

# The Metaphoric Structuring of Time in Moroccan Arabic

**Khalid BERRADA**

Faculté des Lettres et des Sciences Humaines

Ben M'sik, Casablanca

## 1. Introduction

According to Dowden (2007), time has been the subject of study of philosophers and scientists for 2500 years, which has allowed us to gain some understanding of it today; nonetheless, many issues remain unresolved. Among the questions that have preoccupied investigators over centuries, we may cite the following:

- How can time be actually defined?
- Does time exist when nothing is changing?
- What kinds of time travel are possible?
- Are the future and past real?
- Will the future be infinite?
- Are tensed or tenseless concepts semantically basic?
- What are the neural mechanisms that account for our experience of time?

Dowden believes that some of these issues may be better understood and resolved owing to scientific progress, but others need philosophical analysis.

This paper, however, will attempt to address the concept of time without resorting to any scientific scrutiny or philosophical enquiry. In fact, physical, philosophical and religious investigations of time often disregarded the linguistic and conceptual aspects of time – the manner in which various cultures conceptualize it (Maalej, in press).

In keeping with the new cognitive approach to metaphor, this paper examines how Moroccans, especially ordinary speakers of Moroccan Arabic (MA), understand time. To have an idea of how Moroccans understand time, we need, in fact, to study how this concept is structured in the language Moroccans use, MA. At this juncture, it is worth stressing that the MA collected data confirms that time is largely understood and expressed in metaphorical terms, as we shall have occasion to instantiate in the ensuing sections of the present paper. The same observations are pertinent with regard to Classical Arabic (CA), the high variety, some examples of which will be occasionally provided herein, especially for comparison purposes.

I shall adopt Lakoff and Johnson's (1980, 1999) theory of metaphor as a theoretical framework. Lakoff and Johnson have attracted our attention to the fact that in addition to the conscious and innovative employment of metaphors in literary, creative discourse, language users equally have resort to systematic metaphors, conventionally and quite unconsciously, in their everyday use of the language. These hackneyed metaphors pervade the structure of human languages, and notwithstanding being conventional, they have not passed on to the realm of the literal. It is noteworthy that these linguistic metaphors are just manifestations or instantiations of conceptual metaphors, which can equally be manifested in other forms of human discourse, such as music (Dorin and Osthus, 2000) or pictures (Forceville, in press). These metaphors, according to Lakoff and Johnson (1999), structure our thought processes; they are fundamental to the way we think, for they enable us to consistently conceptualize some domains of our experience in terms of other domains of experience. They involve systematic cognitive mappings from the concrete, more delineated source domains onto the abstract, or less delineated target domains of experience. These mappings are experientially motivated, and they result in what Lakoff and Johnson term conceptual metaphors, such as the mappings from the spatial source domain to the temporal target domain, some Arabic linguistic instantiations of which will be our major concern in the present paper.

In fact, Lakoff and Johnson (1999) have judiciously drawn our attention to the common observation that time is structured metaphorically across genealogically and geographically related and unrelated languages. The metaphoric conceptualization of time is a natural phenomenon reflected in the structure of many languages, and this stems mainly from the fact that as time is a highly abstract concept, we tend to understand our experience with it in terms of more concrete source domains that are more accessible to our comprehension in the surrounding physical and cultural environments. Thus, Lakoff and Johnson (1980, 1999) have found that time is lexicalized in English in metaphorical terms. Similar findings are reported by Manjani

(1997) for Hindi, Yu (1998) for Chinese, Engberg-Pedersen (1999) for Danish, Boroditsky (1999) for Mandarin, Shinohara (1999) for Japanese, Moore (2000) for Niger-Congo language, and Maalej (in press) for Tunisian Arabic. In this paper, I would like to examine how Moroccans understand time in terms of space, as well as how they conceptualize time in terms of a precious commodity. Finally, I will tackle some interesting examples which demonstrate how time is perceived and experienced anthropomorphically in MA.

## **2. The Spatialization of Time**

The spatialization of time is a noticeable phenomenon across many cultures, and this is clearly reflected in the languages they use (cf. Boroditsky, 2000). Clocks and watches, which are commonplace nowadays, are an evidence of the way people tend to conceptualize time in terms of space, and they are long preceded by other devices adopted in various cultures to measure time in spatial terms such as sundials, hourglasses, water clocks, and candles. Bolinger (1980:41) rightly observes that “one of the most sweeping of the imaginings inherited from the childhood of the race is the metaphor of space applied to time.” Thus, we measure time:

1.  $\zeta\text{ndek lw}\epsilon\text{qt kt}\epsilon\text{r} / \text{q}\epsilon\text{ll}$  (MA)
2.  $la\delta\text{ayk waqtan ?aktar/ aqall}$  (CA)

You have more/less time.

We also locate happenings in it, by conceptualizing it as a container:

3.  $f\zeta\text{a}\text{šriyyam}$ (MA)
4.  $fi \zeta\text{a}\text{šrati ?ayyamin}$ (CA)  
in ten days (time)
5.  $f\text{essayf}$  (MA)
6.  $fi \text{ssayf}$  (CA)  
in summer

We equally refer to it in terms of dimensions – the temporal concept of duration being perceived in terms of length:

7.  $d\epsilon\text{ww}\epsilon\text{zti w}\epsilon\text{qt qsi:r/ twi:l}$  (MA)
8.  $?istaRraqta waqtan tawi:lan/ qasi:ran$  (CA)

You have spent a long/ short time.

9.  $l?\text{i}\text{žtima}\zeta \text{kan twi:l}$   
The meeting was long.

10. lhε fla kant qsira

The party was short.

Time is also depicted as an object or being moving in space, and it may be drawing near or departing.

11. lmtihan qarrab

(The time of) the exam is approaching.

12. Radi yži wahεlw qεlw ld yysi bbah

There shall come a time when the child will disobey his father.

13. mša εlilεlw qt

Time has gone (away from) him.

14. mša dalεlw qt likunti katgraf

The time you were used to has long gone.

15. wε mšat yyam wžat yyam whuwwa matbeddalš.

Some days have gone and other days have come, but he has not changed.

The conceptualization of time as a moving object is more specific in (16), where time is viewed as a vehicle, transporting people, and leading them to a certain destination.

16. maçraft had lwεqt fayn Radi bina

We just don't know where time is leading us.

Analogously, time is conceptualized in terms of different levels of motion depending on our psychological states. When we are having a hard time, time seems to linger, to move very slowly, or even to stand still, as in (17, 18, and 19); however, pleasant time seems to elapse by very quickly, as in (20 and 21). This is clearly expressed in the English proverb "pleasant hours fly fast." Consider:

17. lwεqt tgul makayzidš

It is as though time is not moving.

18. lwεqt tgul makaymšiš

It is as though time is not going.

19. lwεqt tqi:l

Time is heavy (i.e. too slow)

20. lwεqt kayžri

Time is running.

21. lwε qt kaytir

Time is flying.

More innovatively, we sometimes hear:

22. lwεqt kayferfer

Time is flapping its wings.

Here the rapidity of time is depicted via the image of a bird flapping its wings. It may be considered as a poetic way for referring to the swift passage of time. In fact, innovative language users exploit the conceptual metaphor TIME IS A MOVING OBJECT by coming up with linguistic metaphors that may appear strikingly innovative, yet they are clearly subsumed under the above-mentioned conceptual metaphor. Hence, we can sense the validity of Lakoff's (1993) proposal that the study of poetic metaphors is an extension of the study of conventional metaphors. Shakespeare, for instance, when imparting his experience of temporality, represented time fancifully as an object that 'travels in divers paces with divers persons', in boredom 'it stands still', in laughter it 'gallops' (cited in Howe, 1987:5-6). These linguistic metaphors, innovative as they may appear, do not seem to pose any difficulty of interpretation, notably because they do not depart from the conceptual metaphor about time as an object that may move slowly or quickly, a metaphor that has conventionally become part of the conceptual system of many cultures, including the English culture.

A similar innovative metaphor illustrating this conventional conceptual metaphor of time as a moving object may be extracted from the Holy Qur'an :

23. wama: ?amru ssa:çati ?illa kalamhi lbasar ?aw huwwa ?aqrabu

And the matter of the Hour (of Judgement) is as the twinkling of an eye, or even quicker. (sura 16:77) (Yussuf Ali's translation)

The quotation above demonstrates the existence of the conceptual metaphor TIME IS A MOVING OBJECT in the Holy Qur'an, which reflects the Arabic language that was used more than fourteen centuries ago. The verse above reminds us that the life to come is not remote in time. Far from being a distant appointed time, it will come more swiftly than we believe. (For similar examples, see suras 12:107, 22:55, 33:63, 42:17, 46:35, and 44:66).

The Holy Qur'an also makes reference to time not simply as a moving object, but as measurable in terms of space. Consider:

24. hal ?ata: çala l?insa:ni hi:nun mina ddahri lam jakun šaj?an ma?ku:ra

Has there not been over Man a long period of time, when he was nothing - (not even) mentioned? (sura 76:1)

25. ?iqtarabati ssa:çatu

The Hour (of judgement) is nigh. (sura 54:1)

The Hour of judgement is drawing near. Time is perceived in terms of space, a short distance. In this respect, Ibn Kathir (1995, Vol. 4: 262) adduced a Hadith; on the authority of Sahl Ibnu Saad, the prophet said “I was sent to you and the Hour (of judgement) is like this.” The prophet, peace upon him, then attracted his audience’s attention to the small space between two fingers.

Time, moreover, has a metaphorical orientation structure across many languages (Lakoff and Johnson, 1999). The past, present, and future are conceptualized in a three-dimensional space. Thus, the present is metaphorically conceptualized as the location of the observer, and the future is understood in terms of the space in front of the observer:

26. gëddamk lwëqt baš tražëç llë mtihan

You have time in front of you to revise for the exam.

The past is metaphorically mapped as the space behind the observer, as in:

27. xëlli lmadi murak wsir lgëddam

Leave the past behind (your back) and go forward.

luh kulši mur dëhrëk, wëftëh şëfha ždi:da

Throw everything behind your back, and turn a new page.

(i.e., let bygones be bygones.)

The spatial expressions used in this section with respect to the lexicalization of time in Arabic (MA and CA) and English may be literally translated into other languages and be perfectly meaningful, for they also reflect the way we conceptualize time across many cultures. Being pervasively used to talk about time, these expressions seem to be constitutive of this concept, for they are the ordinary ways at our disposal to refer to and categorize our experience with time. Time is conceptually grounded in space, and many languages simply mirror this fact. Casasantos and Boroditsky (2003) have equally provided non-linguistic evidence through some psychophysical experiments to support this common observation. Their laboratory results demonstrate that “people rely on spatial information to estimate time,” and “spatial representations subserve temporal representations” (p. 216). Nevertheless, more laboratory experiments are needed to validate their findings, based on non-linguistic data. Moreover, the recurrence of spatial expressions to talk about time across related and unrelated languages should by no means warrant the postulations that they are universal, for this claim awaits empirical validity. To my knowledge, investigators have not attempted to conduct

large scale cross-cultural studies to examine the various conceptualizations of time across a large number of unrelated languages.

### 3. Time is Money

In what follows, we shall be dealing with another reific metaphor of time, which conceptualizes time as something precious that can be rapidly used up. Lakoff and Johnson (1980, 1999) propose the conceptual metaphor *TIME IS MONEY*, which includes two subcategories: *TIME IS A RESOURCE* and *TIME IS A VALUABLE COMMODITY*. They contend that these three conceptual metaphors form “a single system based on subcategorization.” In our culture, money is a “limited resource” and limited resources are “valuable commodities”. Therefore, these relationships of subcategorization characterize a logical relationship of entailment between the metaphors: *TIME IS MONEY* entails that *TIMES IS A LIMITED RESOURCE*, which entails that time is a *VALUABLE COMMODITY*. In fact, this system based on entailment and subcategorization proves that metaphors are not just matters of subjective imagination; they also involve aspects of logical reasoning – hence the Experientialist view of metaphor as “imaginative rationality” (Lakoff and Johnson, 1980:193).

Lakoff and Johnson stress that these three conceptual metaphors reflect the way modern industrial societies conceive of time. *TIME IS MONEY* (TM) structures our daily activities with time in many respects. It is experienced as something that can be spent profitably, invested, saved or squandered. Thus, we find systematic examples of the sort:

I have to *budget* my time.

I *spent too much* time on that.

I've *invested* a lot of time on this project.

You don't *use* you time *profitably*

That mistake resulted in a *considerable* loss of time.

Lakoff and Johnson (1999: 164)

This manner of conceptualizing time is common across many unrelated cultures, including the Moroccan one, yet it is not universal (cf. Lakoff, 1987: 209). Examples, of this metaphor abound in English to the extent that language users do not perceive its metaphoric character and hold it as part of “an objective characterization of what time ‘really is’” (Lakoff, 1987: 209). This is based on the experiential ground that we often gain or pay money according to the amount of time spent. For instance, wages are paid by the hour; we have to pay for the exact amount of time spent on telephone calls, etc.

Time is also conceived as a limited resource (LR), which is used up rapidly. We speak of running out of time, or not having enough time. Moreover, time is understood as a valuable commodity (VC); we are said to give time or to lose time. To illustrate these conceptual metaphors, we may cite the following examples from MA:

29. kayeqtasəd ɟla lwəqt (TM)

He saves time (in the sense of economizing).

30. kaydiyyaɟ lwəqt fšella yliq (TM)

He squanders time in trivial matters.

31. kaywəddaf wəqtu fəlmasaʔil litɟu:d ɟli:h b ɛnafɟ (TM)

He invests his time in profitable affairs.

32. dəyyaɟ bəzzaf dyał lwəqt mni kan mriɟ wdaba kajhass bellı lwəqt makafiš baš ydir šəRlu mətqun lwəqt kaytir (TM and LR)

He wasted a lot of time when he was ill, and now he feels that the time left is not sufficient for him to do his work properly, (since) time flies.

33. ɟandək ši wəqt zayd (VC) or (LR)

Have you got any time left?

34. yəmkalli nnaxud šwiyya m n wəqtek (LR)

Can I take a bit of your time?

35. ʔistanfadtı wəqti (LR) (CA)

I used up all my time.

36. mšali gaəl wəqt (LR)

I lost all my time.

37. maəanduš lwəqt ma jəɟtik(LR)

He doesn't have the time to give you.

Most of these expressions about time are not perceived as metaphoric. They are the normal everyday expressions available in the language to refer to the importance and value of time, and to reflect the quantification of work in terms of time – a common practice in companies. Yet these expressions presuppose conceptual metaphors we are scarcely conscious of in our daily interactions with language. This essentially emanates from the fact that these linguistic examples have become the normal conventional expressions that reflect our experience with and comprehension of time. But with a little reflection, one may be aware of the metaphorical nature of this abstract concept.



In fact, the linguistic examples above demonstrate that, not unlike many cultures, Moroccans conceive of time as a valuable commodity and a limited resource. Yet it is worth stressing that some MA linguistic instantiations of these conceptual metaphors of time do not prove to be readily translatable across other languages. This is equally true even with regard to a variety that is close both geographically and genealogically to MA. In Tunisian Arabic, according to Maalej (in press), time is not conceptualized as a resource that can be invested; thus (29) will not necessarily make sense in Tunisian Arabic. However, unlike Moroccans, Tunisians conceive of time as a commodity that can be lent:

38. *sallafni šwiyya min waqtik* (TA)

Lend me some of your time. (Maalej, in press)

This conceptualization of time is not instantiated in MA; moreover, my informants do not deem it to be even potentially valid in MA.

Thus far, we have dealt with MA instantiations of time in terms of space as well as in terms of a valuable commodity. We have noted that our conceptualization of time is largely metaphorical in nature. We understand time in terms of motion and space and we think of it as something that can be invested, given, and saved, or that can run out. It is hard to think or talk about time without resorting to these metaphors, which are largely constitutive of the way we experience time. In the next section, we will be concerned with some interesting Arabic expressions reflecting the conceptualization of time in terms of a person.

#### **4. The Personification of Time**

Personifying or anthropomorphic metaphors are included by Lakoff and Johnson (1980: 33) under the rubric of ontological metaphors. But they are more elaborate extensions of ontological metaphors, since they further particularize the physical objects or entities as being a person. That is, non human abstract or concrete entities are depicted as if they were really endowed with human characteristics. Consider, for instance:

39. *buseffir kajtsara fkul qent* (MA)

Jaundice is strolling everywhere.

This disease, which is due to the excess of bile, a liquid secreted by the liver, is very pestilential. This contagious disease is lethal; it is responsible for the death of many people in Morocco. The above-mentioned example depicts this disease as an abhorrent enemy ready to pounce on people; it is an insidious enemy.

Quite often, we have recourse to the personification device without even being aware of it, as in:

40. lbuta bRat tgulha (MA)

The bottle (of gas) wants to say it.

(It is about to run out.)

41. hrēb n̄ḡas mēn ḡajniyya (MA)

Sleep ran away from my eyes.

Equally, personification is an important means for the poet to convey his ideas by strikingly novel and vivid images. Al Mutanabi – a very articulate and renowned poet who appeared in the renaissance of the Islamic civilization in the tenth century – does not see fever as being due to microbes or viruses that attack the body, raising its temperature, but he fancifully personifies it as an undesirable guest, in the following lines, extracted from a long poem of his:

42. waza:ʔirati: kaʔanna biha: ḡaya:ʔun (CA)

falajsat tazū:rūni: ʔilla fi ḡḡala:mi

badaltu laha lmata:rifa walḡaḡa:ya

faḡa:fatha wa ba:tāt fi ḡida:mi

ʔabinata ḡḡahri ḡindi kulla bintin

fakayfa wasalti ʔanti mina zziha:mi

(cited in El-Jarmiti and Amin (1951: 13))

My visitor is as if shy.

She visits me only in the darkness.

I provided beds and blankets for *her*,

But she disliked them and slept in my bones.

Daughter of fate, I have many daughters,

So, how did you manage to come from the crowd?

In these lines, the poet considers fever as “the daughter of fate” in order to convey the impression that it is a very loathsome and irresistible enemy. Fate in the Arabic culture has been considered as the most repugnant enemy to Man, as we shall see below.

It is worth stressing in this respect that there is a conflation of time and fate in Arabic. The two concepts are so intertwined that it is often difficult to discriminate

them, for they tend to collocate interchangeably especially in MA. In fact, the CA referring expression for time (azzama:n) is the expression that is commonly used in MA to refer to fate (zzma:n). In MA, there is a very rich number of metaphoric expressions that personify this abstract concept and that show how our conceptions of fate are mirrored in the language we use daily. In fact, fate is often depicted as an animate being much stronger than us, and so powerful that hardly anyone is believed to remain unscathed by his mighty sway. Fate, therefore, is abhorred, for it is often believed, especially in periods of draught, food shortage and economic crisis, to be beyond us, and we seem but tiny specks utterly vulnerable to his blows. All these experiences and beliefs of Moroccans about the nature of fate are metaphorically reflected in the language of our everyday, mundane interactions.

Thus, we are engaged with fate/ time in all sorts of matches, including violent combats, as is shown from the following examples:

43. sɛrɛu zzɛman

Fate defeated him (in wrestling).

44. kaytsarɛɛ mɛa lweqt

He is wrestling with time.

45. Rɛlbu zzɛman

Fate won him.

46. ?axuti šnɛq ɛlijja zzɛma:n / ra ddu lɛhmɛr šaɛl ɛla lmusakin

Brothers! Fate/time has strangled me. The red light is indeed lit on the poor.

(“Red light” symbolizes danger”.)

47. zzɛman kajɛfraɛ fih kif bɛa

Fate/time is destroying him as he pleases.

48. lahu zzɛman fettu:š

Fate/time kicked him to the touchline.

(i.e., fate made an outcast of him.)

49. zzɛman kajžri ɛlih

Fate/ time is running after him.

50. qɛhru zzɛman

Fate vanquished him.

51. Rɛlbu ɛman

Ottman won him.

(Here fate/time is given a proper name normally assigned to a person.)

52. zzeman kajεžri bina lhawiyya

Fate is precipitating our downfall.

(Fate/ time precipitates us to the chasm/ bottomless pit.)

53. ɣyit manqawem / walakin zzeman hl kni

I resisted for a long time, but fate wiped me out.

Fate, moreover, is depicted as a pitiless and deceitful being. **He** should never be trusted, for **he** changes his mood very rapidly – due to **his** protean nature – and alters the status of a person in no time.

54. zzε man makaj ε rhamš

Time has no mercy on us.

55. ra:h lε rd ɣε tšana / whad lhala zz ε man fr ε dha ɣlina

The soil is thirsty, and this situation is imposed on us by fate/time.

56. ha:kku zz ε man kilg ε nfud / bla r ε hma blε šafaqa

Fate/time scrapes him pitilessly like a hedgehog.

Some people eat hedgehogs, but they have to scrape them against something solid in order to remove their spines before ultimately killing them for being cooked. This is believed to cause the utmost degree of suffering to hedgehogs. In the above-mentioned utterance, the speaker extends this experience, which these wretched animals are submitted to, to apply to the suffering imposed on Man mercilessly by time.

57. zzε nan Rε ddar /llah jxarr ε:na mεn dar lɣajb bla ɣajb

Time is perfidious. May God let us leave this house of shame (i.e., the earthly life) without shame?

58. ?inna zzama:na ɣaduwwun fi: θijja:bi sadi:qin (CA)

Time is an enemy in the garments of a friend.

59. farra? mabinna li:hi zzama:n

Why did time separate us? (extracted from an Egyptian song)

60. mεn yεzraɣ ššar jhs εd ε waqbu / wkijj ε t lli ytiq bε zz ε man

He who sows evil shall harvest its consequences, and damned is he who trusts time.

61. ?inna ššabi:bata na:run ?in ?aradta biha ?amran / faba:dirhu ?inna ddahra mutfi:ha (CA) (El-Mraghi, 1982: 277)

Youth is a flame. Make haste if you want to fulfil something with it, for time will extinguish it.

Notice how vividly El-Majdoub (undated) expresses the idea of the protean nature of fate, apostrophizing it as follows:

62. raḥ dak zzε man wnasu / wža da zzε man bfasu (p.12)

That time went away with his people, and this time arrives with his hatchet.

63. ya da zzε man yaRε ddar / tε yyε hti mε n kan sε ltan /

wrε kkε bti mε n kan raε i (p. 10)

Oh treacherous fate/time! You overthrew the king, and lifted he who was shepherd.

64. mε n llayε qra lε zzε man ε quba / yži ε la raḡu mε kbub (p. 10)

He who doesn't foresee the repercussions of time will fall down on his head.

However, despite the mighty power of fate/time, some people believe that they should outwit him, or, at least, they should confront him, instead of surrendering submissively to him:

65. dε rbu zzε man brε kla

They kicked fate.

66. xεssεk twažεh zzεman

You have to confront fate.

67. xεssna nεtεawnu εla zzεman

We have to support one another against fate.

## **5. Conclusion**

The MA data on time reveals that this abstract concept is understood and experienced in metaphoric terms. These metaphors of time conceived in terms of space, a valuable commodity, as well as an enemy give a piece of evidence to the fact that it is often the case that for human beings to understand abstract notions – such as time – they need to get a grasp on them by means of concrete concepts that are more clearly delineated in their experience. Metaphor, thus, far from being extra tricks with words, emerges as an indispensable cognitive human tool.

Moreover, the linguistic metaphors discussed in this section give ample testimony to the inadequacy of any literal similarity view for the analysis of the processes involved

in metaphoric production and processing. Lakoff and Johnson's (1980, 1999) accounts are much more solidly grounded. In (22), for example, we are not comparing time to a bird flying, but the bird here is used as a palpable, more delineated, source domain via which we understand our psychological experience of temporality. Time is a target domain that is less delineated and therefore hard to understand in its own terms. To be able to talk about it and understand it, people belonging to various cultures tend to map it onto more delineated domains, such as that of moving objects.

Nevertheless, as I also argued in Berrada (2007), some conceptual metaphors may be recurrent cross-culturally, yet their metaphoric linguistic instantiations may be culture specific and may vary considerably from one language to another. For instance, in MA, as we have demonstrated above, time is conceptualized as a moving object, yet unlike English and other languages reported in (Ast, 2006), the MA data I have collected does not include the visual images of time flowing or flying as an arrow. Moreover, as we have observed in section 2, we may find pronounced linguistic variations even in very closely related varieties, such as Tunisian Arabic and Moroccan Arabic, which stand in a diaglossic situation with Classical Arabic.

### **References**

- Ali, Yussuf (1993). *The Holy Qur'an*. Edited and revised by The Presidency of Islamic Researches. Al Madina Al Munawarah: The Custodian of the Two Holy Mosques King Fahd Complex for the Printing of the Holy Qur'an.
- Ast, Olga (2006). "Visualization of Time Flow: An Artistic Inquiry into the Development of the Visual Metaphor," 12th International Symposium on Flow Visualization Göttingen ISFV website (1-9).
- Berrada, Khalid (2007). "Food Metaphors: A Contrastive Approach," *metaphoric.de* 13/2007 (7-38).
- Boroditsky, Lera (1999). "First Language Thinking for Second language Understanding: Mandarin and English Speakers' Conceptions of Time," Proceedings of the Twenty-first Annual Meeting of the Cognitive Science Society, Vancouver, BC.
- Boroditsky, Lera (2000). "Metaphoric Structuring: Understanding Time through Spatial Metaphors," *Cognition* 75 (1-28).
- Casasantos, Daniel, and Boroditsky, Lera (2003). "Do We Think about Time in Terms of Space?" 25th Annual Meeting of the Cognitive Science Society, CogSci 2003 (216-221).

- Doring, Martin and Osthus, Dietmar (2000). « Les Métaphores de la Musique/La Musique Comme Métaphore, » in Abreu, J.M (Ed.) *La Communication Multilingue et l'Intéreactivité au-delà des Mots*. Brest (132-144).
- Dowden, Bradley (2007). "Time," *The Internet Encyclopaedia of Philosophy*.www.nvvaam.org/education/memori.
- El-Jarmiti, A. and M. Amin (1951). *Albalagha Alwadhiha*. Egypt: Dar Alma'arif.
- El-Majdoub, Abdurrahman (undated). *Al-qawl Almaatur min Kalam Ashaykh Abdurrahman*. Casablanca: Dar Ihya'a Al'ulum.
- El-Mraghi, M. (1982). *Ulumu Albalagha*. Beirut: Dar Al-Kutub Al-'Ilmia.
- Engberg-Pedersen(1999). "Elisabeth Space and time," In Jens Allwood, and Peter Gardenfors (Eds.), *Cognitive semantics: Meaning and cognition*. Amsterdam and Philadelphia: John Benjamins Publishing Company (131-152).
- Forceville, Charles (in press). "An Introduction to Pictorial and Multimodal Metaphors," to appear in: *Basamat*, Vol. 4.University Hassan II, Mohamedia.
- Howe, L.W. (1987). "Time and its Metaphors". *Contemporary Philosophy*. Vol. XI, No. 10 (5-6).
- Ibn Kathir, H.D. (1995). *Tafsiru Lqur'an Alaadhim*. (4 Vols.) Beirut: Maktabat Nour Al'ilmijja.
- Lakoff, George. (1987). *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*, Chicago: The University of Chicago Press.
- Lakoff, George (1993). "The contemporary Theory of Metaphor," in: A. Ortony (Ed.): *Metaphor and Thought*, Cambridge: CUP (202-251).
- Lakoff, George and Mark Johnson (1980). *Metaphors We Live By*, London: The University of Chicago Press.
- Lakoff, George and Mark Johnson (1999). *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*, New York: Basic Books.
- Maalej, Zuhair (in press): *Metaphor, Embodiment, and Culture: Evidence from Tunisian Arabic*. Amsterdam: Benjamins.
- Manjali, Franson (1997): "On the Spatial Basis of Conceptual Metaphors," *International Journal of Communication* Vol. VII, 1-2: (157-167)
- Moore, Ezra (2000): *Spatial Experience and temporal metaphors in Wolof*. Doctoral Dissertation. UC Berkeley.

Shinohara, Kazuko (1999): *Epistemology of Space and Time*. Kwansei Gakuim University Press.

Yu, Ning (1998): *The Contemporary Theory of Metaphor: A Perspective from Chinese*. Philadelphia: John Benjamins.

### Key to Phonetic Transcription

#### Consonants

ʔ	glottal stop	ʔardun	land
b	voiced bilabial stop	ba:bun	door
t	voiceless alveolar stop	baytun	room
θ	voiceless dental fricative	θaɟlabun	fox
ʒ	voiced palato-alveolar fricative	ʒamalun	camel
h	voiceless pharyngeal fricative	ħani:nun	nostalgia
x	voiceless velar fricative	xa:lid	eternal
d	voiced alveolar stop	da:run	house
●	voiced dental fricative	●anbun	sin
r	voiced alveolar trill	rahmatun	mercy
z	voiced alveolar fricative	zallatun	lapse
s	voiceless alveolar fricative	samakun	fish
ʃ	voiceless palato-alveolar fricative	ʃa:hidun	a witness
s	voiceless pharyngealized alveolar fricative	sawmun	fasting
d	voiced pharyngealized alveolar stop	na:diratun	beaming
t	voiceless pharyngealized alveolar stop	ta:ʔirun	a bird
ç	voiced pharyngeal fricative	çilmun	science
R	voiced uvular fricative	Rari:bun	strange
f	voiceless bilabial fricative	fanna:nun	artist
q	voiceless uvular stop	qalbun	heart
k	voiceless velar stop	kabi:run	big
l	voiced dental lateral	laylun	night
g	voiced velar stop	gles (MA)	sit down
m	voiced bilabial stop	maža:zun	trope
n	voiced alveolar nasal	nahnu	we
h	voiceless glottal fricative	huna:ka	there



w	voiced labio-velar semi-vowel	waladun	a boy
j	voiced palatal semi-vowel	jawmun	a day

**Vowels**

i	short close front unrounded	ṣilmun	science
i:	long close front unrounded	ṣali:mun	omniscient
ɛ	short half close central	fɛ nn (MA)	nice
u	short close back rounded	ḍulm	injustice
u:	long close back rounded	raʔu:fun	merciful
a	short open back unrounded	ʔarḍun	earth
a:	long open back unrounded	ṣa:limun	scientist