

## TIME: MEANINGS, PERSPECTIVES AND APPROACHES

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***Abstract:** This paper provides a brief review of the literature related to time. First, the paper discusses ways that individuals represent time. Then the quantitative and the qualitative perspectives of time are discussed. Temporal dimensions in organizations, such as time orientation, polychronicity, and time urgency, are described. The paper may provide implications for academics whose research is related to behaviour over time.*

***Keywords:** Time perspectives, organizational research, time orientation, polychronicity, time urgency*

***JEL Classification:** J22*

### 1. Introduction

Time is one of the central preoccupations in contemporary industrial society. In fact, the pace of life in modern society and the emphasis placed on such values as growth, success, advancement and gain has put a premium on time (Blyton and al., 1989). For the leaders of American companies among the fifty most important, the Time is a crucial strategic element (Fortune, 1989). Moreover, for Stalk and Hout (1990) time is now the major competitive advantage for many companies. It is not difficult to give a few examples of processes and resources management based on time and

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expected to improve performance Companies: the "just in time", flexitime, time management, deadlines, punctuality, etc. (Benabou and Morin, 2004).

Thus, enormous effort is expended in designing ways to increase the amount of activity which can be done in a given time. So, the notion of time in organization, in its complexity, has become a major object of study. For example, many recent articles address the issue of organizational time (e.g., Ancona and al., 2001; Bluedorn, 2000; George & Jones, 2000; Hassard, 1996), and the Academy of Management has made its main theme in 2000.

Paralleling the increasing recognition of time as an important organizational and managerial variable, there is a great disagreement among researchers about what time means, and who one gain valid and useful knowledge about it (Rose and al., 2009).

The central objective of this paper is to explore the articulation of the different conceptions of time and the organizations need to manage a number of time-related variables. First, we propose an overview of the concept of time in various fields, like philosophy, sociology, economy, psychology and anthropology. Second, we focus on the quantitative and the qualitative perspectives of time. Then we describe some aspects of temporal dimensions in organizations, such as time orientation, polychronicity, and time urgency.

## ***2. Interdisciplinary Overview of time***

What is time? "*When no one asks me. I know; as soon as I have to explain it, I no longer know,*" replied Saint Augustin (Bergadaa, 1989). Nevertheless, numerous philosophers and researchers have taken turns trying to answer this question. There are numerous articles on the subject of time in every discipline. Bergadaa (1990) offer an overview of the concept of time in various levels on which the phenomenon is perceived to decide how to integrate the role of time into management and organizational studies.

The lack of attention to temporal issues in the organization and management literature stands in contrast to a long philosophical and scientific concern for time (Fraser, 1975; Hall, 1983; Jaques, 1982; Lauer, 1981). For the philosopher Bergson (1959), the reality of time is its duration. The moment is only an artificial distinction necessary to the understanding of certain phenomena. The past and the future are

unconditionally linked, while the present carries along actions that conclude past events and sow the seeds of what is to come. Past and future are thus entirely contained in the present. It is through internal states of consciousness that time exists. For Bergson, time is "creation" (Bluedorn and Denhardt, 1988).

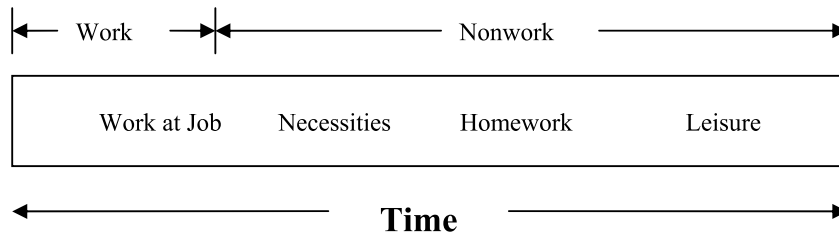
At his turn, the sociologist Merleau-Ponty (1945) accuses Bergson of confusing past, present, and future within a uniform period with the intention of defending the idea of duration. According to Merleau-Ponty, the moment is what enables the individual to visualize a present that is not inert and yet to be aware of future plans and dreams as well as of the past and its regrets and nostalgia. Here, time is a duration shaped by consecutive moments, each of which is able to embody an event that is perceived subjectively. For Merleau-Ponty, time is the construction of the world as directly experienced by humanity (Bergadaa, 1989).

For the physicist Bachelard (1932), the fundamental problem in the notion of duration, is the exact moment in which the action begins. According to him, action must have begun at a precise moment to have a fixed duration. For him, time exists only through the events that are contained within it, and reality is the moment that can be measured and analyzed. Duration can be only the subjective and retrospective synthesis of moments. For the physicist, time is causal analysis.

According to the historian Braudel (1969), time is universal. The past continues to exist in the present and for the future.

On another level, the economist Becker (1965) proposed his theory of "human capital." For him, individuals become producers of their own general satisfaction by allocating units of time to units of activity. His work has been completed and developed by a number of economic researchers (e.g., Dupuy, 1975; Hill and Juster, 1980; Linder, 1970). Their conclusion is that time exists in limited and finite quantities and is a basic intangible resource and that the freedom to use time as one chooses can be acquired by trading another resource, such as money or effort. For Becker and the researchers opting for an economic approach, time is a resource. At the same way, Feldman and Hornick (1981) suggest a structure of time divided on "work time" and "Nonwork". Work is paid time that enables the individual to acquire economic purchasing power through income. The residual time after work is "nonwork." The latter can, itself, be divided into

three categories, of activities: necessities, homework, and leisure. The result is a structuring of time in terms of four groups of activities, as follows:



*Source: Adapte from Feldman and Hornick (1981)*

In organization theory, time has also attracted several researchers with new conceptions influenced by anthropological and sociological traditions. In the 1980s and 1990s, several review papers on time appeared in management and organizational studies (Bluedom and Denhardt, 1988; Clark, 1985; Das, 1993; Hassard, 1996; McGrath and Rotchford, 1983). Their intension was to refresh interest in time in their own areas of study: organizational sociology, social psychology and management. They raised many questions and issues about time in organizations. They also integrated and criticized studies on time in the field, adding new perspectives. As culture becomes an important and popular concept in understanding and managing organizations, researchers begin to recognize time as one of the important elements composing culture. In fact, Schein (1992) considers time to be the most fundamental aspect of culture. The anthropologist Hall (1983) also insists that time is a core system of cultural, social and personal life, for him time is a “silent language” and a fundamental way in which members of a culture, or organization, communicate with each other (Lee and Liebeneu, 1999).


### ***3. Perspectives on Time***

A fundamental dichotomy underlying much of the social sciences in general, including perspectives on time, is that between objective and subjective realities (Jaques, 1982; Kern, 1983, Blyton et al., 1989; Adam, 1994). In fact, many “times” have been conceptualised, but, as Bluedorn (2002) notes, these have frequently been articulated in the form of a

persistent dichotomy. For example, since antiquity rhetoricians contrasted their measured, “objective” time, *chronos*, with the subjective view of time or *Kairos*. Bluedorn (2002), and Orlikowski and Yates (2002) provide comprehensive overviews of these variants, which are summarized and adapted in Table 1.

Table no. 1

*Temporal Dualities?*

| Objectif Time      |  | Subjectif Time     |
|--------------------|--|--------------------|
| <i>Absolute</i>    |  | <i>Relative</i>    |
| <i>Linear</i>      |  | <i>Cyclical</i>    |
| <i>Monochronic</i> |  | <i>Polychronic</i> |
| <i>Clock time</i>  |  | <i>Event time</i>  |
| <i>Chronos</i>     |  | <i>Kairos</i>      |

Source: Adapted from Bluedorn (2002); Orlikowski and Yates (2002)

### 3.1. Objective view of time

When asked the question 'what is time?', people generally think of the clocks and calendars. It is the clock time concept that people have in mind, consciously or unconsciously, when they think of time. It is characterized as homogeneous and divisible in structure, linear and uniform in its flow, objective and absolute, that is, existing independent of objects and events, measurable (or quantifiable), and as singular, with one and only one 'correct' time (Bluedorn and Denhardt, 1988; Clark, 1985; Hassard, 1989; McGrath and Kelly, 1986). According to the objective view, time is "independent of man" (Clark, 1990), a view that is aligned with a Newtonian assumption of time as abstract, absolute, unitary, invariant, linear, mechanical, and quantitative. The clock has emerged as a primary metaphor in this conceptualization of time. This concept is the dominant one in our contemporary society, and is closely associated with the development of industrial society (Clark, 1985; Bluedorn and Denhardt, 1988). It is also the basic assumption upon which our society relies for its operation and management. It is often called “the linear-quantitative tradition” (Hassard, 1989), “event time” (Clark, 1985), or “the Newtonian conception” (McGrath and Kelly, 1986).

The quantifiability of clock time gave birth to another important concept of time in history. As labour got paid by time, and entrepreneurs became sensitive to the productivity of their enterprises calculated by the

formula in which time is a denominator, time began to be recognized as a resource: 'time is money'. According to this metaphor, time can be, like money, spent, saved, wasted, possessed, budgeted, used up and invested. People understand time in financial terms in most cases of everyday life, especially in business and management contexts.

Thus, most quantitative social science studies of organizations adopt this perspective and treat time as "quantitative time, continuous, homogeneous" (Starkey, 1989). In fact, time in management, has been closely related to productivity. An organization is considered more productive or efficient when it reduces the period of time it takes to accomplish a given work. Time is viewed as a resource which should be 'measured and manipulated in the interest of organizational efficiency and effectiveness' (Bluedorn and Denhardt, 1988). This concept of time has dominated most research in management and organization studies.

### *3.2. Subjective view of time*

The opposite view of time is the subjective one. Time is seen as relative, contextual, organic, socially constructed and thus experienced through people's culturally relative interpretations. Time is a product of the norms, beliefs, and customs of individuals and groups. Such a view reflects a constructed conceptualization of time, where time is "defined by organizational members" (Clark, 1985) and is assumed to be neither fixed nor invariant (Adam, 1990; Glucksmann, 1998; Jurczyk, 1998). Time is conceived as "qualitative, heterogeneous, discontinuous, and unequivocal when different time periods are compared" (Starkey, 1989). In this view, "time is in the events, and events are defined by organizational members" (Clark, 1985).

Das (1993) suggests that time should be recognized as a subjective phenomenon. Subjective time implies a time conception which is shared (or owned) by any subject or entity, whether it is an individual, group, organization or any other entity that is of interest to management and organizational research. Other writers of review papers on time (Bluedorn and Denhardt, 1988; Clark, 1985; McGrath and Rotchford, 1983) share Das' view. They all argue that the clock time concept is a very limited notion, and too simple to understand organizational phenomena. The clock time concept should be complemented by concepts which have rich implications

for gaining a deeper understanding of organizations in the context of culture (Schein, 1992).

Bluedorn and Denhardt emphasize the plurality of time. Although our life is so embedded in time that people simply regard it as unchangeable and taken-for-granted, 'time is fundamentally a social construction that varies tremendously between and within societies' (Bluedorn and Denhardt, 1988).

Much of the social scientific literature on time may be seen in light of the fundamental objective-subjective temporal dichotomy presented above (Orlikowski and Yates, 2002). While adopting one side or the other of this dichotomy may offer researchers analytic advantages in their temporal studies of organizations, difficulties arise when these positions are treated-not as conceptual tools-but as inherent properties of time. Focusing on one side or the other misses seeing how temporal structures emerge from and are embedded in the varied and ongoing social practices of people in different communities and historical periods. By focusing on what organizational members actually do, Orlikowski and Yates, 2002 suggest a practice-based perspective on temporal structuring.

### *3.3. The Practice-based Perspective*

As Orlikowski and Yates (2002), Bluedorn (2002), and Bluedorn and Denhardt (1988) have separately argued, the dangers with dichotomies is that they too easily decay into the ossified stances of two opposing camps, each believing that their preferred form of time is good and true, and the opposite form is just plain wrong. There are, they remind us, alternatives to the weary fight along objectivist / subjectivist; positivist / contextualist; objectivist / relativist lines. Orlikowski and Yates (2002) develop the notion of temporal structuring, and explore how a practice-based perspective may be able to bridge the gap between the objective and subjective perspectives highlighted above, as well as between other dichotomies in the literature on time.

In fact, Orlikowski and Yates (2002) suggest that studying time in organizations requires studying time in use, that is, examining what organizational members actually do in practice, and how in such doing they shape the temporal structures that shape them. Table 2 compares the dominant (objective and subjective) perspectives on time with the practice-based perspective developed by Orlikowski and Yates (2002). In essence, these perspectives differ in where they position the primary locus of explanation for temporal phenomena. That is, an objectivist perspective

places most emphasis on an external entity or force, a subjectivist perspective is chiefly concerned with cultural meanings, and a practice perspective focuses principally on human activities. In addition to these fundamental differences, we can also point to differences in people's experiences of time and the role of human actors in temporal change.

This view may offer a new insights into how people construct and reconstruct the temporal conditions that shape their lives (Orlikowski and Yates, 2002). A practice-based perspective also helps us to see that people may experience time as clock-based or event- based (or both) depending on the type of temporal structure being enacted in practice at that moment. (Orlowiski and Yates, 2002).

Table no. 2

*Different Perspectives on Time in organizations*

|  | <b>Objective</b>   | <b>Subjective</b>  | <b>Practice-Based</b>  |
|--|--|--|--|
| <b>View of time</b>                      | Exists independently of human action; exogenous, absolute.   | Socially constructed by human action; culturally relative  | Constituted by, as well as constituting ongoing, human action.   |
| <b>Experience of time</b>                | Time determines or powerfully constrains people's actions through their use of standardized time measurement systems such as clocks and calendar   | Time is experienced through the interpretative processes of people who create meaningful temporal notions such as events, cycles, routines, and rites of passage   | Time is realized through people's recurrent practices that (re)produce temporal structures (e.g., tenure clocks, project, schedules) that are both the medium and outcome of those practices.  |
| <b>Role of actors in temporal Change</b> | Actors cannot change time, they can only adapt their actions to respond differently to its apparent inexorability and predictability, e.g., speeding up, slowing down, or reprioritizing their activities. | Actors can change their cultural interpretations of time, and thus their experiences of temporal notions such as events, cycles, and routines, e.g., designating a "snow day", "quiet time", "fast track", or "mommy track". | Actors are knowledgeable agents who reflexivity monitor their action, and in doing so may in certain conditions enact (explicitly or implicitly) new or modified temporal structures in their practices, e.g. adopting a new fiscal year or "casual Fridays" |

Source: Orlikowski and Yates (2002)



#### ***4. Theoretical foundations of temporal dimensions in organization***

Organizational researchers have investigated several phenomena of subjective time from an individual differences orientation. Among them are time orientation (e.g. Francis-Smythe and Robertson, 2003; Zimbardo and Boyd, 1999), polychronicity and monochronicity (e.g. Palmer and Schoorman, 1999; Slocombe, 1999), time pressure and time urgency (Rastegary and Landy, 1993; Waller and al., 2001).

This is why, we will introduce in this portion of the paper the temporal dimensions that could characterize organizational life. We consider in our discussion four temporal dimensions: time orientation, polychronicity vs monochronicity and time urgency

##### *4.1. Time orientation: past, present, future*

In this part of the paper we will develop a classification of temporal orientations or temporal perspective. In fact, people are different in many ways. One of them is how they perceive the past, present, and future. Some of us think about the future most of the time, some about the past, and some about the present. In other words how people perceive the relative importance of past, present and future?

Time perspective has been defined as the “degree of emphasis [people place] on the past, present, and future” (Bluedorn, 2000); as “the totality of the individual’s views of his psychological future and psychological past existing at a given time” (Lewin, 1951); as the degree to which one reflects upon the past, is centered in the present, or anticipates the future (Lennings, 2000).

Similarly, time orientation has been defined as an individual’s dominant or preferred orientation toward the past, present, or future, (e.g. de Volder, 1979; de Volder and Lens, 1982; Gjesme, 1983; Lens, 1986; Nuttin, 1985); as “the cognitive processes that results in a distinct pattern of responding to objects, events, and situations that implicate a distinct temporal space” (Lasane and O’Donnell, 2005); and as the cognitive, motivational, and emotional processes involved in anticipating, planning, and regulating behaviour (Nurmi, 2005; Fortunato and Furey, 2010)

But the terms time perspective and time orientation have often been used interchangeably by researchers. Thus for the sake of brevity and expediency, we use in this paper, from this point forward, the term time orientation to refer to both constructs.

**Past time orientation** is defined as the extent to which the individual places importance on his past. It is also the extent to which the individual has access to, or memory of, the past.

The most common way of viewing the time orientation of organizations is in terms of from now until some point in the future. Orientation, in and of itself, implies some reference point "out there". Thus, for the most part, time orientation in organizations deal with the future time period, and are often referred to as short- or long-term perspectives or horizons.

These orientations can range from, for example, daily production schedules, weekly or monthly sales quotas, quarterly performance trends, annual financial reports, to longer-term strategic market, process, or product development plans. Early empirical research in organizations focused on the differences in planning temporal horizons among functional groups (Lawrence and Lorsch, 1967). Lawrence and Lorsch (1967) measured temporal orientation of organizational members in terms of percentage of their working time they spent on tasks that would realize profit within specific future time periods. They found evidence that different types of workers (i.e. production, sales, and research) had different temporal orientations.

**Orientation to the present** is defined as the extent to which an individual is aware of their present. As Zimbardo and Boyd (1999) and others (Lasane and O'Donnell, 2005; Seijts, 1998) have noted, Present time orientation has often been treated conceptually and empirically as the opposite of Future time orientation. Thus, a person with a Present time orientation is one who disregards the future consequences of behavior and fails to engage in long-term planning and goal setting (Fortunato and Furey, 2010)

In fact, people scoring high on the present perspective dimension focus on the "here and now," attending to immediate goals. Because of this more narrow time lens, people high on present time perspective have a tendency to believe that planning is not useful, are more likely to behave impulsively, and often lose track of time (Zimbardo and Boyd, 1999).

**Orientation to the future** has been defined as: "the length of the future time span over which one conceptualizes personalized future events" (Wallace, 1956); as "a general concern for future events" (Kastenbaum, 1961); as the overall importance a person attaches to the future (Lewin,

1942); as an orientation towards the future that includes anticipation, planning, and the regulation of behaviour (Nurmi, 2005) and “a general capacity to anticipate, shed light on, and structure the future” (Gjesme, 1983). In other words it’s the extent to which an individual is aware of his or her future (Tuttle, 1997).

Several researchers have measured future orientation in organizational settings (Das, 1987; Jaques, 1964; Lawrence and Lorsch, 1967; Payne and Pheysey, 1971). Early work by Jaques (1964) found positive correlations between future orientation of the job's characteristics and demands, and the level of the job in the organizational hierarchy, as well as the compensation awarded the job incumbent. John Hammond III (1979) has suggested that knowledge of time orientation could be useful in matching managers with clients and projects (Vinton, 1992).

#### *4.2. Polychronicity versus monochronicity*

Polychronicity and monochronicity are a temporal construct first proposed by Hall (1959) and expanded upon by Bluedorn, Kalliath, Strube, and Martin (1999). Polychronicity is defined as “the extent to which people prefer to be engaged in two or more tasks or events simultaneously, and believe their preference is the best way to do things”. On the other hand, monochronicity is an individual or a culture’s preference for engaging in either one activity at a time (Bluedorn and Jaussi, 2008).

Hall (1983) studied various cultures and observed that they could be differentiated in terms of time use preferences, which he labeled “monochronic” and “polychronic.” He noted that people in monochronic cultures prefer to work on one task at a time, ideally from start to finish. They do not like doing multiple things at the same time, having many tasks in progress, or leaving things unfinished. In contrast, people in polychronic cultures tend to do many things at once and it is rare for them to allocate a chunk of time to only one task. Indeed, one hallmark of polychronicity is the tendency to engage in multiple tasks simultaneously and to have many tasks in progress. In such cultures, people seem to have no problem leaving things unfinished (Hecht and Allen, 2005).

Bluedorn (2000) offered a detailed discussion linking polychronicity and organizations. For example, polychronicity may have important implications for how people use their time and perform their work, especially under circumstances in which they are required to manage

multiple responsibilities simultaneously (Onken, 1999). Also, research has shown that polychronicity can be reliably and validly measured at the individual level (e.g., Bluedorn et al., 1999; Conte et al., 1999; Kaufman-Scarborough and Lindquist, 1999). Researchers have also examined the relation between polychronicity and performance. Specifically, Taylor, Locke, Lee, and Gist (1984) found that polychronic behavior in academics (i.e., working on multiple, concurrent projects) was positively related to performance. Kaufman-Scarborough and Lindquist (1999) found that monochronic individuals enjoyed planning their daily activities so that they knew when to do each task, but had more trouble organizing what they had to accomplish and managing changes to their schedule than those on the polychronic end of the spectrum. Of course, the choice is not binary, between a monochronic and a polychronic pattern; rather, there are infinite degrees of polychronicity ranging from the absolute monochronic approach through extremely high levels of polychronicity (Hall, 1983).

#### 4.3. *Time urgency*

The third time-related individual difference of interest is time urgency. In fact, some research suggests that time urgency, which includes a frequent concern with the passage of time, is a relatively stable individual difference variable (Conte and al., 1995; Landy and al., 1991). *Time urgency* is regarded as a stable personality trait, as supported by high test-retest reliabilities (Conte and al., 1995; Landy et al., 1991). The concept of time urgency is defined as a “frequent concern with the passage of time” (Waller and al., 2001). Thus, “time urgent” individuals are concerned that temporal resources are scarce and must be conserved. They are preoccupied with the passage of time and feel chronically hurried (e.g., Conte, Mathieu and Landy, 1998; Landy et al., 1991; Menon, Narayanan and Spector, 1996). People high in time urgency have a tendency to construe time as a scarce resource, and as such, plan its use carefully (Landy and al., 1991). Even when faced with external deadlines, time urgent individuals frequently impose their own internal time lines and strategically use those internal markers to gauge the time remaining until task completion (Rastegary and Landy, 1993; Waller et al., 2001). Indeed, individuals high in urgency view time as their enemy (Price, 1982), which drives them to schedule more activities than comfortably fit into an allotted period and to continuously check how much time remains for activities (Friedman and Rosenman,

1974). In contrast, non-time urgent individuals tend to underestimate the passage of time and therefore feel less hurried and constrained by time resources (Waller et al., 2001; Mohammed and Nadkarni, 2011)

Time urgency has been profoundly studied in the area of work stress and wellbeing (e.g., Friedman and Rosenman, 1959; Mohan, 2006). However, this individual difference has also been studied in the performance-related literature, as it has been associated with perceptions of deadlines, time awareness, and perceived rate at which tasks should be performed (Landy and al., 1991; Stachowski, 2011).

## **5. Conclusion**

Time is a fundamental topic that exists in human affairs. How individuals construe time and how they allocate and fill time are fundamental issues in understanding behaviour. Time may well be the fundamental asset that humans seek to allocate, rather than money (Davies, 1992)

In this paper, we have tried to provide an overview of some of the ideas and research that are relevant to an understanding of the temporal aspects of organizations and their members. Clearly we have not covered everything. But, we hope that this review can serve as the entree to a large, disparate, and often daunting literature for academics and practitioners. We also hope that we have explained how time is a salient factor in organizational life and it is important for organizations and research in HRM, to examine more generally its influence on many aspects of the organizations such as work conflict or work self-efficacy.

## **References**

1. Adam, B. (1990). *Time and social theory*. Philadelphia: Temple University Press.
2. Adam, B. (1998). *Timescapes and modernity: The environment and invisible hazards*. London: Routledge Publishing.
3. Ancona, D. G., Okhuysen, G. A. & Perlow, L. A. (2001). Taking time to integrate temporal research. *Academy of Management Review*, 26, pp. 512-529.
4. Ancona, D.G. & Chong, C.L. (1996). Entrainment: Pace, cycle and rythm. *Research in Organizational Behavior*, 18, pp. 251-284.

5. Bachelard, G. (1932). *L'intuition de l'instant*. Paris: Gonthiers, Bibliothèque Médiations.
6. Becker, G. (1965). Theory of the allocation of Time. *The Economic Journal*. 299, pp. 493-517.
7. Benabou, C. & Morin, D. (2004). *La culture temporelle des organisations: Étude de validité de construit dans sa version française*. Montréal: AGRH2004.
8. Bergadaa, M. (1988). Le temps et le comportement de l'individu, *Recherche et Applications en Marketing*, première partie, 3(4), pp. 56-72.
9. Bergadaa, M. (1989). Le temps et le comportement de l'individu, *Recherche et Applications en Marketing*, deuxième partie.
10. Bergadaa, M. M. (1990). The Role of Time in the Action of the Consumer, *Journal of Consumer Research*. 17(3), pp. 289–302.
11. Bergson, H. (1959). *L'évolution créatrice*. Paris: PUF.
12. Bluedorn, A. C. & Denhardt, R. B. (1988). Time and organizations. *Journal of Management*. 14, pp. 299-320.
13. Bluedorn, A. C. (2000). Time and organizational culture. In N. M. Ashkanasy, C. P. M. Wilderom & M. F. Peterson (Eds.), *Handbook of organizational culture & climate*. Thousand Oaks, CA: Sage, pp. 117-128.
14. Bluedorn, A. C. (2002). *The human organization of time. Temporal realities and experience*. Stanford, CA: Stanford University Press.
15. Blyton, P., Hassard, J., Hill, S., Starkey, K. (1989). *Time, Work and Organization*. London: Routledge Bohannan.
16. Braudel, F. (1969). La longue durée. *Annales ESC*. 4, 1958, dans *Ecrits sur l'histoire*. Paris: Flammarion, pp. 41-83.
17. Clark, P. A. (1985). A review of theories of time and structures for organization studies. In S. Mitchell (Ed.), *Organizational sociology: Research and perspectives*. 4, New Haven: JAI Press, pp. 35-79.
18. Clark, P. A. (1990). Chronological codes and organizational analysis, in *The theory and philosophy of organizations*. J. Hassard & D. Pym (eds.). London: Routledge, 137-166.
19. Conte, J. M., Landy, F. J. & Mathieu, J. E. (1995). Time urgency: Conceptual and construct development. *Journal of Applied Psychology*. 80, pp. 178–185.
20. Das, T. K. (1993). Time in management and organizational studies. *Time & Society*, 2, pp. 267-274.
21. Davies, G. (1992). It's about time. *Gestion 2000*. 8(3), pp. 69-86.
22. Ebert, R.J. & Piehl, D. (1973). Time horizon: a concept for management. *California Management Review*. 15(4), pp. 35-41.
23. Feldman L.P. & Hornik J. (1981). The use of Time: An Integrated Conceptual Model. *Journal of Consumer Research*. 7(4), pp. 407-419.
24. Fraser, J. T. (1975). *Of time, passion, and knowledge*. New York: Braziller.

25. Friedman, M. & Rosenman, R. (1959). Association of specific overt behavior patterns with blood and cardiovascular findings. *Journal of the American Medical Association*, 169, pp. 1286–1286.
26. George, J.M. & Jones, G.R. (2000). The role of time in theory and theory building. *Journal of Management*. 26, pp. 657-684.
27. Hall, E.T. (1983). *The Dance of Life*. Garden City: Anchor Press/Doubleday.
28. Hassard, J. (1996). Images of time in work and organizations. In S. R. Clegg, C, Hardy & W. R. Nord (Eds.), *Handbook of organization studies*. Thousand Oaks, CA: Sage, pp. 581-598.
29. Hill, M.S. & Juster, T.F. (1980). Constraints and Complementarities in Time Use. Working Paper, Institute of Social Research, University of Michigan.
30. Jaques, E. (1982). *The form of time*. New York: Crane & Russak.
31. Kaufman-Scarborough, C. & Lindquist, J. D. (1999). Time management and polychronicity: Comparisons, contrasts, and insights for the workplace. *Journal of Managerial Psychology*. 14, pp. 288-312.
32. Lauer, R.H. (1981). *Temporal man: The meaning and uses of social time*. New York: Praeger.
33. Lee, H. & Liebenau, J. (1999). Time in Organizational Studies: Towards a New Research Direction, *Organization Studies*, 20(6), pp. 1035-1058.
34. Linder, S. B. (1970). *The Harried Lesiure class*. Columbia: University Press.
35. McGrath, J.E. & Kelly, J.R. (1986). *Time and human interaction: Toward a social psychology of time*. New York: Guilford Press.
36. McGrath, J.E. & Rotchford, N.L. (1983). Time and behavior in organizations. *Research in Organizational Behavior*, 5 , pp. 57-101.
37. Menon, S., Narayanan, L. & Spector, P.E. (1996). *The relation of time urgency to occupational stress and health outcomes for health care professionals*. In C.D.
38. Merleau-Ponty, M. (1945). *Phénoménologie de la perception*, Gallimard: Bibliothèque des Idées.
39. Mohammed, S. & Nadkarni, S. (2011). Temporal diversity and team performance: the moderating role of team temporal leadership . *Academy of Management Journal*. 54(3), pp. 489 –508.
40. Orlikowski, W.J. & Yates, J. (2002). It's about Time: Temporal Structuring in Organizations. *Organization Science*. 13(6), pp. 684-700.
41. Palmer, D.K. & Schoorman, F.D. (1999). Unpacking the multiple aspects of time in polychronicity. *Journal of Managerial Psychology*, 14, pp. 323-344.
42. Rastegary, H. & Landy, F.J. (1993). The interactions among time urgency, uncertainty, and time pressure. In O. Svenson & A. J. Maule (Eds.), *Time pressure and stress in human judgment and decision-making*. New York: Plenum, pp. 217–240.

43. Roe, R.A. (2005). *Studying time in organizational behaviour*. Maastricht: METEOR, Maastricht University.
44. Stachowski, A.A. (2011). *A model of time use at work: individual differences, time use and performance*. A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason University.
45. Stalk, G., Hout. T. (1990). *Competing against time*. New York: The Free Press.
46. Starkey. K. (1989). Time and work: a psychological perspective. *Time, work and organization*. Paul Blyton. John Hassard. Stephen Hill and Ken Starkey (eds.). London: Routledge, pp. 35-56.
47. Vinton, D.E. (1992). A new look at time, speed, and the manager. *Academy of Management Executive*. 6(4), pp. 7-16.
48. Waller, M.J., Conte, J.M., Gibson, C. B. & Carpenter, M. A. (2001). The effect of individual perceptions of deadlines on team performance. *Academy of Management Review*. 26, pp. 586-600.
49. Zimbardo, P. G. & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual differences metric. *Journal of Personality and Social Psychology*. 77, pp. 1271-1288.