic and mythological narratives together with everyday personal experiences

Cultural rhythmic

It is a theoretical–methodological assumption of this research that whenever problems concerning time or temporality are addressed, it is about rhythmic. The semantic use of the term *rhythm* replaces variants of the term *time*, such as temporal, temporals, a-temporals, temporalisation and others, which usually reduce meanings to other conventional or already naturalised uses. Facing the question of how to study the notion of time of a social group, its temporality, a correspondence between different definitions of *time* and *rhythms* was developed based on musical knowledge. In music, as well as in other arts, terms such as *tempo*, *rhythmic*, *rhythm*, or

pulse are commonly used, all referred to the different appreciations on the *flux of becoming*, always present in every piece of music.

Etymologically, the Dictionary of the Spanish Royal Academy defines *rhythm* as: 'Timed order in the succession or occurrence of things' (Real Academia Española, 2001) deriving it from the Greek term $\rho\acute{\epsilon}\tilde{\iota}\nu$, which means to flow. Its musical meaning says 'Proportion kept between the time of a movement and of another different one' (Real Academia Española, 2001). This last definition gets close to the notion proposed here. Rhythm is the conceptual element that brings us closer to the *apprehensible instant*, which is to my understanding where the transference of minimum information for humans to communicate is textured, the communicative syntax of every cultural system. This transference of information is made in this minimum differentiable rhythm, usually called *instant*, where it is given the only moment of continuity maintaining the cognitive present in connection to its past and to its continuous coming, the future. In this direction, becoming is defined as the unity of signification to be prioritised at the moment of understanding the present Mocoví temporality. In this sense, to study cultural rhythmic in becoming, in that instant in which the whole subjective and social past continuously recreates itself in connection to the group rhythmic in which it is lived, provide us essential information on the logic that operates in the assimilation and naturalisation of a certain temporality.

These reinterpreted concepts, relative to the study of ethnographies on temporality where social rhythms are described, make possible to address the problem by analysing the *collective life rhythm* of a group, the rhythm transferred by its members during *daily collective activities*, and thus able to be apprehended in the participant observation. Therefore, the temporality of a society can be understood from the life rhythms constitutive of a social, economic and worldview organisation, which articulate the daily nature and habits of their subjects (Table 3).

The articulation between rhythm and temporality was already present in the first sociological and anthropological studies on time. The main mentor of the social study of rhythm was the French ethnologist Marcel Mauss: 'rhythms and symbols not only bring the aesthetic and imaginative faculties of man into play, but at the same time all his body and soul' (Mauss, 1979: 284). Mauss already proposed in 1924 that rhythms contribute to articulate imaginaries and practices, and that anthropology, as well as sociology and psychology should focus on the study of symbol and rhythm (Mauss, 1979: 280). Prior to that, in 1905, Mauss had already emphasised the importance of focusing on the 'social morphology' of the Inuit, when studying their rhythms of dispersal and concentration of individual and collective life, even arguing that 'each social function has its own rhythm'

Table 3. Cultural rhythemics constitutive of a society's temporality. The Mocoví case.

Cultural rhythmic	Hegemonic temporality	Mocoví temporality	Social organisation
Daily rhythms	Calendrical and scheduled organisation Projective attitude	Organisation of the duties and <i>what is to come</i> Coming attitude	
Seasonal and annual rhythms	Accumulative chronology, almanacs, globalised rhythms	Natural cycles, moon phases, reading of the immediate scenery	
Communicative rhythemics	Linear narratives, realism Virtual rhythms	Non-linear narratives	
Economic and political rhythemics	Rhythms of the capitalist market, consumerism and intensive overproduction	Hunting and gathering in the woods Vegetable garden and farm animals	Economic organisation
Rhythms of production and work	Rationalisation and hourly work Accumulation and progressivism	Non-intensive agriculture, wood clearing, charcoal Lack of punctuality, disinterest for accumulation	
Ritual and religious rhythemics	Church, mass, catholicism, indoctrination, evangelicals	Ancient/new ones Native music and dancing, rites	Worldview organisation

(Mauss, 1979: 429). In one of his conferences on Aesthetics at the Collège de France given in 1935–1936, Mauss said: ‘Since the appearance of plastic arts, notions of equilibrium have emerged, thus notions of rhythm; and since the appearance of rhythmic arts, art emerged. Socially and individually, man is a rhythmic animal’ (Mauss, 2007: 147). When describing the aesthetic phenomenon, Mauss formulates an alternative definition based on rhythm reviving psychologist Wilhelm Wundt and another pioneer of rhythms, ethnologist Franz Boas, who proposed to study rhythm in decorative arts, dance, music and literature of native North American societies (Boas, 1955). In Mauss’ words:

[Boas] connects all art to rhythm, for where there is rhythm, generally there is something aesthetic: where there are tones, variation in touch and intensity, generally there is something aesthetic. Prose is only beautiful when it is to some extent rhythmic and to some extent chanted. Differences in tone, touch and feeling –all this is rhythm and all this is art. (Mauss, 2007: 68)

Durkheim mentions the term *rhythm* to refer to the time category: ‘The calendar expresses the rhythm of collective activities, while at the same time its function is to assure their regularity [...] what the category of time expresses is the common time for the group, the social time’ (Durkheim, 1982: 9). The concept of *rhythm* as *regulator of social activities* emphasises how rhythm is embedded in every temporality. Durkheim explains that religious life is structured in ‘regularly repeated acts’, which constitute collective rhythms and he uses them as an experimental proof of the belief in social events of religious character (1982: 8).

Evans-Pritchard is one of the first ethnographers to stress the concept of *rhythm* to think the temporality of the studied group. He refers to:

three layers of rhythms: physical, ecological and social. The Nuer observe the movements of celestial bodies, other than the sun or the moon... but they do not regulate their activities in relation to them, nor they use them as points of reference for the account of the seasons... Cattle needs and variations on food supply are the ones that mainly translate the ecological rhythm into the social rhythm of the year, and the contrast between ways of life at the height of the rainy season, and of the dry season is that which provides the conceptual poles for the temporal account. (Evans-Pritchard, 1977: 114–115)

These three layers enable us to understand how Nuer think time, in what Evans-Pritchard describes as *account*, although it is not a quantitative calculation. Chronology, for example, does not express itself through the

numbering of years but through the reference to the system of age groups (Evans-Pritchard, 1977: 122). It is surprising to think that it is not relevant to know *how many* years happened in an event recapitulation, something unconceivable to any person formed in the western temporality who orders his own life based on the account of his *birthdays* and what has been done *in between* and during them. The same happens with the location of a moment in the past and that depending on which time *of the year* is that about: 'The Nuer do not use names of the months for marking the time of an event. . . Time is a relation between activities. . . Time does not have the same value throughout the year' (Evans-Pritchard, 1977: 119–120).

This focus of anthropology on the 'rhythmic issues' is completed with the emergence of subsequent studies along the 20th century, which unfortunately did not succeed in arousing new interests: in Malinowski (1973) when explaining the Trobriand islanders calendar in New Guinea ruled by agricultural and social rhythms; in Hall (1983) when studying rhythms implied in the synchronisation processes between people and their different behaviors in monochronic and polychronic societies; in Turner (2005) when analysing the rhythm of music and dancing in the different types of *ndembu* rituals in Zambia; in Descola (1996) when observing rhythms of hunting journeys and the rhythm of energy consumed among the *Achuar* in the jungle of Ecuador; in Durand (2004) who applies a generalised use of the term *rhythmical*, sometimes related to seasonal cycles and agricultural rhythmic, as well as to the recurrence of mythical cycles; in Bourdieu (2006) when analysing how capitalism is imposed on the life rhythms of Kabyle society in Algeria.

In addition to these works in anthropology, there are outstanding studies addressing rhythmic issues such as Lefebvre (1974, 2007) on rhythm analysis, in which the interaction between notions of time, production of space and comprehensions of everyday life is analysed. Similarly, Bachelard (2011) applied that from a philosophical perspective to the study of space, the imagination and body rhythms. Zerubavel (1985) suggested to address the rhythms hidden in the schedules and calendars of social life from the sociology of time. Both John Dewey and Susanne Langer studied the concept of 'vital rhythm' in connection with the aesthetic experience of art and the existence of art forms (Kruse, 2007). Recently, Goodman (2010) applied rhythm analysis to the study of sonic culture, the politics of frequency and the ecology of fear.

In brief, cultural rhythmic is proposed as methodology built for studying temporality among different social groups and inside them. Studying different rhythmic experiences integrated in the participant observation enables us to interpret social facts that are implicit in the everyday practices of organisation, in the economic–political relations, and in the group's worldviews.

Recovering the phrase by Edward Hall, when he refers to the cultural patterns linking time and culture as 'the language of time' (Hall, 1983: 3), it can be said that cultural rhythmicity is the language of temporality. Rhythmicity is in this sense, a theoretical and methodological language to carry out the purpose of criticising hegemonic temporalities and their practices.

Case study: Mocoví temporality

The ethnographic work among Mocoví communities was carried out between 2005 and 2006 having made three visits to the region of Chaco, Argentina and also by sharing experiences among them in Buenos Aires. Mocoví people are geographically located in the region of Chaco, north-eastern Argentina (Figure 1). The diverse families who identify themselves as Mocoví people live in different towns and rural areas of southwestern Chaco province and northwestern Santa Fe province forming a group of over 12,000 people in 2005 (López, 2007). The indigenous groups visited identified themselves in the region as the communities of Santa Rosa and San Lorenzo in Cacique Catán, and the community of Colonia Juan Larrea. Being there my principal interlocutors were Marcos Gómez, Francisco Gómez and Sixto Lalecorí. With regard to public services, these settlements did not have electricity, natural gas or running water at the time of the fieldwork.

The fieldwork undertaken made possible an approach to the life rhythm of the indigenous interlocutors, in particular to the involvement in their everyday practices, which enabled me to experience a different rhythmicity to that imposed by the hegemonic temporality. There was a profound investigation upon five cultural rhythmicities for testing in the territory the central hypotheses presented at the beginning of the article.

In the first group of analysed rhythmicities, mainly connected to the everyday life rhythms, I was able to confirm Mocoví people's attention to immediate events, to the becoming, with no concerns for what may happen afterwards for planned actions. At my first arrival at Marcos's house and after introducing ourselves, the community chief first said: 'I knew visitors were about to come, I heard a bird singing, who always sings when people comes'. He was weeding a cotton field and did not hesitate to stop working and invite us to come in for a *mate* (native drink made with hot water and herbs). When I told him it was not necessary for him to stop, he added 'there's no rush, how shouldn't we welcome our visitors?' This first experience focused my attention on this Mocoví's life rhythm attribute of becoming, when paying attention to messages from the natural surroundings, such as a bird singing and not caring to interrupt a job to welcome us.

An attitude that reveals a spontaneous rhythmic thanks to which he is able to adapt to a change in his everyday life without appealing to postponements.

In the second group of rhythmic, I analysed a close connection between the interpretation of the rhythms of celestial bodies and climatic rhythms. For instance, the interpretation I found of the link between moon's position in the sky and its phases, and meteorological factors, such as rain or drought. Both astronomical and climatic rhythmic require a periodical observation of phenomena and a transmission of this knowledge through generations. At the same time, Mocoví people's history and mythology are narrated by the interlocutors through mythical characters represented in the night sky, and in particular, over the Milky Way, so called *nayic*, the road. These attributes of the Mocoví temporality are clearly opposed to the hegemonic temporality which sets historical processes in calendar dates and thus setting them on a timeline. For science, stars are the past of the universe, moving away from present; for Mocoví people, instead, they are the present setting of its origin and its worldview.

In the third group, when analysing music, myths and everyday life's stories, I found a common pattern to all: the non-linear narratives. In various circumstances during the interviews, usually Marcos or his brother Francisco, when telling a real experience in their lives, they inserted oneiric or mythological facts, or visions of the future. They told me for example that anyone's physical discomfort may be induced by a late ancestor or through a shaman's dreams, without requiring their presence. That is to say, that they sounded fictitious to me for not conceiving such discontinuity of facts that may be otherwise chronological thus logically ordered in measurable sequences, being hours, days or years. This discontinuity in the narrative of past facts with visions of the future or mythological elements inserted, evidenced a construction of the past, different to the serial construction of a linear temporality, which necessarily must order a continuity of events in causal, accruable and unable to overlap terms.

In the fourth group of rhythmic, I analysed rhythms of politics and labour. In electoral times, the search for indigenous voters by local politicians showed me another rhythmic, characteristic of the hegemonic temporality: visiting them periodically for bringing them food and making sure they will be voting for them. This dynamics is sustained on a basis of a sense of permanence, appropriation and projection of the becoming, all constitutive qualities of the present mechanics of politics in Argentina. Another clear example arose from the conversation I had with a farmer of European descent who told me that when farmers look for indigenous workers, they have to deal with their lack of punctuality

when starting the working journey, or at the time of being picked up from their homes:

it's incredible they are not interested in working longer or having a continuity in their jobs. You never know if they are going to be at home when picking them up or if they just left to pay a visit to a relative. It happened to me to find them sleeping in the middle of the field when the job supposed to have been finished by then; they follow their rhythm, they do it when it's fine for them. Anyway, they do the job finally. Or when you ask them about the amount of time to be spent on working in a field and they say half an hour. And after two hours you come back and they not even switched on the machine. They don't have any reference to the time passed.

This story clearly points out the tension between the farmer's hegemonic temporality, cadenced by market processes and the estimated schedules of the work routine, and the ordinary temporality marked by internal rhythms of the group (such as the will to work, a true need for money that very day, a visit to relatives) and by an absence of schedules to put in order its behaviour facing the fact of having to produce in order to eat.

In the last group, I acknowledged the presence of urban and virtual rhythmicities. The former were evidenced in the discourse of the indigenous people who moved out to town and who after some years find contradictions in the irregular and unscheduled life of the non-urbanised indigenous people. It is odd for them to realise that prior to their move to town, they had life rhythms adapted to natural rhythms, like going to bed at sunset, now the Sun being replaced by electric light. Meanwhile, virtual rhythms filtered from mass media, such as the marking of the start of each hour on the radio in synchrony with the global time zones or the possibility to communicate at any time with mobile phones. The introduction of rhythms, external to the immediate context builds a notion of multi-temporality that contributes to conceive the multiplication of overlapped activities. This feature is typical of the multitask production of capitalism that aims to maximise profits disregarding the social and environmental sustainability of such economic purpose.

The result of this ethnographic process enables us to understand, as Table 3 illustrates, that the social, economic and worldview organisation of the Mocoví groups may be interpreted from the different cultural rhythmicities that make possible to acknowledge both temporalities. Furthermore, the ethnographic experiences enabled us to recognise in both contexts (Chaco region and Buenos Aires) that a coexistence of a Mocoví temporality and a hegemonic temporality is given. For example, among the instances that made possible to identify these everyday situations in

which this coexistence between both temporalities was given, it stands out: (1) the lack of interest for routine and projective work, along with the involvement in rural works at the same time, (2) the unconcern for the observance of municipal and bureaucratic procedures in general, along its use for personal purposes and the management of such rhythms at the same time, (3) the attention to daily natural rhythms and the contemplation of their changes, even when they are involved in work activities marked by productive or virtual rhythms, (4) the overlapping of historic and mythical narratives along with everyday personal experiences. In the first and second examples, the coexistence is expressed in the inevitable condition of the hegemonic temporality as social ordering of production, and the Mocoví temporality from the disinterest and unconcern for progressively observing these rules of work. In the third example, the attention to sun, moon, animals and plants rhythms is always present, and these can be read in parallel to any other activity. In the fourth example, another temporality coexisting among the Mocoví people emerges the mythological temporality, that is, the one which expresses the internal logic of myths and that has a character of originary temporality, since it does not respond to the linear logic, typical of the hegemonic temporality, and it is possible to conceive the coexistence of past and present, simultaneously, in synchrony (Lévi-Strauss, 1984).

By being in the woods with the indigenous people, this coexistence of temporalities is understood when it is realised that their attention is focused on the instant they live but not in the process of working such continuous time for earning such money that the accumulative production presents to them, even though they reproduce it. Having said that, what does their attention to the instant but not to the process to the duration imply? This implies that their life rhythms are in connection with an experience of the everyday and immediate reality and not with an experience of appropriation and stopping of becoming for its control, as the western-capitalist life rhythm presents it and put it into practice. There are temporalities, as the Mocoví one, that enable us to challenge and to reconsider the hegemonic temporality that rules the scientific thinking that generates the models on which the current knowledge of mankind is built. To be able to demonstrate this postulate has been one of the main aims of this research. There was no intention to make a world of all possible temporalities but to integrate differences and try to create a new way of thinking the construction of temporality within any social group.

It is emphasised to conclude that the importance of understanding cultural diversity in terms of temporality and rhythmic resides in the possibility to have access to the temporality of the cultural other proposed to be studied, hence for knowing and appreciating its life rhythmic, denaturalising an own temporality as the only possible one. Temporality and rhythmic

are complementary concepts. As time and rhythm are inseparable for understanding one or the other, a notion of rhythmic that pretends to constitute a method of apprehension for the different rhythms that makes possible an access to a way of life, to a rhythmic of life, has been proposed here. The study of temporality in rhythmic terms enables us to grasp the cultural diversity and the coexistence between different human groups from their daily rhythms, their habits and customs, which all integrated constitute a cultural rhythmic. Furthermore, there has been an attempt to understand the naturalisation of the linear logic at the encounter of the originary temporality and the hegemonic temporality. I aimed to demonstrate that Mocoví people, for all what has been gathered in the field and in their rhythmic of life, are an example and a proof that the hegemonic temporality is not the only way for conceiving time, and besides, it enables us to postulate the existence of an originary temporality of the group, that characterises its way and rhythms of life. Therefore, this temporality is an intangible cultural resource for the consideration, constitution and protection of the Mocoví identity.

The acknowledgement of the originary temporality of a social group demonstrates in this last sense, that the power to impose cultural rhythmic, exerted by the hegemonic temporality, is culturally and historically built, and therefore, it must not be imposed to other social groups as having a natural, universal and ahistorical character. The triple relation of the natural, the univocal and the official is dissociated as a formula of imposition of cultural rhythmic, if it is understood that its constitution may be reformulated from the distinction between the hegemonic temporality and the originary temporality within any social group.

Acknowledgements

I wish to thank Pablo Wright and fellow scholars at the Institute of Anthropological Sciences (Ethnology and Ethnography Section), University of Buenos Aires, Argentina. Thanks also to all the staff at Tornquist agency (INTA), to all members of the Research Centre of Time and Temporality and to Nicolás Kugler for his collaboration in the translation of this article.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by a scholarship from CONICET (Argentina's National Council of Scientific and Technical Research).

References

- Bachelard G (2011) *Poética del espacio*. México: Fondo de Cultura Económica.
- Boas F (1955) *Primitive art*. Toronto: Dover Publications.
- Bohm D (1988) *La totalidad y el orden implicado*. Buenos Aires: Kairós.
- Bourdieu P (2006) *Argelia 60. Estructuras Económicas y Estructuras Temporales*. Buenos Aires: Siglo XXI Editores.
- Bergson H (2004) *Duración y simultaneidad. A Propósito de la teoría de Einstein*. Buenos Aires: Ediciones del Signo.
- Carbonell E (2004) *Debates Acerca de la Antropología del Tiempo*. Barcelona: Publicacions de la Universitat de Barcelona.
- Day S, Papataxiarchis E and Stewart M (1999) *Lilies of the field: Marginal people who live for the moment*. Boulder: Westview Press.
- Descola P (1996) *La selva culta: simbolismo y praxis en la ecología de los Achuar*. Quito: Editorial Aby Yala.
- Dilthey W (1944) *El mundo histórico*. México: Fondo de Cultura Económica.
- Durand G (2004) *Las estructuras antropológicas del imaginario*. México: Fondo de Cultura Económica.
- Durkheim E (1982) *Las Formas Elementales de la Vida Religiosa*. Madrid: Akal.
- Bouysse-Cassagne T, Harris O, Platt T and Cereceda V (1987) *Tres Reflexiones sobre el Pensamiento Andino*. La Paz: Hisbol.
- Evans-Pritchard E (1977) *Los Nuer*. España: Anagrama.
- Fabian J (2002) *Time and the other: How anthropology makes its object*. New York: Columbia University Press.
- Fischer E (2002) Las Categorías del Tiempo y el Concepto de Temporalidad: el Caso de Upinhuaya. *Revista Andina* 35: 167–190.
- Geertz C (1990) *La Interpretación de las Culturas*. Barcelona: Gedisa.
- Gell A (1992) *The anthropology of time: Cultural constructions of temporal maps and images*. Oxford: Berg.
- Glennie P and Thrift N (1996) Reworking E P Thompson's time, work-discipline and industrial capitalism. *Time & Society* 5(3): 275–299.
- Goodman S (2010) *Sonic warfare: Sound, affect and the ecology of fear*. Massachusetts: Massachusetts Institute of Technology Press.
- Gunn A (1986) *El problema del tiempo I. Estudio histórico y crítico*. Buenos Aires: Hyspamérica.
- Hall ET (1983) *The dance of life: The other dimension of time*. New York: Anchor Books.
- Hallowell I (1955) Temporal orientations in western civilization and in a pre-literate society. *American Anthropologist* 39: 647–670.
- Hawking SW and Penrose R (1996) *La naturaleza del espacio y el tiempo*. Santiago de Chile: Editorial Universitaria.
- Heidegger M (1996) *Being and time*. Albany: State University of New York Press.
- Husserl E (1959) *Fenomenología de la conciencia del tiempo inmanente*. Buenos Aires: Nova.
- Hodges M (2008) Reconsidering time's arrow: Bergson, Deleuze and the anthropology of time. *Anthropological Theory* 8(4): 399–429.

- Hodges M (2009) Disciplining memory: Heritage tourism and the temporalisation of the built environment in rural France. *International Journal of Heritage Studies* 15(1): 76–99.
- Hodges M (2010) The time of the interval: Historicity, modernity, and epoch in rural France. *American Ethnologist* 37(1): 115–131.
- Hubert H (1990) Estudio Sumario sobre la Representación del Tiempo en la Religión y la Magia. *Reis* 51: 177–204.
- Iparraguirre G (2011) *Antropología del Tiempo. El Caso Mocoví*. Buenos Aires: Sociedad Argentina de Antropología.
- Iparraguirre G and Ardenghi S (2011) Tiempo y Temporalidad desde la Antropología y la Física. *Revista de Antropología Experimental* 11: 251–260.
- Kant I (1996) *Crítica de la Razón Pura*. México: Porrúa.
- Kruse F (2007) Vital Rhythm and Temporal Form in Langer and Dewey. *The Journal of Speculative Philosophy* 21(1): 16–26.
- Leach E (1971) Dos Ensayos sobre la Representación Simbólica del Tiempo. In: Leach E (ed.) *Replanteamiento de la antropología*. Barcelona: Seix Barral, pp. 192–210.
- Lefebvre H (1974) La producción del espacio. *Papers Revista de sociología* 3: 219–229.
- Lefebvre H (2007) *Rhythmanalysis: Space, time and everyday life*. London: Continuum.
- Lévi-Strauss C (1993) *El Pensamiento Salvaje*. México: Fondo de Cultura Económica.
- Lévi-Strauss C (1984) *Antropología Estructural*. Buenos Aires: Eudeba.
- López A M (2007) *Astronomía, identidad y cambio en comunidades mocovíes del Chaco Argentino*. Mg Thesis de Maestría en Antropología inédita, Facultad de Filosofía y Humanidades, Universidad Nacional de Córdoba.
- Malinowski B (1973) *Los Argonautas del Pacífico Occidental*. Barcelona: Península.
- Mauss M (1979) Ensayo sobre las Variaciones Estacionales en las Sociedades Esquimales. Un Estudio de Morfología Social. In: Mauss M (ed.) *Sociología y Antropología*. Madrid: Tecnos, pp. 359–431.
- Mauss M (2007) *The Manual of Ethnography*. New York/Oxford: Berghahn Books.
- Munn N (1992) The cultural anthropology of time: A critical essay. *Annual Review of Anthropology* 21: 93–123.
- Newton I (2004) *Principios Matemáticos de la Filosofía Natural*. Madrid: Alianza.
- Prigogine I and Stengers I (1998) *Entre el tiempo y la eternidad*. Buenos Aires: Alianza Universidad.
- Real Academia Española (2001) *Diccionario de la Lengua Española, vigésima primera edición*. Madrid: Espasa Calpe. Available at: www.rae.es (accessed 18 June 2010).
- Rigby P (1985) *Persistent Pastoralists. Nomadic Societies in Transition*. London: Zed Books.
- Terradas I (1998) Circa: Antropología del Tiempo y la Inexactitud. *Anales de la Fundación Joaquín Costa* 14: 233–253.

-
- Turner V (2005) *La selva de los símbolos: aspectos del ritual ndembu*. Madrid: Siglo XXI Editores.
- Wright P (2008) *Ser-en-el-sueño. Crónicas de historia y vida toba*. Buenos Aires: Biblos.
- Zerubavel E (1985) *Hidden rhythms. Schedules and calendars in social life*. London, UK: University of California Press.