Arab Cultural Influences on Intertemporal Reasoning

Donald G. MacGregor¹

and

Joseph R. Godfrey²

Abstract

All known cultures deal with time. How they understand time is a defining cultural characteristic, especially in contrast to the Western cultural understanding. This paper uses the term *intertemporal reasoning* to refer to the psychosocial and cultural processes engaged when people either integrate past experiences and events or project forward to the future. Available literature (in English) on Arab culture is explored to contrast how that culture reasons about time and events, with respect to Western cultures. A number of themes emerge from this synthesis, including the role that attribution of causality plays in Western culture as a basis for interpretation of the past, and the tendency of Arab culture to integrate events into an associative *gestalt* as a basis for understanding and explanation. The results suggest that Arab culture has traditions that may place less emphasis than Western cultures on temporal sequencing as a key organizing principle, both in terms of cognitive processes and in terms of cultural functions such as storytelling. Furthermore, the poetic quality of Arab culture favors an associative approach to the integration of past and present, as opposed to the causal approach of Western cultures. As a practical matter, it is suggested that Arab cultural traditions concerning time and events may play an important role in how day-to-day experience is both encoded and recalled as part of reconstructing recent personal histories (e.g., where one has been) in terms of the ordering of events in the recent past.

¹ Contact Author: Donald G. MacGregor, Ph.D., MacGregor Bates, Inc. 1010 Villard Avenue, Cottage Grove, OR 97424 tel. 541-942-5727 fax. 541-942-8041 email: donald@macgregorbates.com

² Joseph R. Godfrey, Ph.D. Winset Group, LLC. Fairfax, VA
Introduction

“The handling of time is revealing of how unconscious implicit patterns work in a culture, and how tenaciously people hold on to them. They exist like the air around us.”

Sergio Missana

All known cultures deal with time. How they understand time is a defining cultural characteristic, especially in contrast to the Western cultural understanding. We use the term *intertemporal reasoning* to mean the psychosocial and cultural processes engaged when people either integrate past experiences and events or project forward to the future. In essence, intertemporal reasoning refers to how a culture deals with time itself as a phenomenon, as well as how events that either take place or have taken place are recalled, represented and organized in terms of an explanation or history of the culture. This includes how cultures ascribe meaning to events, particularly the meaning of the past and present in terms of the future. Intertemporality, as a cultural characteristic, describes differences between cultures that have importance for understanding social processes, such as decision making and planning, including the relationship between time and preferences, and the effects of time on cognitive processes.3

We use the rubric of *intertemporality* to refer also to processes that are engaged in the course of reconstructing a cultural history for the purposes of evaluating the appropriateness or desirability of a present action or prospect, or as a reference point for making a decision about current actions. In the context of an action proposed for the present and for which the consequences at not realized until some, perhaps distant, point in time a similar invocation of intertemporal reasoning is required to gauge, for example, the impact of the decision on future generations. Intertemporal reasoning captures modes of perception, thought and emotion that support and accompany this constructive activity. Thus, our use of the term “reasoning” should be taken in a sense broader than as an aspect of cognition, though cognition plays a significant role in intertemporal reasoning. Thus, cultural histories, the process of genealogical reckoning, and impacts on future generations all involve intertemporal reasoning and draw upon it for their content and their logic.

---

3Trope & Liberman (2003); Forster, Friedman & Liberman (2004); MacGregor (1993).
The concept *intertemporal reasoning* is a formalization of the informal approach by which a culture tells its cultural “story” be that as history, as legacy or as myth. As much as intertemporal reasoning captures the role of historicism (and manner of historical analysis) in defining a culture, it denotes as well the more everyday manner in which a culture views the present as a continuation of the past and as a projection into the future. As we discuss in this paper, both Western cultures and the Arab culture engage in intertemporality, but do so on the basis of differing principles that affect not only features of daily life, but also impact important social, economic and political processes.

We approach the topic of this paper from multiple perspectives, including those of anthropology, sociology, psychology and Arab literature (particularly poetry). We draw from these disciplinary areas to highlight and link together recurring ideas and themes relating to intertemporal reasoning, and to derive an undercurrent of meaning to observations made by a number of researchers and writers on Arab culture. Observations made by these researchers and writers have been with respect to features of Arab culture that relate to intertemporality and that are noticeably distinct from temporal attitudes in Western cultures. These observations serve as fundamental background for this paper.

*A Note About Bibliographic Resources*

Although the West has had a long-standing political relationship with the Arab world since at least the middle of the 18th century, scientific studies of that world are very few. Unlike the Chinese culture, for example, that has been studied cross-culturally for decades, the Arab culture has received less attention. On the other hand, we do have a range of resources available in the English language that provide general interpretation, advice, and guidance on Arab culture. Some of these works are several decades old and others are more recent. Since the focus of this paper is on a specific aspect of Arab culture, our net for gathering resources was cast broadly to retrieve as many insights as possible and from a divergent set of perspectives.

At present, most resources on Arab culture do not deal specifically with potentially meaningful subdivisions of that culture such as, for example, Arabs in Egypt versus Arabs

---

4 Western culture takes history for granted, but it was not always so. The modern sense of history has a very definite origin in the works of the 5th century B.C. Greek historian Herodotus.
5 For a historical review of U.S. engagement with the Middle East, see: Oren (2007).
in other Middle-eastern countries. Although there are subdivisions of the Arab culture that may be important from a contemporary perspective, such as Muslim Arabs who are Sunni versus Shi’ia, these distinctions are not noted upon in any detail in the available literature with respect to their anthropological or psychological characteristics.

Finally, writers on Arab culture have generally approached their task through the lens of Western culture, and have tended to make their observations using Western culture as their reference point. One could argue that other reference points are also possible, and may be preferable (or even essential) for some practical purposes (e.g., Arabs in North Africa compared with Arabs in the Middle East proper; Somali Arabs versus Syrians). For this paper, we have focused on resources available in the English language (either original or translated). To be an Arab is neither racial nor genealogical, but rather is a cultural trait. Thus, writings on Arab culture tend to be cast in general cultural terms, and are largely written for Westerners who seek a general understanding of that culture, recognizing that (important) regional and sub-regional differences may exist.6

A Note on Arab Culture and Islam
To many in the West, Arab culture is synonymous with Islam. Although the historical roots of Islam reside in the geography of the Arab world, these two ideas have become associated in ways that can be distracting. A large majority of Arabs are Muslim, but approximately 8% to 10% of Arabs are not.7 Looking at Muslim representation worldwide, Arabs comprise only about 12% of the world’s Muslims.

Given the centuries-long relationship that the Arab culture has had with Islam, it is difficult at this point to unravel their mutual influences on one another. And, indeed, for the purposes of this paper we regard members of the Arab world as influenced by Islam whether they are Muslim or not. A parallel exists in the West with regard to Christianity

6Many authors use the term West and Western to describe a broad range of cultures that can generally be thought of as modern and industrialized. The United States is one such culture, as are a number of the cultures of Europe, Scandinavia and even Asia and South America. We use this convention as well in part because it is the terminology used by many of the resources consulted for this paper when authors of such resources established a framework for comparing Arab culture with non-Arab cultures. However, even modern, Western cultures contain segments that we would judge as traditional cultures. In the United States, for example, Native American cultures can retain much of their traditional character and worldviews, including distinct ways of viewing time and space that influence their intertemporal reasoning (e.g., Ortiz, 1969).

7This percentage is difficult to estimate and sources vary in their estimates from something on the order of 4-6% on the low end to 12%-plus on the high end.
and its influence on Western cultures: although representation of various religions in the U.S., for example, varies widely the culture itself is predominantly based on values, beliefs and attitudes that are linked to the Judeo-Christian tradition. The pervasiveness of this tradition is sometimes difficult to recognize, even among those who do not devoutly practice a particular religion. Even religious secularists are influenced by the larger cultural traditions of which they are a part (e.g., Sunday as a non-working day; Easter as a holiday). Our focus in this paper is to stay as much as possible within a context of Arab culture and to forego opportunities to explore the interesting and revealing conflicts that occur within Islam as it encounters the challenges of social change.8

The Myth of the Monolithic Arab

In this paper, we will sometimes refer to the “Arab mind,” a term that two of the authors of references used in this paper have adopted as titles for their books. In actuality, there is no single Arab mind. There is, however, a natural human tendency to think of “the other” (e.g., those who live differently or in other places) as having monolithic qualities of “sameness” or “consistency.” However, in this age of transition of Arab culture, there are many Arab “minds”, so to speak, much like we, in the U.S., have many American minds. Arabs populate twenty-two countries or areas of North Africa and the Middle East.9 We need to be cautious about over-generalizing to an entire culture, particularly one that is undergoing such rapid change. We can speculate, but we do not know, all of the important dimensions of individuality in Arab culture. In the course of our research for this paper we did not encounter particular research or writings on Arab culture that specifically identified concepts or language that Arabs use to distinguish or describe differences between one another, such as how in the West we describe features of one another in terms of personality. This is not to say that such language does not exist; it is to say that this has not likely been a robust topic of research summarized in Western resources.

Lastly, an examination of Arab culture on any topic carries with it a risk of stereotypes that could be misleading. The value in exploring Arab culture lies, in part, in identifying

---

8For more background on Islam in the modern era, see various works by Bassam Tibi including: Tibi (1988); Tibi (2008).
9As of this writing the Arab countries/areas of the world are (alphabetically): Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.
the underlying traditions of that culture which most individuals have as their cultural background. The specifics of context and circumstances can influence how these traditions play out in terms of social interactions, for example, or interpretations of attitudes and behaviors.

Arab Culture and Modernism

Our perspective here focuses on the enduring features of Arab culture . . . those that remain despite influences of modernity. We might consider these as legacy influences. This thread allows us to bring into our analysis the poetic aspect of Arab culture, rather than resigning that aspect of the culture to a literary category (as we might do in considering Western culture).

With regard to the transition of Arab culture into modernity, we can see some of the acute pain points of this transition in how Arab societies are making linkages and engagements with the world of Western commerce. In this very practical area, we see some of the more visible artifacts of the tension between core Arab cultural principles that reflect Islamic precepts and core concepts in Western economics as embodied in the financial area. The slow and careful emergence, for example, of the Arab world into the insurance industry is a stark example of how much invention is required to integrate the modern concept of insurance with the traditional Arab ethic of social responsibility.10

Finally, it is tempting to hold a view that Arab culture today bears little relationship to the Arab culture of the past with its emphasis on traditionalism. However, the trappings of modernity, including urbanization and exposure to Western values and culture, do not necessarily erase the Arab culture of the past. As an example, consider the United States, where less than 100 years ago the majority of the population lived (and worked) on farms, most of them small, and lived lives, in part, based on a set of American agrarian values imported with the immigrant cultures that comprised the bulk of the nation. Although today most Americans live in urban or suburban environments and have only at best a faint direct connection to agrarian society, a study of American culture would certainly consider

10Schoon (2007).
agrarian values to be a cornerstone of American culture today, and would likely find agrarian values resident in American attitudes about religion, economics and social life.\textsuperscript{11}

\textbf{Observations on Time}

One of the more common observations about Arab culture is its lack of attention to what in the West we refer to as punctuality. Indeed, some writers on Arab culture note that it is often frustrating to Westerners the general attitude that Arabs take toward keeping appointments and the like. In general, Arabs are seen as admiring good timekeeping, but lacking that quality in their own culture.\textsuperscript{12} One Arab observer notes that “time is not as fixed and rigidly segmented as it tends to be among Westerners”.\textsuperscript{13} The result of these tendencies, as least as perceived by Westerners, is for Arabs (as a culture) to exhibit a laxity with respect to time agreements. Appointments, completion and/or delivery times and all manner of temporal agreements that are regarded as significantly meaningful to Westerners appear to be of much less consequence and concern to Arabs.

In an analysis of this tendency, Raphael Patai (2007) makes several observations about Arab culture that begin by noting that the concept of punctuality does not exist in Arab cultures, and that its non-existence is, at least in part, attributable to how time is dealt with in the Arabic language.\textsuperscript{14} According to the early linguist, Edward Sapir,

\textquote[Hoijer (1954), p. 93; Cited in Patai (2007)]{“Language functions not simply as a device for reporting experience, but also, and more significantly, as a way of defining experience for its speakers.”}

According to Patai, this \textit{language encodes reality} hypothesis is responsible for features of the Arabic language that:

\textquote{“. . . does not lend itself to verbal distinction between two different past time periods. Hence for the Arab mind it is of relatively little concern}

\textsuperscript{11}Bond (2002) uses the expression \textit{subterranean cultural influences} to characterize cultural influences on behavior that may have profound effects despite the difficulty in observing or measuring them. Cohen (1997) points out the paradox between the power of such influences and their relative inaccessibility: “But, because they are either so over-learned (or were never explicitly taught in the first place), they may bypass conscious processing altogether. Our verbal reports and judgments are most clearly tied to conscious levels of processing, and so they may never get connected with the cultural rules embedded in our preconscious.” (p. 126)

\textsuperscript{12}Al-Omari (2008).

\textsuperscript{13}Nyddell (2006).

\textsuperscript{14}Patai (2007).

\textsuperscript{15}Hoijer (1954), p. 93; Cited in Patai (2007).
whether two past actions, events or situations recalled were simultaneous or whether one of them preceded the other."16

In examining the Arab tendency toward a more casual relationship with time and punctuality than is the case for Westerners, we fairly quickly see that time itself is relatively poorly encoded in the Arabic language for which “verb tenses are syntactically vague and indeterminate.”17 We can contrast this with the English language and, indeed, with the broader class of romance languages, with their verb tenses that give high resolution (and, therefore, importance) to the past, present and future. If language encodes what is important to a culture, then certainly Western cultures find temporal definition of extreme importance.18

Along these same lines, the anthropological research of Judith Williams highlights how time and events are dealt with in Arab culture. In her study of Lebanese villagers, she notes that villagers “. . . are unaccustomed and reluctant to ponder along the time dimension.” Moreover, “There is . . . a disregard for time as a measure or gauge of events.”19 Williams’ informants would routinely transpose early childhood events to adulthood, and conversely. In addition, informants would date or order events in terms of

---

18Barr (1961). It is interesting that of the various Arab commentators only Patai (2007) addresses the relationship between language and experience to any extent (or at all). Abdennur (2008) gives some attention to Arabic, but largely in terms of its features as a language. It is noteworthy that much of what is available in English on Arab culture addresses very little the Arabic language itself and its (potential) relationship to Arab culture and thought. James Barr (1961) argued that the relationship between language and thought represented a faulty appreciation of the facts that led to “the idea that differences in thought structure will correspond to differences in language structure” (p. 42). Boman (1960) has argued that thought and language are interdependent, and has found theoretically significant differences between Hebrew and Greek. Boman also has interesting and relevant remarks regarding the understanding of time by ancient Semitic peoples as being more qualitative than quantitative. With respect to the correlation between language and thought, the general thesis of Boman is reflected as well in the view that all thought is metaphorical and is bounded by imagery and language. A related notion (reflected in Patai's comments) is that languages are based around differing properties, such as verb-based versus noun-based. Saidi (2007), for example, has noted the verb-based properties of some spoken versions of Arabic. Although the various philosophical and linguistic arguments with respect to language-thought correlation comprise an interesting intellectual thread, the practical value can be more difficult to gauge. It is not unreasonable to suppose that both Arabs and Westerners can have similar thoughts despite strongly differing languages. Patai has placed some importance on the differences between Arabic and Western languages as a basis for the "Arab mind" and perhaps this aspect of his work bears some criticism for putting too much upon a (strong) relationship between language and thought. On the other hand, when we consider relating to the Arab world (both modern and traditional), we should be aware of subtleties in language and thought. As we seek to improve those relations it will mean making improvements on the margins where rules are less important than influences.
19Williams (1968).
external markers, such as a wedding, a holiday or a conflict. In general, people were indifferent about the specifics of chronological age. With regard to the future, about half of the pre-adults were able speak of the future, but only with prodding; the remainder were not. The past tended to be difficult to reflect upon, and was generally remembered more in terms of sentiment and contentment than with temporally-specific detail.

Writing from the perspective of Islamic principles, Frithjof Schuon comments that:

"Like all traditional civilizations Islam is a ‘space,’ not a ‘time’; for Islam ‘time’ is only the corruption of this ‘space.’"\(^{20}\)

We see in Schuon’s observation a theme seen elsewhere: the diminutive role that the concept of time plays in the essential nature of Islam. Schuon characterizes the Islamic view of time as a “corruption” which can mean several things, including a transgression. That is, the “space” is sacred, but to reconfigure it in terms of “time” is a sin or blasphemy.\(^{21}\)

We begin to see a pattern emerging with respect to how Arab culture not only regards time, but also the role that time plays in the meaning of events. The tendency within Arab culture is to place relatively less emphasis on time per se, whereas in the West time is a commodity “not to be wasted.” Indeed, it is relatively common since the Enlightenment in Western cultures to equate time with other commodities, such as money and wealth. The Western adage “time is money” speaks beyond the notion of a wage earner selling their time for an income and extends to all forms of economic activity including the charging of rents and interest.\(^{22}\) Time is the essence of many forms of Western agreements, extending

---


\(^{21}\)Within the Biblical tradition, the narrative style is primarily in terms of a linear ordering of events and encapsulated stories of prophets (see, for example, Alter, 1996, for a translation and commentary on Genesis). However, the Qur’anic tradition does not obey a linear format, as noted by Michael Sells in his recent translation of the Qur’an (Sells, 2007). Sells comments that “With the exception of the account of the prophet Joseph, the Qur’an scatters its tales of the prophets throughout the text. Aspects of the story of Moses, for example, occur in 44 different passages in the Qur’an, but are never brought together in a single Surà.” (Sells, 2007, p. 15). As confusing as this fragmented and non-linear narrative style may be to Westerners, it has been noted by Norman Brown as having the effect of intensifying the underlying message by breaking the rules of language (Brown, 1984). This same type intensification of experience is discussed later in the present paper in terms of the role it plays in Arab poetic expression, in part through imagery and association. We speculate that these same mental mechanisms are at work in the Qur’an and form the basis for a cultural tendency toward non-linearity and recursion as features of how experience, both personal and cultural, is organized and communicated.

\(^{22}\)See MacGregor & Godfrey (in press) for a discussion of the role that time plays in Western views about valuation of assets as represented in the concept of Net Present Value (NPV), and the challenges that NPV
well beyond the making of appointments or schedules. The importance that the West places on time as commodity does not readily translate into a similar conceptual relationship with time in Arab culture, where time itself appears to have a less purposive role in life.\textsuperscript{23}

**Time and Events**

We turn now to events.\textsuperscript{24} Time is measured by events; that is, the passage of time is gauged by events and it is our knowledge of events, including how they are produced, that gives us our measured sense of time. For Westerners, events form the basis for historical analysis and in the West we strive for exactness with respect to statements about events, their timing and (perhaps most importantly) their sequencing. Historical interpretation is generally done with the intention of providing a causal explanation. Thus, attribution of causality is one of the fundamental intentions of Western historical analysis. Its products present to Arab cultural views about the cultural legitimacy of discounting future values to the present. They note that although Islam is not inimical to the notion of present value and recognizes that because an asset’s value can change over time the comparison of the value of assets over time requires a comparison in terms of present value. Present value, however, computed using a discount rate does present significant conceptual and theoretical challenges for Islamic principles.

\textsuperscript{23}Anthropologist Edward Hall in his book *The Silent Language* (1959) advanced the notion of *polychronicity* to describe how some cultures have the ability to manage multiple events and activities simultaneously (what today we might call multi-tasking), while other *monochronic* cultures tend to manage events sequentially. In Hall’s terms, Western cultures tend to exhibit *monochronicity*, which emphasizes the planning and scheduling of activities into relatively fixed sequences from which deviation is difficult. Associated with monochronicity is a tendency toward relatively fine divisions of time in intervals or units, as opposed to polychronicity that more readily accommodates time in terms of broad generalities and that allows more easily for interruptions and delays. Abdennur (2008) comments on polychronicity as a (potential) feature of Arab culture.

\textsuperscript{24}An event is a “primitive” term that describes a linearly ordered set of relationships between objects in space, where objects, space, and relationships are all primitives as well. In physics an event is an interaction (relationship) between two particles (objects) at some point (space), e.g., scattering of an electron by a photon. However, even in modern physics the meaning of an event is controversial. There is no solid reason that we should assume the concept of "event" has the same meaning in Arab culture as it does in the West. In psychological studies of temporal perception time passage is perceived in terms of events (e.g., Svenson & Maule, 1993). The failure of an Arab, for example, to perceive the passage of time to the same degree as one in the West could be due to differences in perception of what constitutes events. It is reasonable to suppose the same being true in a psychosocial, cultural context as in the world of sub-atomic particles. Events are such because we attach meaning to them, and therefore orient to them, perceive them and encode them. In addition, there is the matter of a discrete versus continuous universe. Westerners tend to have a discrete view of the past, which could lead to "chunking" perceptions and experiences in terms of events. On the other hand, a more image-based, associative encoding of the past might lead to the perception (or definition) of events in organic terms, and as occurring on a large and changing scale. In which case, the specifics of an event (e.g., start, stop/end, duration, encapsulation, content) would be much less precise, and perhaps irrelevant. Indeed, there might be relatively less agreement than an event had occurred at all.
are narrative stories that take predefined and identifiable forms. Its products are also trends that show the relationship between past states and future (predicted and projected) states. Indeed, Western historical analysis is done (in part) to learn from the past, to avoid undesirable repetitions of the past, and to shed whatever light is possible on the darkness of the future.

This takes us to the matter of causality, for it is the relationship between events that occupies much of Western culture’s conceptual framework for history. Fundamentally, in the West the past is looked to for meaning, and causality is one form that meaning can take. In general, the search for meaning in historical analysis is a matter of specifying events (in time) according the sequence of their occurrence and, from such intertemporal relationships, positing causal relationships in the manner of Aristotelian logic. The more distance in a temporal and/or spatial sense between two events, the more likely that the underlying causal relationship is (perhaps) due to one or more intervening events that may be as yet unknown. Thus, the inquiry proceeds to discover those events, should they exist. The larger process is, of course, more complex than this. Our interpretation of events and their meaning is guided by pre-existing theories, themselves based on historical analysis.

As a general intellectual orientation that we hold in the West, the search for meaning is very much a process of inquiry that is guided by theories of meaning. Moreover, whether or not an individual is engaged formally in such processes (as scientists are) or whether one simply gives meaning to their own life and its events, it is clear that for the Westerner the construction of causal explanations is a focal point of our relationship with the past. For Westerners, the past is organized in terms of a temporally-sequenced ordering of events, often expressed in terms of the causal relationship (or causality) between events. The emphasis is not only on what happened, but also on when. Indeed, the “correctness” of the sequencing is so critical that the meaningfulness of an event is contingent on knowing its time of occurrence. Knowing the “when” legitimizes the event itself. History is constructed to explain or attribute causality, and precise temporal location and attribution is a critical part of the larger social framework within which Western life is conducted. In social settings, causality is often attributed to personal agency. That is, an

---

26That is, if event $A$ preceded event $B$ then (at least hypothetically), $A$ was a cause of $B$.
27The process that in the West is generally referred to as the hypothetic-deductive reasoning process.
individual is held responsible and correlates with self-efficacy and the primacy of the individual as the causal agent for their life.28

We turn now to an examination of these ideas with respect to Arab culture and to Ibn Khaldûn, one of the culture’s most respected historical figures. Ibn Khaldûn was a 14th century scholar and statesman who, in his time, produced a text titled the *Muqaddimah*, generally regarded as the first attempt by any historian to discover changes in human patterns of political and social organization.29,30 Modeled somewhat on the works of Aristotle, the *Muqaddimah* is an encyclopedic-style representation of history, not in terms of events but in terms of philosophy.31 Ibn Khaldûn’s perspective is that of “man” and the influence of the physical and social environment on the individual. Even in contemporary Arab culture, Ibn Khaldûn remains respected for his intellectual and spiritual leadership, and is looked to as a benchmark for reconciling new ideas with old.32

One of the many topics that Ibn Khaldûn dealt with in the *Muqaddimah* was that of causality. He noted that:

“This world with all the created things in it has a certain order and solid construction. It shows nexuses between causes and things caused, combinations of some part of creation with others, and transformations of some existent things into others, in a pattern that is both remarkable and endless.”33

From this general precept, he builds upon a larger scope of creation, extending from “the minerals” and progressing to plants and animals. His taxonomic framework focuses on the results of what he calls “causal nexuses”. However, the underlying nature of causation for Ibn Khaldûn lies in the realm of the creation for which his only theory is a theological one.

---

28This is also reflected in the system of tort law prevalent in the West (largely in the US) that holds individuals responsible for harms that befall others and looks upon their behavior as the ultimate locus of culpability. Thus, the individual is put in the position of making other individuals whole in cases involving loss.

29Khaldûn (1967).

30The Islamic calendar numbers years from the date of Muhammad’s migration or *hijra* from Mecca to Medina in the year 622 C.E. The current Islamic year is (as of this writing) 1432 A.H. (Latin: *anno Hegirae*), putting the era of Ibn Khaldûn at approximately the 7th century A.H., about 700-plus years after the Prophet.

31It is informative that the *Muqaddimah*, despite being a history, contains very few dates and those that are included are the names of a few key Arab/Islamic leaders mentioned in a brief forward. In over 400 pages of historical analysis as applied by Ibn Khaldûn, chronology as we recognize it in the West is not present.

32e.g., Dusuki (2006).

the causation he speaks of is that of God. To Ibn Khaldûn, the fact that we see the world around us is a testimony and, therefore, a proof of the existence of a creator. Indeed, as 20th century scholar Abdallah Laroui notes:

“It must be remembered that recourse to testimony is one, if not the only foundation of the Muslim religion; for the word of God is transmitted by a witness, the veracious Prophet. Muslims do not conceive of a proof, written or oral, that cannot in the last resort be reduced to the account of a firsthand witness.”

We contrast this perspective with that of Western cultures where causation is the essential framework within which understanding and meaning is, in principle, defined. A framework built around causation moves the mind toward events and the relationship of individual actions to events, as opposed to human actions as resulting from the fundamental qualities of human nature. The latter perspective on human nature as the locus of motivation is more along the lines of Ibn Khaldûn and Arab culture; the former perspective on events as drivers of human motivation is more consistent with Western worldviews.

Image, Association & Recapitulation

To this point, we have focused largely on the relative laxity (at least as perceived in the West) with which Arab culture approaches the concept of time and the general de-emphasis on events as the basis for a causal approach to history. And, we have contrasted this tendency with what might be characterized in the West as a preoccupation with the triad of time, events and causality.

A contrasting triad for the Arab culture, and one that captures how past, present and future are related intertemporally, might be based on the linkage between three concepts: image (or imagination), association and recapitulation. These three elements can be seen as the basis for a cultural history, though along different lines than in the West where cultural meaning is often in the form of event-based historical analysis and synthesis.

---

34 Laroui (1976), p. 16.
35 For a more complete discussion of this matter and its relationship to Judeo-Christian concepts, see: Smith (1991).
36 White (1973).
So, what is emerging here? First, the Arab culture is a culture that cares a great deal about its traditions but not necessarily in terms of a historical chronology. The temporal relationships appear (much) less important than the conceptual relationships. Thus, “things” can be grouped together across large expanses of time in terms of a conceptual unity that may represent evolving ideas that form cornerstones or reference concepts for the culture’s self-definition.

Both Western cultures and Arab culture aggregate experience; the difference is likely in terms of the basis or mode of aggregation. The Arab culture may focus less on the aggregation of experience as a sequence of events than about the consolidation of images and ideas. As a resource, the past may be less of a basis for predicting or projecting to a future than as a foundation whose depth is measured by a scope defined in terms of similarity, though the dimensions of similarity may be less featural (e.g., perceptual) and more conceptual. Things coming together at a conceptual level to produce a reality or truth, rather than a sequence of events and experiences that reflects an underlying causal model of how things come to be or come to pass. We could say that Arab culture is organized thematically, where history serves as a storehouse of occurrences and ideas the ongoing consolidation of which serves to restate and affirm its fundamental truths. We could describe Arab culture as having an atemporal approach to history.

Some observers of Arab culture have pointed to the tendency toward abstraction in the Arab mind. That is, the Arab (and the culture) trends away from concreteness in their modes of thinking and leans toward abstract ideas. We would argue that this tendency, if it exists, is strongly related to what in the West we might call reasoning by association and similarity. Associative thought processes tend to lead to the combining of experiences,

---

37 Abdennur (2008).
38 The concept of association has a long history in Western psychology, dating from very early theories of mental functioning and structure (e.g., Bartlett, 1932) to modern theories of memory that characterize association in terms of “spreading activation” (e.g., Collins & Loftus, 1975; Anderson, 1988). However, the potential bias-inducing effects of associative processes were recognized relatively early. Sir Frederic Bartlett (1932) noted that association as a descriptive mechanism (i.e., “things being together are similar”) can easily be transformed into a causal representation (i.e., “things being together because they are similar”). This shift in organization can lead to biases in mental processes, as is the case with representativeness, a tendency to assess probability on the basis of associative similarity of a target case to alternative classes of cases from which it might have come (Kahneman & Tversky, 1972). We hypothesize that cultures, such as Arab culture, for which association is a particularly strong aspect of its expressive traditions (e.g., narrative, poetic, oral) may be more susceptible to the biasing effects of reasoning by association and similarity than cultures that are less so.
perceptions and the like into higher-order ideas and constructs. These higher-order cognitive objects become the basis for categorizing and organizing new experiences. These are some of the essential principles of cognition as we regard them in the West.\(^{39}\)

We note here as well that within a Western tradition of cognitive psychology, time as an element of experience is most often observed in memory as a feature of how events are encoded. Here we turn to the work of Endel Tulving and his distinction between *semantic memory* (i.e., memory for general knowledge) and *episodic memory* (i.e., memory for specific events).\(^{40}\) According to Tulving’s theory, episodic memory is composed of feature-related elements that are initially encoded as part of experience. Retrieval is facilitated when retrieval cues have a high similarity to the encoded information. As yet, we have little research on Arab culture that points to the specifics of how memory processes in that culture might differ from what appears to be the case based on research from Western cultures. However, we can hypothesize that the encoding of experience in Arab culture may take on characteristics more similar to what in the West we might regard as that of semantic memory in that the aggregation of experience is based on culturally meaningful conceptual units. It is the cultural meaningfulness of event aggregation to which we now turn.

**Poetry and Intertemporal Reasoning in Arab Culture**

We begin this section by citing from a relatively recent practical guide on Arab cultural awareness in which the following advice on verbal communication is given:

“Arabs love poetry and creative speech. They are fond of bestowing flowery blessings and colorful swearing.”\(^{41}\)

We believe such observations require careful consideration and exploration because their roots provide access to a deeper understanding of Arab culture than appears so on its surface.\(^{42}\) In many ways, the statement could be readily attributed to Western cultures and particularly to American culture: we (speaking of the U.S.) love poetry and creative

\(^{39}\)Robinson (1995).

\(^{40}\)Tulving (1972, 1983).


\(^{42}\)Patai (2007) and others have noted a similar characteristic of Arab culture with respect to the importance that poetry places on cultural expression.
speech, and in a certain manner of characterizing such things we are fond of flowery blessings though the notion of “blessings” connotes a religious rather than a secular focus. Finally, colorful swearing is most assuredly an aspect of our multicultural social environment with its highly varied forms of English-based pejorative epithets, both humorous and otherwise. The key here with respect to Arab culture is the way that poetry in the culture has evolved over time, the structure and content of its poetic themes and the role that poetry continues to play in the evolution of Arab culture in the modern world.

In his highly regard text on the challenges modernity poses to Arab culture, Abdallah Laroui notes that “the language and culture of the Arabs express themselves . . . in poetry and literary prose.” What Laroui refers to here is more than a statement that Arabs express themselves through poetry and prose: such is also true of Western cultures. It is, rather, the notion that modern poetry uses models and foundations based on the attitudes and works of classical periods as a basis for continued reconstructions, which he regards as a “constant of Arab poetry.” It would not be unreasonable to say that the Arab culture is a poetic culture in that the manner of cultural evolution is both reflected in and guided by poetic reconstructions. The Arabist Jacque Berque in his observations on cultural expression in Arab society noted:

“The primary characteristic of the Bedouin poet is the sociological origin of his utterance. He is his people’s spokesman, who by his word exalts his own group against all others.”

A related theme is developed by David Tracy in his concept of analogical imagination. Tracy argues that common ground can be reached by focusing on the universal, and that classic works of art and literature through their intensification of human experience attain to universals that transcend time and place. We extend Tracy’s theme to say that Arab culture uses poetry in a similar way to integrate (and intensify) its cultural

---

43Laroui (1976).
44Ibn Khaldûn proscribed in the *Muqaddimah* (written in the 14th century) the division of Arab language and speech into two branches: rhymed poetry and non-metrical prose. He further defined the purposes and ends for poetry (“heroic poems and elegies) as distinct from prose (“sermons and prayers and speeches intended to encourage or frighten the masses (p. 441).” Thus, as early as the 14th century we see a strongly defined linkage between how poetry and prose are structured and the appropriate role for its inclusion in language.
46Tracy (1987).
experience across time. We turn now to specific aspects of Arab poetry and its relationship to cultural factors that exert influence on intertemporal reasoning.

In pre-Islamic Arabia, poets enjoyed significant political power. Some of the earliest themes of Arab cultural expression from the pre-Islamic period are contained in the poetry of that period, most notably a classic form of poetry comprising a body of work generally referred to as *qasidas*. A number of these odes exist and have their origin in Bedouin tribes of pre-Islamic Arabia. The most famous collection of such odes is the *Muʿallaqat*. Prior to the founding of Islam in 622 C.E., Bedouin tribes engaged in poetry contests, producing narrative poetry that expressed themes related to life in the desert environment. So dispersed were the tribes, that their occasional meeting provided opportunities for social relationships, often lasting only for the relatively short period of a desert encounter. These relatively short poems (about 120 lines) adopted a form and content that characterized the meeting and the parting, as well as rich and flowing visual and emotional imagery that touch upon nature and the environment. Here, we borrow from Michael Sells:

> “The *qasida* opens onto the abandoned campsite – traces in the sand from rain trenches and tent pegs, blackened hearthstones, ruins left by the beloved’s tribe. The traces are silent. Yet they invoke. As the poet stands before them the tension of this silent invocation demands release. This is the site and wellspring of the poem.”

Berque adds to this element of classical Arab poetry with this observation:

> “The oldest theme in Arab literature, that of *atlāl* (elegy on the vestiges of the abandoned camp), raises its own process to the level of inspiration by creating the poetic object out of the void. Whether the void results from a tribal emigration or from a poetic convention of rarefaction, the result will be the same: to make this vacuum the source of subsequent intensities.”

The content of the *qasidas* expressed (both then and now) important cultural themes: deep love, pursuit of desire, bravery in standing up to another, prowess in fighting, self-sacrifice and the importance of social values to name but a few. Beginning as an oral tradition and composed by individual authors, performance was based on memory and

---

49 For a more complete discussion of Arab cultural themes in pre-Islamic poetry see Sells (1999) and Berque (1978).
done by rhapsodes (rawis) who (over time) embellished, modified and expanded upon the original themes. Again, citing from Sells:

“Another largely oral tradition, jazz, may offer an analogy. A song evolves with each performance. The artist learns its basic contours and then, building upon a rigorous apprenticeship in the expectations and possibilities of the tradition, performs it. [T]he early Arabian poem was not – or not only – memorized. It was remembered, recalled from out of a common sensibility and a common cultural gestalt.”

A similar observation is made by Berque:

“However long it may be, indeed, a poem revolves in a recurring simultaneity, rather than unfolding over time. Furthermore, it is not told: it is retold, is memory. This is what the ancient Arab poetry illustrates by the name dhikrā.”

Essentially, the tradition of poetry in Arab culture is based on a set of themes that subsequent poets (whether oral or written) honor and solidify by restatement and expansion. Thus, restatement and recapitulation are fundamental to the powerful poetic aspect of Arab cultural identity. Classic Arab poetry expressed in works such as the Muʿallaqat reflect this concept. Over the centuries, poets “borrow” and reprise ideas from previous poets. Unlike Western poetry that is built upon the idea that each work is the unique creation of an individual author (poet), Arab poetry bears a resemblance to some forms of music in that the poet strives to honor and integrate through restatement the works of previous poets and does not strive for complete originality. Cultural continuity is developed and supported through the mechanism of adoption and re-interpretation. Indeed, Arab poetic works are a restatement of age-old themes with touches and flourishes of modernizations and embellishments provided by the poet. The old and the new are continually integrated and synthesized in a process that embodies both creation and re-creation. History in general appears to be regarded this way: A compendium of classic ideas that continually undergo restatement and, therefore, reaffirmation thereby solidifying their role and purpose as reference points for cultural definition, expression and redefinition. Aziz Al-Azmeh notes that “The past is not the progenitor of the present, but

---

51 In the West, we see faint strains of this tendency in, for example, the works of William Shakespeare. Here, Western society has extracted, excerpted and restated Shakespearean themes repeatedly over the centuries.
is at best its paradigm in the realm of history.” Al-Azmeh’s observation that the past is (to paraphrase) an example or model of the present, rather than its initiating point emphasizes the notion of recapitulation as opposed to causality.

It is tempting to view the relationship of Arab poetry to Arab culture from the Western orientation of reminiscence. That is, the remembrance of a past or a bygone era. Although Arabs appear proud of their cultural history, this would likely be an incorrect inference. Reminiscence implies a nostalgic and even romanticized attachment to (and reliving of) the past. If this were the case, we would see (and regard) Arab culture as caught in a reverie around some now-gone historical greatness. This is, generally, not what we see. We see instead a culture with very strong roots in the modern (e.g., Berque; Laroui), and for which poetic expression based on recapitulation is a cornerstone. As Berque comments:

“Many of (the intensities of Arab poetry) are not merely aesthetic and psychic, but social. Arab poets often play an effective role in the course of events. In this capacity they enjoy power taken quite seriously by political leaders.”

Practical Implications

We have discussed three central elements that, based on our synthesis of key existing sources, provide a hypothetical framework for characterizing temporal perspective in Arab culture: imagery, association and recapitulation. We note that in the realm of history, Western cultures strive for exactness with respect to statements about events, their timing and their sequencing. Historical interpretation is generally done with the intent of providing a causal explanation, and attribution of causality is one of the fundamental intentions of historical analysis. Its products include trends that show the relationship between past states and future (predicted) states. Indeed, Western historical analysis is done to avoid repetitions of the past.

In comparing Arab cultures with Western cultures we identified a number of tendencies with respect to (a) inferences of meaning and causality, and (b) organization and interpretation of events and experiences. Table 1 summarizes key tendencies of Arab versus Western culture with respect to inferences of meaning and causality. Table 2 summarizes key tendencies of Arab versus Western culture with respect to organization

---

52 Al-Azmeh (1986).
Arab Cultural Influences

and interpretation of events and experiences. The two sets of observations are not entirely independent.

Table 1. Inferences of Meaning and Causality: Western vs. Arab Cultural Tendencies

<table>
<thead>
<tr>
<th>Western Cultural Tendencies</th>
<th>Arab Cultural Tendencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Aggregation of experience as a sequence of events.</td>
<td>• Atemporal consolidation of images and ideas.</td>
</tr>
<tr>
<td>• Meaning resides in original authorship and statement of ideas and themes.</td>
<td>• Meaning based on restatement and recapitulation of significant themes.</td>
</tr>
<tr>
<td>• Truth and validity based on scientific principles, including replications.</td>
<td>• Truth and validity based on the concept of a witness.</td>
</tr>
<tr>
<td>• Search for causality in individuals, events and historical trends. Focus is on the details of events and their relationships.</td>
<td>• Assume causality in the divine. Look for its expressions or revelations in themes across a large temporal and spatial scale.</td>
</tr>
<tr>
<td>• The human is the primary source of agency and causality.</td>
<td>• God is the primary source of agency and causality.</td>
</tr>
</tbody>
</table>

Table 2: Organization and Interpretation of Events and Experiences: Western vs. Arab Culture Tendencies

<table>
<thead>
<tr>
<th>Western Cultural Tendencies</th>
<th>Arab Cultural Tendencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rich language structure for temporal organization.</td>
<td>• Limited language structure for temporal organization.</td>
</tr>
<tr>
<td>• Temporal &amp; spatial encoding (e.g., episodic memory).</td>
<td>• Thematic encoding (more similar to semantic memory).</td>
</tr>
<tr>
<td>• Aggregation of experience as a sequence of events.</td>
<td>• Atemporal consolidation of images and ideas.</td>
</tr>
<tr>
<td>• Sequencing is critical. Events “fit” together in a causal chain.</td>
<td>• Association &amp; similarity (in a thematic sense) are critical, and may dominate sequencing.</td>
</tr>
<tr>
<td>• Relatedness based on a logic of cause-effect relationships between events, their antecedents and their consequences.</td>
<td>• Relatedness based on associative connections that “fit” in terms of culturally-defined themes and gestalts.</td>
</tr>
<tr>
<td>• Themes as problem framings.</td>
<td>• Themes as revelations.</td>
</tr>
<tr>
<td>• Emotion as disruptive of reason.</td>
<td>• Emotion as fact and response to revelation.</td>
</tr>
<tr>
<td>• Story coherence based on chronological order (e.g., “Once Upon A Time”).</td>
<td>• Story coherence based on associative chains (e.g., one image leads to another).</td>
</tr>
</tbody>
</table>
Greater substantiation of the concepts and ideas in this paper are in order and additional research should be undertaken to better understand them. Nonetheless, we may need to move forward with the best information we have and in that spirit these suggestions for practical applications are offered.

- Punctuality with respect to appointments, meetings and the like has been mentioned frequently by a number of observers of Arab culture (e.g., Patai, Nydell, Al-Omari, Al-Azmeh). Our analysis here not only supports these observations, but also provides a deeper perspective on how time and events are looked upon by the Arab culture and lends greater meaning to these observations. In our view, the differences between Western and Arab cultures with respect to matters such as punctuality and promptness are a manifestation of more important cultural differences with respect to the interpretation and meaning attached to events and causality.

- Extending this line of reasoning, we can see other phenomenon that might emerge in the context of Arab culture and that are grounded in the tendency of members of the culture to perceive events and causality in this way. We speculate that events are looked upon less as a significant piece of new information, but rather as a repetition of past occurrences. A Westerner should, therefore, not be surprised to find that an Arab “sees” something very different in a given event, and does not automatically or quickly look to seek a cause for the event as much as a cultural story to attach to the event.

- For the Arab, it may be that nothing is really “new” but rather a restatement of something that has gone before. The old adage “things come again” applies very strongly to Arab culture, in which case there may be significant differences in how events are perceived. In the West, profound events must have profound causes – indeed, the Western mind is attuned to the salience of events and thereby to attributing causality. In Arab culture, the tendency may be more toward seeing all events as less profound in and of themselves, but more as a restatement of a deep and important cultural or religious theme.

---

54Al-Azmeh (1986). Author notes that “present events and any other, including the future, are seen as repetitions of past occurrences.” Also, “if the present were ever-present in the intention of God . . . (its) origin becomes not only the ultimate explanatory principle of everything, but in fact all things become a mere repetition of origin.”
Although we have been discussing “culture” up to this point, it is often individuals that we encounter, and it is their beliefs, attitudes and behavior that we notice.

- There may be some important effects with respect to the ability or capability of individuals to reconstruct chains of events, such as (for example) the order in which things occurred, or the order in which places were visited. That type of chronological memory is somewhat contrary to the general Arab cultural mind set and it may be somewhat difficult for individuals to respond to questions and/or probes that call upon them to remember or reconstruct personally-related events in terms of a temporal framework. An initial reconstruction, for example, might contain a number of non-sequiturs, such as implausible relationships between time and distance, or inconsistencies in recall depending upon how questions are asked. This can occur with Westerners as well, particularly under stress, but with members of the Arab culture the effects may be less related to stress and more to fundamental differences in how even their personal history is encoded and reconstructed.

- It may be the case that when Arabs attempt to tell stories based on actual events, that time and place of key components become intermingled in such a way as to allow the intrusion of thematic elements that color the narrative. For example, if an individual was to attempt to talk about how they came to be involved with a group, say from childhood through adulthood, a Western version of such a story would likely focus on meetings between people at different ages in one’s life and at different places. The narrative would follow a historical model and key dates, such as Christmas or New Year’s, would likely enter into the story in some way, but would be appropriately linked to the individual’s age or the year of the date (e.g., Christmas of 2003).

- A member of the Arab culture might exhibit slightly different tendencies with respect to how stories are structured. First, they may not begin a story or narrative with the same type of beginning – such as fixed point in time (e.g., “once upon a time”). They may begin with something associated with an important cultural event, such as Ramadan. In addition, important elements of the story may not be sequenced with the same clarity as a Western-style story. For example, several important elements (e.g.,

---

55Indeed, Western-style story telling usually places a clear temporal framework around the story. Digressions from the temporal framework are clearly defined as such.
meetings, discussions) may have happened around Ramadan, but which Ramadan (by year) would be either less relevant or even irrelevant. In some cases, elements may be imported into the story that occurred before the period of the story, or even before the individual was born.

- The tendency for the Arab culture to think in associative terms may influence how language is used to represent or portray stories and narratives. For Westerners, there is a cultural value attached to exactness and coherence in stories, where exactness is in terms of faithfully representing events as they occurred, and coherence with respect to the temporal relationships between events. A more strongly associative telling of stories might place more emphasis on language features and lead to using language to create a pleasing gestalt or impressionistic representation (e.g., a word picture); one that places less emphasis on, for example, accuracy in a veridical or factual sense.

Up to this point, we have been discussing how Arab culture interprets the past and the present. An important aspect of constructing stories and narratives is the future: what might happen or could happen; what events might take place; how things might change over time. In addition, how might plan for the future either the near term or the long term? These are very Western questions to pose and address, either formally or informally.

- A small number of observers of Arab culture have noted a tendency for the culture to pay relatively little attention to long-range planning (e.g., Al-Omari, 2008). This may be a matter of a cultural preference for a short-term orientation and the need to deal with the problems of today. It is also possible that a long-term planning orientation is perceived as an intrusion into matters that are the province of the divine.

- As a practical matter, the Arab culture might best be viewed as not yet having developed the cultural traits of deep concern for the future as is the case in the West. This is not to say that Arab culture is devoid of a future orientation, but it is to say that Western cultures hold a highly developed orientation toward the future and has institutionalized futures thinking. That is, Westerners may, to Arabs, seem in a rush or constantly expressing urgency and concern about the future. Alternatively, Arabs may

---

56 Al-Omari (2008). Author offers the following advice: “... plans and proposals should be presented in such a way that captures the short-term potential rather than the long-term potentials which may not be of great interest.” (p. 174). Also, “This is not to say that Arabs do not plan for the future, but rather they tend to be more engaged with the tyrannies of the urgent, which is the now and then.” (p. 174).
seem at times insufficiently concerned about the future. In addition, it is important to keep in mind that when Westerners conceptualize the future, they do so in terms of events, whereas the Arab traditional view of the future is a continuing revelation or unfolding of the past.

Conclusions
In February of 2011, and during the height of the crisis in Egypt calling for President Hosni Mubarak’s resignation, the New York Times reported on diplomatic cables containing details of meetings between Mr. Mubark and a U.S. congressional representative. Mr. Mubarak discussed his younger son, Gamal, who (according to the NYT) “he described as a perfectionist from childhood.” Quoting Mr. Mubarak, “As a school boy if I gave (Gamal) a notebook with one line that was not straight, he would throw a fit and demand a new one,” and recounted Mubarak characterizing Gamal as “idealistic” and “punctual.” Adding, “If he (Gamal) says ‘meet me for lunch at 2:00,’ he means 2:00. Set your watch by it.” As much as these comments by Mr. Mubarak about his son Gamal reflect characteristics of Gamal, they also reflect Mr. Mubarak’s perceptions of what Westerners value in terms of not only punctuality, idealism and material perfection, but also efficiency in time management and duty to others with respect to appointments. Essentially, Mr. Mubark spoke in Western terms about the qualities of his son, thereby portraying him in terms of what he considered to be important characteristics that, from his cultural perspective, he saw Westerners embracing.

The objective in learning to interact or work with (or within) a cultural context other than one’s own is not so much a matter of learning a set of rules or signs to watch for, but rather to go beyond the confines of protocol to establish, if you will, a gestalt or perspective that holds simultaneously the “rules” of the culture as well as its themes and social motifs. To think like an Arab (or a member of any other culture) is not simply to reason one’s way through, it is to feel the world in the way that the Arab does. Most of the reference points for that feeling come not from an understanding of a culture’s history as a chronology of events (though that is sometimes useful) or the unique logic of its thought processes (though some advantage may be gained there as well) but from an appreciation

\[57\text{Mazetti \\& Cooper (2011).}\]
of a broad range of cultural elements that include music, art and religion as well as their interaction and interrelated influences.

In this paper we have focused on a single aspect of culture, namely intertemporal reasoning and how Arab culture, in contrast to Western cultures, is shaped by traditions that place time and events in a different framework than is the case for Western cultures. We reiterate that the Arab cultural tendencies identified in this paper are those of tradition, and as such represent an underlayment of cultural influence that is manifest in surface features of social attitudes and behaviors. These cross-cultural tendencies we have termed intertemporal reasoning to in part describe the sociocultural processes by which the Arab culture conceptualizes the relationship between its past, its present and its future; and in part to offer a conceptual vehicle by which those from Western cultures can gain deeper awareness of the unique perspective that Arab culture has on history and its components, including time and events.

Much research needs to be done to bring the general cultural features identified here into sharper focus and to provide science-based substantiation. How and to what degree modern Arab societies exhibit these cultural features is an open question. Based on the resources used in our research, we have found that Arab culture has enduring tendencies that exist to the present day with respect to how it deals with time. In pursuing a richer understanding of Arab culture along these lines, we found that the traditional perspective on time could be conceptualized in terms of its cultural perspective on events, including interpretation of their meaning and their causality. When contrasted with Arab culture, we found that Western modes of thinking about events and their meaning cast history in terms of discrete causal sequences, a tendency that can differ sharply from the more phenomenological and impressionistic approach of traditional Arab culture.

Inherent in the relationship between time and choice is the notion that better choices require more time. “Considered judgment,” “careful deliberation,” and “a timely conclusion” all imply that the quality of one’s decisions and judgments are reflected in the time afforded to the process, and carry the image of incubation in which information and values are carefully evaluated and appropriate tradeoffs are made. In Western cultures, time can be perceived in terms of the appropriate amount of time to be dedicated to various types of cognitive activities, such as judgment, decision making and even creativity and
imagination. Thus, the passage of time can represent to an individual the importance that another individual has assigned to the activity that consumes the time. With respect to Arab culture, we have little information on this subtle but important cue in social interaction: namely, the temporal pace of cognition, emotion and resolution. By extension, this applies to broader issues as well including the appropriate pace for cultural or social change.

In contrast with the notion of time as a resource that facilitates decision making and choice, is time as a scarce commodity to be used wisely. The decision maker, for example, who uses too much time in making up their mind is termed **indecisive**, implying a deficiency in skill or personality; a wasting of time that perhaps could be better used for other purposes. In our modern life, it often comes down to a matter of time management, which is to say the allocation of a resource of which we have too little. This is very much an economic viewpoint on time and is bound up with our present-day tendency toward commodification. Time is regarded very much in this spirit as a metered good for which precise measurement is necessary.

It is fair to ask in a multicultural world how broadly applicable are our Western notions of time, their meaning and their value. And, whether our psychological explorations of time, either as commodity or as phenomenon, yield anything more than culturally-localized truths. In the context of Western research on the psychology of time, a number of authors have highlighted the relevance of language to our concept of time: in essence, time is how we speak of it.\(^58\) How we use the semantics, syntax and grammar of the language of time determines what it means to us. As Jean-Blaise Grize points out models and schemas of time are “soft in the sense that they allow themselves to be shaped, as wax does.”\(^59\) If we can allow for individual differences in how time is conceptualized, we must allow for cultural differences as well. One of the challenges we face both scientifically and culturally in addressing the notion of time is the strong magnetic pull we experience to characterize time and its function in a metered sense, whether it is the space between years or months that defines, for example, a developmental sequence or the

---

\(^{58}\)Perret-Clermont (2005).
\(^{59}\)Grize (2008), pp. 68-72.
quantity of clock ticks that measures consumed time. Our research on Arab culture suggests that a measured sense of time is not part of the Arab tradition, and the absence of a metered sense of time may still be a significant influence in modern Arab culture. If so, we can imagine a number of implications, including:

- Difficulty implementing or developing an appreciation for concepts and techniques relating to time management and efficient use of time, all of which require an appreciation for time as a commodity having value in its own right;
- Potential conflicts intra-culturally between Arab groups that prize or highly value their traditions with respect to time with those who have adopted more Western viewpoints toward time, its value and its efficient management. These conflicts could manifest themselves as, for example, problems or challenges in working groups or in introducing new business or governmental management practices into more traditional social contexts such as rural cities, towns and villages;
- A tendency, particularly among more traditional segments of the Arab culture, to appear inconsistent in their approach to decision making, and at times seeming indecisive (e.g., taking excessive time to make decisions) or to appear spontaneous (even capricious) in the face of important decisions (e.g., taking too little time);
- Difficulties implementing or promoting Western intellectual technologies that rely on detailed historical treatment of events, such as risk assessment, risk analysis and technological forecasting.

Are these Arab cultural tendencies likely to endure the influences of globalization? Do we need to take them seriously in our engagements with Arab culture and how should we relate to them in terms of our social protocols? Here we offer a cautious approach and suggest that Arab culture today may not be as Westernized as the trappings of modernity.

---

60 The attention and the precision afforded the measurement of time is a fairly recent invention in Western culture. It was not always so. For example, prior to 1884 there was no international standard for time such that longitude could be represented in terms of its spatio-temporal relationship with a fixed location. In that year, the Prime Meridian was established at Greenwich, England, the result of which was a standardization of clock time as well as geographic locations in terms of a common referent. It should be noted as well that differences between Northern and Southern European cultures are often captured in reference to how “rushed” or “time-disciplined” they are (e.g., Nordic precision vs Latin leisure).

61 A separate white paper titled “Observations on the Concept of Risk and Arab Culture” (MacGregor & Godfrey, 2011) details the problems and challenges of implementing risk-related concepts in Arab culture, including the need to achieve cultural compatibility in terms of both the production or development of these methods as well as implementation in terms of broad public or popular acceptance.
(and recent events) suggest. Furthermore, we suggest always keeping in mind that Arab culture has a strong regard for its cultural history, despite not having a clearly Western approach to how that history is conceptualized. Likewise, it may be prudent to foster a view of Arab culture as having a positive view of Western temporal attitudes (e.g., punctuality), but not necessarily willing to abandon other, interconnected features of its cultural matrix in order to achieve that end for itself.

**Acknowledgements**

This work was supported by the Office of Naval Research, Human Social Cultural Behavioral Program, under Contract Number N00014-09-C-0570 to MacGregor Bates, Inc.

**References**


How cultures understand time is a defining cultural characteristic. This paper uses the term intertemporal reasoning to refer to the psychosocial and cultural processes engaged when people either integrate past experiences and events or project forward to the future. Available literature (in English) on Arab culture is explored to contrast how that culture reasons about time and events, with respect to Western cultures. A number of themes emerge, including the role that attribution of causality plays in Western culture as a basis for interpretation of the past, and the tendency of Arab culture to integrate events into an associative gestalt. The results suggest that Arab culture has traditions that may place less emphasis than Western cultures on temporal sequencing as a key organizing principle. Furthermore, the poetic quality of Arab culture favors an associative approach to the integration of past and present, as opposed to the causal approach of Western cultures. It is suggested that Arab cultural traditions concerning time and events may play an important role in how day-to-day experience is both encoded and recalled as part of reconstructing recent personal histories.