6-1-2017

A cognitive linguistic study of cultural models of age in American English and Egyptian Arabic: A corpus-based approach

Hebatallah Said

Follow this and additional works at: https://fount.aucegypt.edu/etds

The American University in Cairo

School of Humanities and Social Sciences

A cognitive linguistic study of cultural models of age

in American English and Egyptian Arabic:

A corpus-based approach

A Thesis Submitted to

The Department of Applied Linguistics

In Partial Fulfilment for the Requirements for

The Degree of Master of Arts

By

Hebatallah Said

Under the supervision of Dr. Amira Agameya

May 2017

The American University in Cairo

School of Humanities and Social Sciences

**A cognitive linguistic study of cultural models of age
in American English and Egyptian Arabic:
A corpus-based approach**

A Thesis Submitted by

Hebatallah Said

Submitted to The Department of Applied Linguistics

May, 2017

In partial fulfillment of the requirements for
The degree of Master of Arts in Teaching English to Speakers of Other Languages

has been approved by

Dr. Amira Agameya _____
Thesis Supervisor
Affiliation: The American University in Cairo
Date _____ May 10, 2017

Dr. Marilyn Plumlee _____
Thesis first Reader
Affiliation: The American University in Cairo
Date _May 10, 2017_

Dr. Reem Bassiouney _____
Thesis Second Reader
Affiliation: The American University in Cairo
Date ____May 10, 2017

Dr. Amira Agameya _____
Department Chair
Date _____ May 10, 2017

Dr. Nathanial Bowditch _____
Dean of HUSS
Date _____ **1 5 MAY 2017**

This thesis is dedicated to my mum and the soul of my dad, no words of gratitude would ever be enough.

Abstract

The role of cultural models in sharing social knowledge, shaping social practices and organizing the perceptions, motivations and actions of community members is widely discussed in the literature (Holland & Quinn, 1987; Watson-Gegeo & Gegeo, 1999; Fryberg & Markus, 2007; Curwood, 2014). In each culture, there are perceptions that indicate what is appropriate or inappropriate according to a person's age (Jensen, 2014). This descriptive and exploratory study examines the Egyptian and American force dynamic cultural models of age from a cognitive linguistics approach. As cognitive linguistics applies a usage-based approach to language, this study relies on naturally occurring data derived from two different types of corpora. For the American English sample (n=200), the web-based corpus GLOWBE was utilized. To reach an equally authentic and rich sample, Web-as-Corpus was utilized for the Egyptian Arabic sample (n=179). The findings of the study showed that Egyptians view age in general as a strong blocking force, while the American culture views *old* age to be a strong force, one that lets more than it blocks. Moreover, the Egyptian culture was found to hold a number of age-related force dynamic cultural models that govern social interaction, unlike the American culture, which holds a number of force dynamic cultural models that tie age with cognitive skills. The study also revealed some cultural models that are undergoing change; these include OLD AGE BLOCKS HAVING SPOUSE OF CHOICE in the Egyptian culture and OLD AGE BLOCKS PARENTING in the American culture. The study also revealed more similarities between the Egyptian and American age-related cultural models pertaining to engaging in meaningful relationships than those pertaining to understanding and wisdom. The study concludes by hypothesizing a framing image schema of AGE IS A PATH in both the Egyptian and American culture.

Keywords: Force dynamics, cultural models, age, causation, schema, web corpora, Web-as-Corpus, force-dynamic patterns

Table of Contents

List of Tables

<h1 style="text-align:center">List of Figures</h1>

List of Abbreviations

CL   Cognitive Linguistics

AGO   Agonist

ANT   Antagonist

GLOWBE   Corpus of Global Web-Based English

FD   Force-dynamic

Chapter One: Introduction

Cultural models are cognitive patterns of ideas, values, and practices that are culturally transmitted or learned and are an integral part of our daily lives. They play a significant role in organizing the perceptions, feelings and actions of community members (Fryberg & Markus, 2007; Collins & Dressler, 2008; Curwood, 2014; Jensen, 2015). According to Watson-Gegeo and Gegeo (1999) cultural models are counted among the "higher mental functions" introduced by Vygotsky in 1981. These functions, as Vygotsky stresses, develop mainly through language in social interaction. Cultural models serve as resources that are used to frame and interpret experience, and guide cognitive tasks like goal setting, making sense of action, and verbalization. Watson-Gegeo and Gegeo sum up the notion of cultural models, their importance and how they relate to language by stating that they "operate below the surface level of behavior and the linguistic level of morphology and syntax, to shape perception, information processing, and the assignment of values" (1999, p. 230). It is important to note that cultural models are high-level gestalts that cannot all be present in the short-term memory at once and are recalled for the performance of a given cognitive task in the form of schemas (Gatewood, 2012; Watson-Gegeo & Gegeo, 1999). This means that for a conceptual framework to be identified as a cognitively shared cultural model of a society it needs to meet three criteria: be implicit rather than explicit, take a long time to learn and modify and be composed of numerous schemas (Gatewood, 2012).

Various theories that endeavor to explain how concepts are cognitively perceived agree that cultural models are the building blocks for cultural knowledge and schemata are the building blocks of cultural models (Collins & Dressler, 2008). Schemata (or schemas) are hypothesized to be relatively stable abstract mental structures that guide action, help in interpreting information

and serve as organizing means for problem solving (Buzzanell & Burrell, 1997; Sharifian & Jamarani, 2011).

Owning to the fact that cultural schemata and their compilations into cultural models have a strong influence on behavior in a society (Schneider, 2012) they are studied under the umbrella of several cognitive sciences through behavior analyses. Some of the cultural models uncovered look into particular cultures to reveal their perceptions of concepts that include land preservation, infidelity, use of technology in education and grandparenting, to name just a few (Paolisso, Weeks, & Packard, 2013; Macauda, Erickson, Singer, & Santelices, 2011; Curwood, 2014; Ofahengaue Vakalahi, Toafa, & Moala, 2008). Under the domain of cognitive linguistics, different linguistic units can be utilized to investigate cultural models, including morphosyntactic features, lexical items, speech acts, idioms, metaphors and discourse markers (Sharifian & Jamarani, 2011).

One of the basic human concepts that has been subject to extensive schematic analysis is the concept of causation. It has long been recognized as one of the most frequently relied on concepts that people use to interpret their physical and cultural surroundings (Lakoff & Johnson, 1980). However, as Lakoff and Johnson (1980) point out, it had for a long while been viewed as a whole, primary concept that could not be further broken down into smaller components. Several attempts have since then been made to break down the concept of causation into smaller components. One such attempt that received wide attention is the idea of force-dynamics by Talmy (2000). The notion of force dynamics, which was later adopted as a framework for analysis, was first introduced by Talmy in 1988 (Boye, 2001). Force-dynamics is an analysis of elements' interaction with respect to force (Talmy, 2000), an interaction that is substantially demonstrated in linguistic behavior. The force-dynamic (FD) framework is used to analyze causing into subsets of

the basic components of causing (which can be represented by verbs like *cause*, *make* and *get*), letting (represented by verbs like *allow*, *permit*, *facilitate*, *enable* and *help*) and blocking (represented by verbs like *prohibit*, *hinder* and *prevent*).

The domain of force dynamics is not limited to physical force, since metaphoric extension extends it to psychological and social interaction as well, "conceived in terms of psychological pressure" (Talmy, 2000, p. 409). In his book, *Toward a Cognitive Semantics*, Talmy (2000) refers to what he calls "sociodynamics" as a social relationship where one element has the force to block or let another. An example of a social FD schema can be seen in this sentence extracted from the Corpus of Contemporary American English: *peer pressure to discourage noncompliance with fishery regulations*. Here *peer pressure* is portrayed as a social force that can block the act of *noncompliance with fishery regulations*.

Having introduced cultural models and explained how they are made up of schemata, a type of which revolves around causation that can be understood in terms of force-dynamics, focus is here given to a particular concept that is viewed differently from culture to culture and that can be examined through a force-dynamic of causation framework: age. In each culture, there are perceptions that indicate what is appropriate or inappropriate according to a person's age (Jensen, 2014). This concept can be seen clearly when looking at the age deemed appropriate for leadership in different parts of the world. The age of the current president of Zimbabwe is 93 years, while one of the reasons the Egyptians protested in 2011 was that the then-president Mubarak would have started his seventh term at 83, which was perceived as too old. On the other hand, in the United States, the age of the presidential candidates of the 2008 elections was often discussed in the news with different references to Obama being too young and McCain being too old (Associated Press, n.d.; Kenski & Jamieson, 2010; Klein, 2008), people voted for the young

3

Obama who was 47 at his inauguration. But what was contemplated in terms of whether it would have been too young would not have been thought so in other parts of the world. The fourteenth Dalai Lama assumed political power of Tibet at the age of 15 after having been installed as the spiritual leader at the age of seven.

It is the universality of the views or presuppositions among the members of a culture that makes them accepted and shared cultural models that are "behavior-mediating and behavior-regulating" (Jensen, 2015) structures and principles in that culture.

1.1   Statement of Purpose and Research Questions

The literature has repeatedly discussed the importance and potential benefit of examining cultural models, from pointing out how such studies can contribute towards more effective inter-cultural communication and cross-cultural understanding to clarifying the impact of social workers training in preparedness to deal with cases of domestic violence (Collins & Dressler, 2008; Sharifian & Jamarani, 2011). Nevertheless, the literature also stresses that the current body of research is limited in terms of the concepts for which cultural models are explored as well as the languages and communities covered by such research. More studies are needed to explore the link between linguistic behavior and a deep level of cultural thinking, as well as more studies that rely on naturally occurring linguistic behavior as opposed to that elicited using various research instruments (Jensen, 2015; Sharifian & Jamarani, 2011). The situation is similar when it comes to studies on age. According to Basting (2010), only a "handful of scholars" (p. vii)have published work related to age and aging since the late 1990s.

Cultural models are shaped through participatory interaction and "repeated social transmission" (Jensen, 2015, p. 128). They are composed of information that is conveyed and

learned through the culture and are therefore shared among the members of cultural groups (Collins & Dressler, 2008). This means that there can be varying degrees of similarity or contrast between the cultural models of different communities depending on how their social experiences influence their perceptions of the world.

A scan of the body of literature revealed that the available research on the cultural models of age in the American society are limited in number and scope. Only one study and one conference paper have been found to contain a relatively small sub-section on one particular dimension of cultural models of age (Jensen, 2014, 2015). As for the Egyptian cultural models of age, no studies have been found. For this reason, this study aimed to explore this area in which little is known. This study investigates and compares age-relevant linguistic choices in Egyptian and American discursive behavior in order to gain information on the cultural models of age they indicate.

1.2 **The Research Questions:**

RQ1: What are the age-related force-dynamic schemata that emerge from Egyptian and American web documents?

RQ2: What are the Egyptian and American cultural models of age that emerge from the identified force-dynamic schemata?

- What are the similarities and differences between the identified Egyptian and American cultural models?

1.3 **Delimitations**

The scope of this study focuses on exploring cultural models of age from a force-dynamic perspective that takes into account instances of linguistic behavior that meet either a blocking or letting relation. The study investigates young and old as abstract notions without specifying the ages or age ranges to operationalize these notions. The study also relies on web documents which

are mainly written linguistic behavior as representative of the cultural models of the two cultures under study. To the extent of my knowledge, this is the first study on the age blocking and age letting cultural models of both the Egyptian and American cultures. For that reason, I decided to look into the cultural models of the whole society at this stage, without breaking them down by gender, race or socioeconomic subcultures.

1.4 Description of Constructs

Cultural models: cultural models are norms shared in a community so that they indicate the appropriate behavior, including verbal behavior, in different situations (Schneider, 2012).

Schema: a schema is a cognitive procedure whereby a concept is portrayed in the form of a mental image (Malcolm & Sharifian, 2002).

Force-dynamic analysis: a conceptual cognitive structure of causation that organizes human understanding and hence verbalization of causative physical, social and epistemic events.

1.5 Operational Definitions

Linguistic behavior: naturally occurring written language extracted from web corpora.

Age-related force-dynamic schema: a conceptualization of age as a force that can let or block an action or event as detected through the analysis of the adjunct verbs, connectors and other lexical items collected from the written linguistic behavior of members of the culture.

Age-related force-dynamic cultural model: a categorization of similar or closely related age-related FD schematic representations detected with a minimum frequency of three tokens in the study sample.

Chapter Two: Literature Review

2.1 **Introduction**

Cultural models are widely shared by culture members and play an important role in reasoning about social issues (Coulson, 2006). They are often inferred through the observed linguistic behavior of the members of a culture and have been the interest of a growing body of research in various disciplines (Jensen, 2015). The current study aims to explore the cultural models of age held by the Egyptian and American societies. To do so, the study utilizes cognitive linguistics as an approach, force-dynamics as a framework and web corpora as source of data.

This chapter starts with a brief account on the link between language and cognition. It then proceeds to offer an overview of cognitive linguistics as an approach to language study. An overview of cultural models is then presented and followed with a relatively detailed account of force-dynamics as a framework of analysis.

2.2 **Language and Cognition**

Questions about the relationship between the medium in which we think and the medium in which we speak has led a lot of scholars and researchers to investigate and theorize about the many ways in which language and cognition could be linked together. These theories have relatively recently started to lead the way to more empirical and objective research.

Despite the differences in approaches to answer said questions, basic notions are agreed on. An example of such agreed on logic is that presented by Pederson and Nuyts (1997) establishing that people use language and other forms of behavior to acquire, store and transmit knowledge about the world which they then use for planning, reasoning and problem-solving. Such

types of actions are performed in a rather systematic way in different environments. This means that people must have an internal way in which knowledge about the world is represented.

This internal way is referred to as "conceptualization" and it encompass not only knowledge about the physical world, but also the social and psychological world. However, the question whether human beings have one integrated or two distinct systems of conceptualization responsible for the processing of linguistic and non-linguistic knowledge remains a point of debate among scholars. Two major schools of thought that have contrasting views on conceptualization are generative linguistics and cognitive linguistics. Since Cognitive Linguistics is a relatively new paradigm, particularly to Egypt and the Middle East, as well as being the interest of the current study, the following section provides an overview of the new approach.

2.3   An Overview of Cognitive Linguistics

Cognitive Linguistics is a relatively new paradigm in linguistics (Dirven, 2005), a modern school of linguistic thought and practice (Evans, Bergen, & Zinken, 2007). As an approach to language study, Cognitive Linguistics (CL) is interested in exploring the relationship between language, the mind and socio-physical experience (Evans, 2012). The CL paradigm views language as an integral part of the general human cognition that utilizes the same component cognitive faculties that are applied to other cognitive tasks such as visual perception, reasoning and motor skills. Dirven defines CL as "a linguistic theory which analyzes language in its relation to other cognitive domains and faculties such as bodily and mental experiences, image-schemata, perception, attention, memory, viewing frames, categorization, abstract thought, emotion, reasoning, inferencing, etc." (2005, p. 17).

CL emerged in the 1970s and has been active since the 1980s (*Cambridge Textbooks in Linguistics*, 2004). During the 1970s and early 1980s, CL research was conducted by a small number of scholars in the United States including Charles Fillmore, George Lakoff and Henry Thompson, Ronald Langacker, Eleanor Rosch and Leonard Talmy. Later in the 1980s CL research started to spread in northern continental Europe, particularly in Belgium, Holland and Germany. It was not until the 1990s, however, that CL was established as a broadly grounded movement with a growing number of researchers identifying themselves as cognitive linguists. It took CL a decade to spread from the United States to Europe and another decade for it to start spreading to other parts of the world. A simple Internet search would show that CL is a fairly new approach to language study in Egypt and the Middle East with a rather modest number of published works.

There are three main hypotheses that guide Cognitive Linguistics as an approach to language research and they are: (1) language is not an autonomous cognitive faculty, (2) grammar is conceptualization and (3) knowledge of language emerges from language use. The sections below provide a brief overview of these hypotheses.

2.3.1   Language is not an autonomous cognitive ability

The first hypothesis holds that language is not an autonomous cognitive faculty. This hypothesis emerged as an opposing response to the claim of the "autonomy thesis" of the generative theory. According to that theory, there is a specific organ responsible solely for language use and understanding in the human brain (*Cambridge Textbooks in Linguistics*, 2004; Evans et al., 2007; Gilquin, 2010). The opposing opinion that has led to the formulation of the CL hypothesis is that while there must be an innate faculty for general human cognition, there are not enough grounds to assume that there is also a separate autonomous faculty solely responsible for the human capacity for language. This is based on the view that the fundamental cognitive skills needed to

organize and retrieve knowledge in the mind are the same for all forms of knowledge including the linguistic knowledge. As Croft & Cruse (*Cambridge Textbooks in Linguistics*, 2004, p. 2) explain," the cognitive abilities that we apply to speaking and understanding language are not significantly different from those applied to other cognitive tasks, such as visual perception, reasoning or motor activity". Violi (2003, p. 26) goes on to stress that "[p]erception, action, language cannot anymore be considered as totally autonomous and independent modules, they must become functional specifications in a common unitary configuration". A view that Dirven (2005, p. 17) advances by adding that language, perception and action "are all one in cognition". CL scholars, however, point out that within the unit responsible for the general cognitive skills, the way language perception and production are processed is probably particular to language.

2.3.2 Grammar is conceptualization

The second hypothesis that characterizes CL proposes that grammar is conceptualization. This is based on the claim that grammar is symbolic in nature, that any linguistic construction is made up of both form and meaning (*Cambridge Textbooks in Linguistics*, 2004; Etelämäki & Visapää, 2014; Evans et al., 2007) According to Cognitive Linguistics, the grammar of any language consists of conventionalized form-meaning patterns in the forms of lexemes, morphemes, lexically specified idioms as well as more abstract schematic patterns and conventionalized patterns for constructing sentences that are available for language users. Precisely, CL proposes that the mental grammar consists of a form, a semantic unit, and a symbolic correspondence that relates the two. Thus each symbolic unit, pairing of meaning and form, inherits meaning by invoking and relying on the shared conceptualization patterns of a language community. By choosing a certain lexical or grammatical structure of those available alternatives to express the same situation, the speaker imposes a particular construal on its conceptual content. Linguistic meaning is thus believed to be

rooted in conceptualization, which consists of both conceptual content and a particular way of construing that content. Construal is a technical term in Cognitive Linguistics for the ability to conceive and portray the same situation in a number of different ways, for which Evans (2012, p. 136) provides this technical definition: "the facility whereby the same situation can be linguistically encoded in multiple ways".

2.3.3 Knowledge of language emerges from language use

The third hypothesis is based on the idea that usage events are the source of all linguistic units. In contrast to the assumption that language arises solely from an innate language module, with a domain-specific learning mechanism, CL assumes a domain-general learning mechanism that is highly sensitive to usage and frequency. There is no doubt that there must be some prespecification for language learning, since humans appear to be the only species capable of language (Evans, 2012). The CL approach "explicitly states that cognition is not something located inside an asocial, acontextual skull" (Etelämäki & Visapää, 2014, p. 478). This entails that there is no principled distinction between knowledge of language (linguistic competence) and use of language (linguistic performance), since knowledge of language is knowledge of how language is used. Being a central CL belief, the usage-based hypothesis guides the CL perspective on language variation and language acquisition.

The manifestation of the three hypotheses results in CL having an inherent mental focus, while also being viewed as "social, cultural and contextual linguistics". Langacker (1997) states that a linguistic production would only be meaningful by means of evoking a set of cultural domains, with their content of cultural knowledge, that impose an understanding on the content of said linguistic production. In that sense, the meanings of a linguistic production are conceptualizations for which the conceptualizers are the speaker and the addressee. This supports

the view that language in itself is the creation and reflection of a culture through a mental process that allows us to interact with the world. Accordingly, this mental processing of language should be studied in light of the social and contextual interaction of actual language use. The methodology to do so is discussed in section 2.5, but first a brief outline of cultural models is in order.

2.4   **Cultural Models and Linguistic Behavior**

The lexical, metaphorical and structural choices of people in various cultures have been studied in order to infer their various cultural models. Among the earlier studies is that carried out by Holland and Quinn (1987) on samples of interview data, which resulted in revealing an American cultural model on marriage. Through analyzing metaphoric choices like *work through* and *spend* in reference to a marriage they inferred a cultural model of "MARRIAGE AS A MANUFACTURED PRODUCT" and "MARRIAGE AS AN INVESTMENT".

Following a different frame of analysis, Wierzbicka (1997) relied in her book on breaking key words down into a group of "semantic primitives" that can be universally understood and be used to understand underlying concepts of words to uncover culture-specific concepts. Among the insightful findings is the detection of an Australian cultural model of generosity and friendly spirit from the way Australian males use the word *shout* in discourse.

The early success of such studies in mapping culturally-shared perceptions led to the persistence of studies aimed at detecting cultural models from linguistic behavior. In a more recent study, Fryberg & Markus (2007) examined the cultural models of education among three American subcultures: the American Indian, Asian American and European American university students. They conducted three studies at Stanford University and at the Haskell Indian Nations University. Participants were undergraduate students with numbers ranging between 335 for study one and 118 for the third study. The first study used an open-ended questionnaire designed to assess

students' representations about education and teachers at the time of the study. The second study collected student responses to five vignettes which students read then described how they would behave if they encountered a similar situation. The third study used the Independence/Interdependence Scale to assess the self. They found that a community-oriented cultural model underlies the educational goals and perceptions of the Indian American and the American Asian subcultures while a more individual-oriented cultural model framed those of the American European students.

One study by Bergelson (2014) examined surface representations of certain basic cultural values to draw cultural inferences from isolated pieces of Russian culture information. The study proposed a number of cultural models held by three Russian subcultures in the work environment: west-oriented, traditional and Soviet-style. One cultural model revealed age perceptions of the three sub-cultures in the workplace environment. The first subculture perceives youth as an inexperienced, untrustworthy state while the second group had a cultural model that regarded old people as needing support and worthy of it and the last group shared a cultural model that saw being old as an inconvenient and unfashionable state. These results can inform workplace decisions where one or all of these Russian subcultures interact and a similar study on the Egyptian culture could result in improved workplace dynamics.

Other cultures with different languages were also studied to investigate the underlying conceptualizations that shape their shared cultural models. Among these were studies done on Kwara'ae in the Soloman Islands (Watson-Gegeo & Gegeo, 1999), Portuguese in Brazil (Pennesi, 2013), and Tongan in Tonga and Hawaii (Ofahengaue Vakalahi et al., 2008). However, it seems that only a limited number of similar studies were conducted to explore shared conceptualizations in Middle Eastern languages and the cultures they represent. One such study is that carried out by

Sharifian and Jamarani examining the Persian expression *sharmandegi*, which is literally translated into '*I am ashamed*' and how Persian speakers utilize it to achieve a number of speech acts that range from expressing gratitude, to sympathy to requesting goods and services.

2.5 Methodology in Cognitive Linguistics

The studies mentioned in the previous section represent how methodology in Cognitive Linguistics has developed. Methodology is an issue that has often been criticized in CL for lacking a clear set of methodological decision principles. This led a number of practicing cognitive linguists to investigate and report on alternative methods and their implementation in CL research (Evans et al., 2007; Gilquin, 2010; Evans, 2012). First, let us take a look at the methodologies used in the studies mentioned above.

For their study, Holland and Quinn (1987) relied on metaphor analysis. It is a method that has amassed both praise and criticism. It started in 1980 with Lakoff and Johnson's book*, Metaphors We Live By* and was developed later into what became known as Critical Metaphor Analysis (Goatly, 2007). It is important to note that the metaphors that are studied using this method are conceptual metaphors not literary ones. Conceptual metaphors are viewed as patterns or themes that facilitate learning new concepts by means of previously established ones by means of conceptual mappings between concrete source domains and abstract target domains (Amin, Jeppsson, Haglund, & Strömdahl, 2012). To illustrate, Lakoff and Johnson (1980) referred to sentences like "Your claims are indefensible," "He attacked every weak point in my argument," and "If you use that [reasoning] strategy, he'll wipe you out" to reflect a systematic pattern of conceptual mappings where an understanding of argument is structured in terms of our understanding of physical conflict. They called this the Argument Is War conceptual metaphor.

The study of critical metaphor analysis (CMA) seeks to discover those themes and patterns in the vocabulary and grammar of a language and explain how they represent and shape the ideologies and social practices of a community.

The major criticism directed at CMA is a criticism of its methodology, which appears to be largely speculative and lacking in scientific rigor. It is thought that CMA does not follow a testable system that offers a means by which it can be falsified (Evans et al., 2007). Another criticism ventures that the existence of conceptual metaphors in the discourse of individuals might be a mere reflection of a historical linguistic pattern that current speakers are not aware of as a metaphoric extension and has no bearing on how the brain processes them (Amin et al., 2012).

On the other hand, Wierzbicka (1997) used her own method for the study mentioned above. In support of her theory of the existence of a Natural Semantic Metalanguage (NSM), Wierzbicka isolates a set of semantic conceptual primes that combine into more complex concepts. These semantic primes are assumed to be innate and intuitively clear. They are arranged in a list that has grown over the years with Wierzbicka's research from 14 primes in 1972 to 63 in 2010 that are grouped in categories such as action and events (e.g. *do*, *happen*, *move*), time (e.g. *now*, *before*, *after*, *for some time*) and logical concepts (e.g. *not*, *maybe*, *can*, *because*, *if*) to name a few (Blumczyński, 2013). NSM claims that exclusively using the semantic primes, the complete meaning of a complex expression can be expressed in reductive phrases which Wierzbicka calls "explications".

A positive evaluation of the theory and method acknowledges that it is one of the few that have considered a number of languages from the start, as opposed to starting with monolingual analysis and claiming findings would equally apply to other languages. However, criticism is aimed at the assumption that the concepts that make up the semantic primes can be used to explain

any complex semantic expression while they themselves are indefinable. NSM has also been criticized for the assumption that there is a finite number of universal terms that represent the simplest possible elements of explanation (Riemer, 2006).

While both methods have been developed over the years and are still used as frames of analysis in semantics and cognitive linguistics, other methods and frameworks of analysis have also been adopted for the purposes of CL analysis that offer well-established criteria and analytic frameworks for the purposes of CL research. One such framework is the force-dynamics system developed by Talmy in 1988. Section 2.7 explains the system of force-dynamics in some detail and offer some examples of its adoption as a framework of analysis in linguistic studies. However, a note on the incorporation of corpus data and methodology into cognitive linguistics is first provided in the following section.

2.6 **Corpus and Cognitive Linguistics**

Several researchers have noted that until recently the use of corpus data and methodology in cognitive linguistic research has been rare (Evans et al., 2007; Grondelaers, Geeraerts, & Speelman, 2007; Gilquin, 2010; Jensen, 2015). This is understandable seeing as many scholars believe that the two paradigms have different objects of inquiry. Gilquin (2010) reports on the views expressed by some scholars during the 26th ICAME conference, arguing that corpus linguistics looks into language use by detecting categories from data and cognitive linguistics looks into language cognition by hypothesizing categories beforehand, which makes the integration of the two paradigms not possible. However, several researchers have a different view; they see the integration of corpus data and methodology into cognitive linguistic research a chance to overcome the criticism directed at cognitive linguistics as a purely theoretical approach to language (Dirven, 2005; Evans et al., 2007; Gilquin, 2010). Hampe (2005) argued that the methodology of the two

paradigms are actually compatible. Grondelaers et al. (2007) even add that the fact that Cognitive Linguistics is usage-based approach with a variational perspective to language are "compelling reasons anyway for Cognitive Linguistics to embrace corpus research" (2007, p. 149). This is similar to Dirven's (2005) view on the process of usage-data collection requiring turning to the methods of corpus linguistics. Such views have led to the gradual incorporation of corpus research in Cognitive Linguistics which is still permeated by studies aiming at proving that corpus data and method can contribute positively to Cognitive Linguistics research (Jensen, 2015). In her book, Gilquin argued that both paradigms, cognitive linguistics and corpus linguistics, benefit from being integrated, leading to what can be called "computer-aided armchair linguistics" (Gilquin, 2010, p. 11) and proceeded to demonstrate three possible scenarios for such integration.

Adopting a corpus-based approach in a cognitive linguistics study can follow a top-down approach, a bottom-up approach or a combination of both. The top-down approach, also called a corpus-driven approach, is inductive in nature. It is useful for investigating data and gaining new insights into language then finding support for the findings in theory. However, the extreme cases of it are criticized for following a numbers crunching approach to language study. The bottom-up approach on the other hand, is deductive in nature. It starts with theory and uses the authentic corpus data to test it, hence the name 'corpus-tested approach'. This approach gives empirical evidence to the endeavors of cognitive linguistic studies in verifying, falsifying or exemplifying the hypotheses they set out to investigate. Finally, a combination of both approaches could be combined for the most comprehensive and sophisticated results.

2.7   Force-Dynamics

Force-dynamics is a schematic system concerned with the linguistic representation of force interactions and causal relations occurring between certain entities. The concept of causation is

one aspect of conceptualization that has received considerable interest. According to Lakoff and Johnson (1980) causation is one of the concepts people use most often to organize their physical and cultural knowledge of the world. For a long time, it was perceived as an "undecomposable primitive" (Lakoff & Johnson, 1980, p. 69). According to Lee (1998), one of the early attempts to break down the concept of cause was suggested by Shibatani in 1973 when he distinguished between two causative cases: the 'onset causing of action' and the 'extended causing of action' and labeled them ballistic and controlled causation respectively. However, it was not until Talmy (1988) introduced force-dynamics analysis that other cases were accounted for.

One of the founding figures of CL, Leonard Talmy (Talmy, 1988, 2000) thoroughly explored the ways in which events requires force. He discovered that while many event conceptualizations are neutral with regard to force (as would be the case in the conceptualizations "the door is closed" and "the ball is rolling"), others are expressed in terms of how entities interact with respect to force (as in "the door cannot be opened" and in "the ball kept rolling"). As a result, he founded the force-dynamics approach which conceptualizes causation in terms of patterns of forces (Morera, De Vega, & Camacho, 2010).

Talmy (1988, 2000) defines force dynamics as a basic schema referring to the implicit forces operating among the events in a scene, which plays a semantic role in certain grammatical structures (1988). In a force-dynamic scene, two entities are distinguished; one entity is the center of attention, while the second is considered in terms of its effect on the first. In their interaction, the focal entity may be able to manifest its force tendency, or it may be overcome. Talmy (1988, 2000) refers to the two entities as Agonist (AGO), the affected entity which is also the focal entity and Antagonist (ANT); the affecting entity. The terms are based on the model of opposing muscle pairs in physiology (Talmy, 2000, p. 413).

In Talmy's schematic representation, both agonist and antagonist have an intrinsic force tendency to them. They can be at rest or in motion. At any given moment, there is a balance of strength in which one entity is stronger and the other weaker, or both equal. The result from this FD interaction is either a directional movement or stasis. For example, in the sentence "the door cannot open" we think of the door as having an intrinsic tendency towards motion, while the antagonist is stronger, which results in stasis, rather than motion.

It should be noted though, that Talmy never uses the term image schema, but treats force dynamics as schematic systems that emerge from the structure and shape of sensory-motor experiences. He further regards these schematic systems as topological, and it is this view, which is consistent with the definition of image schema that led Johnson (1987) to identify force-dynamics conceptual gestalts as image schemata. Image schemata are defined as patterned, embodied interactions that are at once structural, qualitative, and dynamic and the process of schematization is defined as a process of abstraction (Langacker, 1997). Mandler (2007, p. 81) provides another useful definition of image schema as "a representation one is left with when one has forgotten most of the details of an event". Image-schematic patterns of force are a basic conceptual system of language. Without it, human beings would not be able to express complex relationships and reason about relations and events. According to Talmy (2000, p. 209), the FD system is a "fundamental semantic category that allows us to think and talk about events and relations in the physical domain as well as in the epistemic and social domains". This emphasizes that FD patterns constitute an important part of individual and social perspectives, thoughts and beliefs and that investigating those patterns can act as a lens on the individual and collective minds that make up a culture.

2.7.1 Patterns of force-dynamics

Talmy (2000, p. 413) establishes four "basic steady-state force-dynamic patterns" depending on the configuration of four groups of factors with two members in each. Bratishenko (2011, p. 294) summarized those groups of factors in table format as follows:

Table 1. Groups of factors in basic-state force dynamic patterns

Force entities	Intrinsic force tendency:
Agonist/Antagonist	Towards action/towards rest

Resultant of the force interaction:	Balance of strengths:
Action/rest	Stronger entity/weaker entity

The simplest case of force dynamics relates to the force relation that occurs between two interacting entities: the AGO and the ANT. Both have an intrinsic force, which is a tendency for either rest or motion. When the AGO and the ANT interact with opposite forces, the force relation between the two entities is called *resistance*; while if the agonist's and antagonist's forces apply in the same direction, the force relation is called *increment*. The result of the force interaction depends on the balance of strengths. These force relations are further broken down into a number of patterns:

- The *Causative* pattern: when a weaker AGO with a tendency toward rest is forced by a stronger ANT, resulting in motion or action.

- The *Weak Despite* pattern, with the stronger AGO showing a tendency toward stasis. The weaker ANT exerts force against the AGO unsuccessfully, resulting in stasis or inaction.

- The *Strong Despite* pattern, with the stronger AGO showing a tendency toward motion that is faced with a weaker resistance of the ANT, resulting in motion or action. In this pattern, the ANT fails to block AGO.

- The *Causative Hindrance* pattern, with the weaker AGO showing a tendency toward motion is faced with a stronger ANT, resulting in stasis or inaction. This pattern is termed by Johnson (1987, pp. 45–46) BLOCKAGE image schema.

In addition to the basic steady-state patterns, Talmy (2000) identifies secondary steady-state, shift-in-state and shift in balance of strength sets of patterns. The secondary steady-state patterns construe force-dynamic situations in which the ANT remains disengaged from impingement with a weaker AGO, thus allowing the AGO to realize its intrinsic force tendency, and this holds true over an extended period of time. Talmy calls these patterns *Extended Letting* of either motion or rest. *Extended letting* cases involve non-intervention; i.e. it happens when intervention does not occur. On the other hand, the *Onset of Letting or blocking,* are shift-in-state patterns that refer to situations when an intervention is stopped or started, and the shift in balance of strength are cases when are engaged in impingement and one entity becomes weaker or stronger, thus shifting the balance of forces involved.

To illustrate these force-dynamic image schemata, Talmy developed diagrams using a set of special signs to portray the force dynamics expressed in words and phrases, see Figure 1.

a. **Force entities**

Agonist (Ago):

Antagonist (Ant):

b. **Intrinsic force tendency**

toward action: >

toward rest: ●

c. **Balance of strenghts**

stronger entity: +

weaker entity: —

d. **Resultant**

action:

rest:
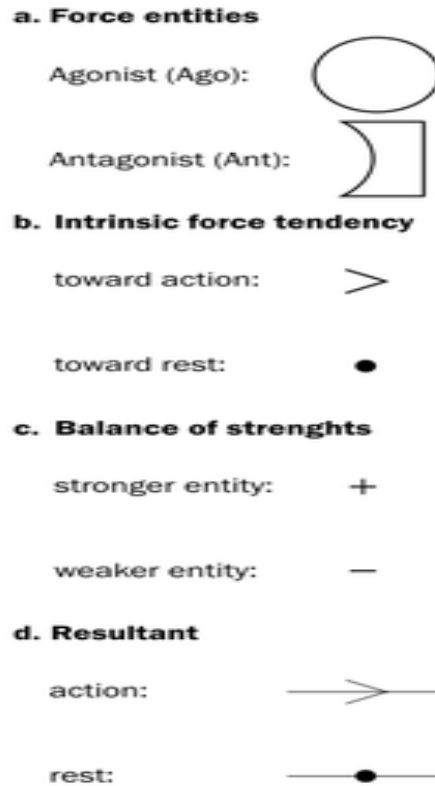
Figure 1. Talmy's set of symbols for force-dynamics diagrams

2.7.2 Force-dynamics as a framework of analysis

Talmy's FD system is characterized with its ability to offer precise analytic procedures for analyzing the semantics of linguistic constructions. His system, therefore, offers a method of understanding the lexical and grammatical aspects of meaning construction. This has led to a number of studies utilizing force-dynamics as a framework for analysis looking into a vast array of linguistic interests including, but not limited to, dimensions of rhetorical effect (Oakley, 2005); revealing character-related dynamics in literature (Kimmel, 2011) and adding tools for the Critical Discourse Analysis of immigration discourse (Hart, 2011).

In addition to the numerous and varied research utilizing the framework to investigate aspects of the English language, the framework has often been successfully utilized for the

linguistic analysis of causation in languages other than English as well. One such study is the dissertation applying force-dynamics to account for the different semantic categories represented in the Korean periphrastic causative construction (Lee, 1998). Among its findings, the study reported that the concept of *causing* was found to only be expressed by nuclear cosubordination, while other core coordination forms express the patterns of *letting* and *preventing*. The study concludes that force-dynamics is an appropriate tool to sort out different concepts expressed by the Korean periphrastic causative construction.

Another, more recent, study by Ibarretxe-Antunano et al. (2016) examined the role of force dynamics and intentionality in the description of placement events by native speakers of Danish and Spanish as opposed to those by learners of both languages. Participants were 10 native speakers of Spanish, 14 native speakers of Danish, 14 adult Danish learners of L2 Spanish and 14 adult Spanish learners of L2 Danish. All L2 learners were functional monolinguals as they were not studying English or any other L2 at the time of data collection and the languages that they used in their daily lives were Danish and Spanish. Their level of proficiency was also in between B1 and B2 according to the Common European Framework of Reference (CEFR).

Data was collected with the stimuli of the PUT task, designed at the Max Planck Institute for Psycholinguistics in Nijmegen, The Netherlands. This study focused only on a subset of placement events (8 videos). This subset of videos was selected to investigate the role of force-dynamics and intentionality in the description and acquisition of placement events. The difference between intentional and accidental placement events was taken into consideration in the design of these video stimuli.

The results of the study showed that force dynamics and intentionality are important semantic components in both languages, but their distribution and relative focus differed cross-

linguistically. Consequently, the two learner groups had difficulties in reconstructing the meanings of the L2 verbs involving these two semantic components. Learning difficulties were observed in all contexts: when moving from a less to a more complex L2 system, when moving in the opposite direction and when moving to an L2 system that is as complex as the learners native one.

2.7.3   Force-dynamics and the study of social and cultural causative events

Talmy (1988) proposed that the Force dynamics system can be extended from the physical domain to the social domain (e.g., "She urged him to leave"). A study by Wolff (2007) set out to support this hypothesis, among other hypotheses relating to the force-dynamics system. The study, in total, constituted of six experiments, all of them utilizing specially designed 3D animations of realistically rendered objects.

While the first five experiments looked into physical and intentional force relationships, experiment six addressed the question whether the force-dynamics system can account for the representation of social causation. Participants, 20 native speakers of English undergraduate university students were presented with animations for situations in which all of the forces were non-physical. The affector force was indicated by the pointing gestures of a police officer and the patient force, by the gestures of a woman.

In some animations, the intentions of the police officer and the woman were in conflict, while in other animations, they were in concordance. In certain animations, the woman went where she wanted to go, while in other animations she did not. In total, ten 3D animations were constructed, two each instantiating *Cause*, *Enable*, *Prevent*, *Despite*, and *Unspecified* configurations. These were presented in random order and after each animation, participants chose a sentence that best described the occurrence. Three of the choices were based on the exact same sentence *(The officer _____ the woman to[from] walk[ing] up to the man),* except for the main verb

which was either *caused*, *enabled*, or *prevented*. The *Despite* option was the sentence *(The woman walked to the man despite the officer).* The last option was none of the above. The results included that a force-dynamics system extends to the representation of social causation.

With empirical evidence now available to ascertain the suitability of the force-dynamics framework for the study of social causation, Jensen (2015) relied on it in his study which primarily aimed to explore whether corpora as a source of natural occurrences of language can be used as data and method to study cultural models. Jensen (2015) used covarying collexeme analysis to come up with a list of the verbs that co-attract the most to the construction [*too* Adj *to*]. Using covarying collexemes to analyze a structure is a measure of the strength of attraction between pairs of lexemes within the structure analyzed. These measures are ranked to indicate the highest coattracted lexical items in the structure. So in Jensen's study the coattraction between adjective and verb elements in the [*too* Adj *to*] construction resulted in a table of the fifty highest lexeme relations for this structure. Number one on the list were the adjective and verb (*early, tell)* while *(young, remember)* and *(young, understand)* ranked fifth and seventh respectively. He then relied on the principle of semantic coherence, which he explains in Stefanowitsch & Gries (2005) words; "since a word in any slot of a construction must be compatible with the semantics provided by the construction for that slot, there should be an overall coherence among all slots" to draw a hypothesis from the small number of results that suggests the existence of a force-dynamic cultural model in the American culture that perceives young age as a force blocking intellectual aptitude. The study uses data from the Corpus of Contemporary American English (COCA) that is as recent as 2012 and focuses only on one blocking pattern of force-dynamic schema. The study also has a primary focus on the verbs in the mentioned structure and only in a small subsection looks at a few examples of young and old age blocking instances in context. Since some of the sentences included

an element of negation that cannot be detected from the verb alone, the results may better be verified with deeper analysis to ensure their accuracy. Thus a more in-depth study can provide results on age-related American cultural models pertaining to both young and old age in blocking and letting schemata.

In their article published in the 2007 issue of *Social Psychology of Education*, Fryberg and Markus state that at the time "no standard methodology exists for assessing cultural models". On the other hand, Talmy (2000) advocates the ability to analyze individual action tendencies, interactions themselves, and interaction results using the force-dynamics system as a framework for analyzing causative relations. For those reasons it is the intention of the current study to utilize the force-dynamics system in investigating the apparently under-researched area of causative cultural models of age held by the Egyptian and American societies.

2.8   Conclusion

As seen from the literature reviewed above, cognitive linguistics is a new approach to language research with the potential to add significantly to the current body of knowledge. Researchers in that field, in recent years "have found evidence for a number of phenomena whose relevance is not restricted to language (like Talmy's force dynamics, 1988, and Lakoff's image schemas)" (Grondelaers et al., 2007, p. 160).

However cognitive linguistics has only recently started adopting rigorous empirical methodology in its studies. One CL theoretical framework for analysis with inherent analytical capacity is Talmy's force dynamics. Also, as CL researchers are discovering, integrating corpus research in CL studies adds to the reliability of the findings and confirms CL's usage-based approach to language. Thereby, this study focuses on explaining the force dynamic schematic patterns pertaining to age and explores the propositions that feature in such schematic patterns as

uncovered by Egyptian and American discursive behavior on web documents. The study also examines which of these FD schemata constitute cultural models of the cultures under study and draws some comparisons between them.

To the best of my knowledge, there are no published studies on the Egyptian FD cultural models of age and only one study, Jensen (2015), that only mentions age blocking FD cultural models of the American culture in one of its subsections. No studies examine the letting patterns of FD cultural models of age in the American culture.

Chapter Three: Methodology

3.1   Introduction

The aim of this study was to explore Egyptian and American force-dynamic cultural models of age. To infer these cultural models two research questions were asked, the first focused on employing the force-dynamics framework to detect age-related schemata in Egyptian and American web corpora. The second question drew on the results of the first to identify the widely-spread cultural models of age of both cultures and how they compare. This chapter explains the research design, the search tokens and sample used to address the research questions and the data analysis technique used to reach the results.

3.2   Research Design

The study follows a descriptive qualitative research design to investigate linguistic tokens collected directly and indirectly from web documents. Since there is limited research on FD age-related cultural models in the two cultures subject of this study, a qualitative study is a good start to help identify, infer and understand the existence of such cultural models that can then be further studied on a broader scale.

3.3   Sources of Data

In order to keep the integrity of this study as a cognitive linguistics study, the field's nature as a "usage-based form of linguistic research" (Grondelaers et al., 2007, p. 149) was decided to be observed by utilizing corpora as a source of spontaneous, non-elicited language data.

Despite the fact that the majority of the available corpora are corpora of English (De Schryver, 2002), there are a few well-established corpora of Arabic readily available. Two of these corpora, namely Arabicorpus (http://arabicorpus.byu.edu/) and the International Corpus of Arabic

(http://www.bibalex.org/ica/en/About.aspx) were consulted and probe searches were carried out. This revealed that although it was easy to identify instances from Egypt from instances from other Arabic speaking nations, both corpora only presented material written in Modern Standard Arabic. This led to insufficient results from both corpora for the purpose of the study with no representation of the everyday register of the Egyptian Colloquial Arabic. For those reasons, it was decided to adopt a Web-as-Corpus approach in collecting the Arabic data in order to reach a representative sample.

Web-as-Corpus is a rather recent resource, one that is both wide-spread and controversial. It is a controversial resource because it pushed the boundaries of what a corpus could be (Gatto, 2011). On the other hand, it is a wide-spread resource because increasing numbers of linguists and technologists are turning to the web as a source of linguistic data "because it is so big, because it is the only available source for the type of language they are interested in, or simply because it is free and instantly available" (Kilgarriff & Grefenstette, 2003, p. 1). Thus, Kilgarriff and Grefenstette (2003) settle the controversy by stating that the answer to the question "is the web a corpus?" is yes (2003, p. 2)" and consequently, Web-as-Corpus is believed to be the best source for the Arabic (Egyptian) data for the purposes of this study.

The Web-as-Corpus resource was adopted in its simplest form, i.e. instead of downloading and saving material from the web to compile an ad-hoc corpus, the whole of the web was treated as a corpus and the search engine Google as the concordancer tool used to retrieve instances with the phrases relevant to this study.

To ensure relevance of the results, the query strategies needed to involve a measure to correctly associate and limit results with sources from Egypt. To do so, the study adopted the same

query strategy utilized by Brigham Young University in compiling the web-based GLOWBE corpus (http://corpus.byu.edu/glowbe/). All search queries were carried out through the [Google Advanced] functionality with *Egypt* specified in the field limiting results by [Region]. Davies and Fuchs (2015) explain and evaluate this parameter as follows:

> "The question, of course, is how well Google has correctly identified web sites by country. For web sites with a top-level country domain (".LK" = Sri Lanka, ".SG" = Singapore, etc.) this is quite straightforward for Google. But in the case of ".com" and ".org" web sites, for example, it is much more difficult. In these cases, Google relies on several heuristics, including 1) the IP address for the web server, 2) who links to that website, and 3) who visits the website…This approach may not be perfect, but it is very good…we have yet to find a single website whose country has not been correctly identified by Google." (Davies & Fuchs, 2015, pp. 4–5)

With the Arabic (Egyptian) data collected from current, authentic web documents, the English (American) data needed to be collected from an equally current, authentic and comparable source. Fortunately, there is a readily available structured corpus built from web documents, with an easy to search architecture and interface; the corpus of Global Web-based English (GLOWBE).

GLOWBE was released by Mark Davies at Brigham Young University in April 2013. Built primarily for English dialect studies, the corpus has 1.9 billion words from 20 English-speaking countries. Considering that the creators of GLOWBE acknowledge it as a useful tool to "provide cultural insights" (Davies & Fuchs, 2015, p. 24), it meets the criteria of being current, authentic and comparable and is thus chosen as the source of data for the English sample.

The English Language sample is collected from the United States section of GLOWBE. This section consists of 386,809,355 words that are derived from sources that are as diverse as the web itself.

3.4   **Sample Compilation**

This study used purposive samples. To help identify the force-dynamic cultural models of age, instances of particular Arabic and English tokens were collected and analyzed. The instances of force-dynamic schemata relevant to this study are those exploring the types of propositions that function as an AGO either let or blocked by the strong ANT: age. Instances with a negated schema were judged according to the context, i.e. if the instance constituted an advice not to follow a blocking schema, it was counted as a blocking schema and a note provided on the meaning of the negation where significant.

The regular span of the concordance lines on GLOWBE and snippets on Google was treated as the standard span of tokens included in the samples. Examples are reproduced verbatim from the web corpora: the italics, quote, bold type or typos in these examples appear as in the original text. Following the example of Holland and Quinn (1987), the schematic relations that make up the cultural models were expressed using all-capitals text. Finally, I followed the functional pragmatic approach to translation while rendering the Arabic tokens included in the study into English, which means that no gloss or word-for-word translation was offered, but just a pragmatic translation of the import of the construction.

3.4.1   Search terms

To reach the proper samples, search markers needed to be identified. According to Wolff and Song (2003), among the lexical structures that can be used to express a causative relation are Overt Causatives. This is a group of verbs that appear to encode the concepts of *let* and *block*. Semantically, Overt Causatives encode a broad construal of the notion of causation implying the occurrence of a result in the case of *let* construals, or the non-occurrence of change of state in block construals. In their study, Wolff and Song (2003) identify 49 Overt Causatives. To test the

suitability of these verbs as search markers to locate an adequate pool of representative tokens, a probe collocations search on GLOWBE was carried out specifying *old* as the node word and looking for verbs within the range of three words after the node. The results included only five of the Overt Causatives, namely *have*, *make*, *get*, *let* and *start*. By checking the contexts for the verb *have*, it was found to mostly be used as an auxiliary for verbs in the perfect tenses and thus inapplicable for the purposes of the current study. Checking the context entries for the verb *make*, resulted in a few instances representing a causative relation, all of which were part of the structures *too old to make* or *old enough to make*. Following this lead, GLOWBE was searched for the structures *too old to* and *old enough to*. Almost all of the results represented a causative relation with verbs that are significantly more suitable for the exploration of the sociodynamics of age than that presented by Wolff and Song. The fact that Jensen (2014, 2015) successfully used the structure of [too Adj to V] to investigate blockage FD cultural models, gave further confidence in the findings of the probe searches. As a result, the expressions: *too young to*, *too old to*, *young enough to* and *old enough to* were utilized as search terms for the compilation of the English sample. A semi-automatic approach to utilizing the corpus was then used. After running searches to automatically retrieve pools of data that feature the query terms, a manual sorting process followed to identify the instances that met the filtering criteria discussed hereinafter to be included in the final study sample.

In order to collect the Arabic sample, the search started by using the Arabic equivalents of the expressions that proved most efficient for the English data collection. It is noted that the words for *young* and *old* in Arabic, "صغير" [saġi:r] and "كبير" [kabi:r] have a considerably broader semantic field that also encompasses the meanings of *big* and *small*. For that reason, the searches were qualified with the equivalent words for *age* "سن" [sin] and "عمر" ['omr] so that the search

queries were variations of "سنه صغير على" and "عمره كبير على", while keeping the [Region] parameters as specified hereinabove. This resulted in a fairly small sample size.

To increase the size of the Arabic sample, the Wolff and Song (2003) list of verbs was used as a guide in an attempt to reach the equivalent Arabic Overt Causatives, by testing them out using probe searches. They proved to be a more efficient instrument for the collection of the Arabic sample, subject to using both the Modern Standard Arabic and the Egyptian Colloquial Arabic equivalents. The final list of search terms included the Arabic equivalents for the word *age*, "سن" [sin] or "عمر" ['omr] in addition to the different pronoun and verb inflections of the following verbs.

1-   يسمح   [yasmaḥ]   (let, allow, permit)

2-   يمنع   [yamnaʕ]   (prevent, prohibit, block)

3-   يساعد   [yusaʕed]   (help, enable)

4-   يعطي   [yuʕti]   (give)

5-   يؤثر   [yuʔather]   (influence)

6-   يجعل   [yagʕal]   (make)

7-   يجبر   [yugber]   (force)

8-   يتسبب   [yatasabab]   (cause)

9-   يخلي   [yexali]   (cause, let, allow, enable)

The resultant Arabic sample consisted primarily of one of the Arabic words for age, "سن" [sin] or "عمر" ['omr] with an Overt Causative and a few instances of the Arabic equivalents for *too old to*, *too young to,* and the English sample consisted primarily of tokens with the structures *too young to*, *too old to*, *young enough to* and *old enough to* and a few instances of either of the words *age*, *young* or *old* with one of the Overt Causatives.

3.4.2   Excluded tokens

In order to ensure the tokens included in both samples represent a culturally shared schema, two filters were applied before deciding on the final set to be included in the samples. The first filter excludes instances where the FD relation between age and the activity mentioned in the token is regulated by law, for example voting, driving, drinking, getting married or retiring and the second filter excludes those where the FD relation reflected an age-related physical ability, for example the ability to carry something heavy or the age-related stages of physical development or decline.

3.5   **Data Analysis**

This study targeted two specific concepts, the concept of letting and that of blocking as represented in Talmy's (2000) force dynamics of causation and summarized above. The FD relationships revealed underwent a two-step classification process. The first step categorized the tokens into one of the four categories: young age blocking, young age letting, old age blocking and old age letting, resulting in the division of each of the Egyptian and American samples into four sub-sections. The second step was sorting the tokens according to the schemata they revealed and grouping same or similar tokens as indicative of a broader proposition, in order to determine which ones are shared cultural models by means of salience.

Since the smallest sub-section in the study is the Egyptian, Young Age Letting sub-section with 28 instances, each instance represents 3.57% of the sub-section. For that reason, I decided that relying on percentages alone to determine which schemata are Cultural Models held by the Egyptian and American cultures has the potential to lead to non-evidence-based generalizations. Therefore, it was decided to rely on counts of frequencies, taking into consideration the sizes of all the sub-sections. A schema repeated three instances or above was considered a FD cultural

model. Comparisons between the Egyptian and American cultural models revealed by each sub-section were drawn where relevant.

It is worth reminding the reader that it was beyond the scope of this study to analyze age specifications, which were not always present in the concordance lines. This, in fact, is in line with the purpose of this study which did not aim to identify the age brackets at which a person is generally considered young, middle-aged, or old according to the societies under study. Rather, the aim is to identify the domains for which age acts as a force that allows or blocks, i.e. it was not *old* or *young* being explored; it was the propositions that featured in *old enough to, young enough to, too old to* and *too young to*. This abstract view of age is believed render better insight on the age-related cultural models of the societies under study since at any day of a person's life they are considered by community members to be at one and the same time too old for certain propositions (e.g. playing with a toy), old enough for other propositions (e.g. advancing into senior management), young enough for a different group of propositions (e.g. commute by bike) and too young for another set of propositions (e.g. retiring). Therefore, it is not a particular number, but a degree of oldness or youngness that is specified by the proposition being discussed. In her book, Woodward (1991) identifies four elements to age: chronological age (how many years old a person is), biological age (a person's physical state of health), subjective age (how age affects the way a person sees themselves) and social age (how age affects the way people see a person). According to Fryberg and Markus (2007), cultural models are "fostered by individual interpretive frameworks or schemas - ways of feeling, thinking, and acting - and are also incorporated in and reinforced by publicly available forms, such as policies, practices, symbols, and social situations." (p. 215), so it can be said that this study explores the propositions that contribute to shaping the elements of subjective and social age in the cultures under study.

Chapter Four: Analysis

4.1   Introduction

This study utilized web corpora as a source of authentic linguistic data and cognitive linguistics as the theoretical framework to examine the FD cultural models of age in the Egyptian and American cultures. It posed two research questions: the first was about the age-related FD schemata in the Egyptian and American web documents. The second question was about the FD cultural models revealed through the schemata and the similarities and differences among the identified FD cultural models of age in the Egyptian and American cultures.

In this chapter, the examples of focus are those revealing patterns of force-dynamic schemata pertaining to age as well as the models that such patterns uncover.

This chapter starts by explaining the patterns of FD schemata covered in the study by portraying and analyzing examples from the Arabic (Egyptian) and English (American) samples, thus showing the different propositions that pertain to age FD schemata. With an understanding of the variety of FD age propositions featured in Egyptian and American web documents, the chapter proceeds with a frequency count of the coding of these propositions to reveal which ones constitute the Egyptian and American FD cultural models of age. Significant comparisons are drawn under the relevant subsections.

4.2   Basic Steady-State BLOCKING Schemata

This section examines the hindrance pattern schemata, also called the *Prevent* types of causal relations (Morera et al., 2010; Wolff & Song, 2003). In the current context, this pattern triggers a schema where YOUNG is a strong antagonist (ANT) with an intrinsic tendency toward stasis that

blocks a weak agonist (AGO) from realizing its intrinsic tendency toward motion. Figure (2) illustrates this force-dynamic schema.
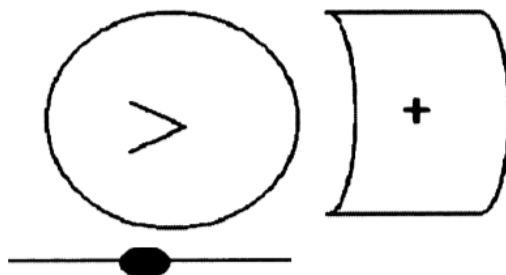
Figure 2. Basic steady-state BLOCKING schema *(Talmy, 2000, p. 415)*

As seen in Figure 2, the AGO has a tendency toward motion, which is shown by the use of the arrowhead symbol placed within the AGO's circle. The AGO interacts with an ANT with their relative balance of strength lying with the ANT as shown by the plus sign placed in the stronger entity. This interaction results in the stronger ANT blocking the AGO with the final state being one of rest as diagramed by the dot on the resultant line beneath the AGO.

It is worth reminding the reader that this, and other FD schemata extend into the interpersonal or social domain by means of metaphoric extension (Talmy, 2000).

4.2.1   Young age blocking schemata in Egyptian Arabic

In each culture, there are certain types of activities, behaviors and dispositions that would be considered appropriate for an age range and inappropriate for others (Jensen, 2014). The following examples depict some of the issues for which *youngness* would act as a blocking force.

(1)   سنك صغير قوى ان يجيلك مطلق وهو كمان سنه صغير على الطلاق بصى اقعدى معاه يمكن
ترتاحى ليه وبردو تسألوا عنه

'You're too young to be proposed to by a divorcee and he is too young to be a divorcee'

(2) .. خاين وماجور او جاهل ومضحوك عليه وبيستعملوه لمصالح خاصة بيهم <u>سنه صغير</u> <u>على استيعاب ما يحدث حوله</u> وللاسف شانة معظم الشباب وليث كلهم بالطبع ...

'..a hired traitor or an exploited ignorant and they use him for their own benefits, being young prevents him from comprehending what is going on around him. Unfortunately, it's the same for the majority of the youth, not all of them of course…'

(3) ياسمينا عن هجوم أحلام: أنا <u>أصغر من أن أرد عليها</u>. أكدت المطربة المصرية الشابة ياسمينا المشتركة في برنامج اكتشاف المواهب الغنائية "arabs got talent" أنها ..

'Yasmina on Ahlam's slander: I am too young to retort to her.'

(4) اخويا الصغير ممنوش رجا او لسه <u>صغير علي تحمل المسؤلية</u> هو عنده ٢٤ سنة وفاتح محل بتانا بس المحل مش بيجيب ايراد اد كدة

'My younger brother is useless, or you could say he is still too young to bear the responsibility. He is 24 and has a shop that brings in paltry'

(5) .. ان <u>صغر سنك يجبرك انك تخدى ر اى حد كبير وتعملى بيه</u> وبلاش تفكرى بارومانسيه زايد\\ه وبعدين الارتباط الرسمى هيخليكى تعرفى ازاى تحلوا مشاكلكم او تكتشفى ...

'Your young age compels you to take the opinion of someone old and follow it and don't think too romantically….'

(6) عندك حق يمكن <u>صغر سنها مخليها مش واز</u>نه الامور صح ويبختك بخطيبك دة يا محتاره حافظى عليه وخدى بالنصيحة. رد قراءة نسخ المشاركة ٠.

'You're right, maybe her young age is not letting her judge things right. You are lucky to have your fiancé Mehtara, keep him and take the advice'

(7) .ومتزعليش منى انتى فعلا ممكن يكون <u>صغر سنك مخليكى مش بتعدي</u> وواقفه للراجل ع الوحدة وكل كلمة يقولها تردى بعشرة والامور تتصاعد ما بينكم

'I'm sorry to tell you that, but maybe your young age is not letting you skip past the trivial matters and you get steamed up about everything. You retort tenfold to everything he says and things escalate'

(8) <u>عمرك صغير على تفكيرك</u> في شكل صناعة السينما والدراما <u>ومحاولاتك</u> الإنتاجية في كلتا الصناعتين؟ بدأت وأنا عمري ١٧ عاماً، ودرست business ..

'You are too young for your thoughts on the movie and drama industries and your production work in both fields? I started when I was 17 and I studied business…'

(9)   اولا انت كلمتني علي الاميل و قلت ان عندك ١٣ سنه و لما قلتلي انك عايز تكون مشرف قلتلك
١٣ سنه <u>صغير علي الموضوع ده</u> (مع احترامي ليك) انت قلت .

'first of all, you contacted me on email and told me that you are 13 years
old and that you want to be a moderator and I told you that 13 years is
young for that (with all due respect). You said…'

(10)   انتى غلطانة وبتأوحى <u>سنك ميسمحش انك تقرى الكلام دة</u> ودراسة اية اللى درستيها فى العلاقة
الزوجية منا ٢١ سنة وبدرس تعليم عالى ومفتكرش حاجة درسناها ...

'You're wrong and being stubborn about it, your age does not allow you
to read such things and what is it that you studied that covered the marital
relationship. Here I am 21 years old and a higher-education student and I
don't remember something we studied…'

The examples (1-10) above show FD schemata of YOUNG AGE BLOCKING a myriad of different propositions that are understood from the co-text and, when necessary, from the extended text. The pattern can be broken down into a basic force-dynamic logic that is shown below for Example (1) above, and applies for all the cases:

- (DIVORSEE, AGO)
- (INITIAL STATE, PROPOSING)
- (YOUNG, ANT)
- (ANT >AGO)
- Therefore, (FINAL STATE, BLOCKAGE); YOUNG AGE BLOCKS BEING PROPOSED TO BY A DIVORCEE

To better understand the blockage scenario surrounding Example (2), the webpage where the sentence appeared was examined. The snippet in Example (2) is part of a reader's comment on a news portal article reporting on the court refusing the appeal of detention for the political activist Ahmed Abou Doma. According to Example (2), Abou Doma, a married man in his late twenties

who had been subject to arrest before, possessed a degree of *youngness* that blocked him from truly understanding or comprehending what is going on around him.

Along the same lines, the FD schemata in Examples (5), (6) and (8) state or imply that the quality of *youngness* blocks different cognitive-based skills. This is implied by the strong worded advice in Example (5) to the interlocutor to take the advice of someone older and adhere to it, since she is too young to think the matter over properly on her own. This indicates the FD schema YOUNG AGE BLOCKS THINKING CRITICALLY. In Example (6) two interlocutors are referring to a protagonist's degree of youngness that prevents her from realizing the ability to judge things correctly, thus presenting a YOUNG AGE BLOCKS SOUND JUDGEMENT schema. Example (8) came in the celebrity interviews page of an online women's magazine. The interviewee is obviously successful in her work in movies and drama and is also young. This matter gets the interviewer to inquire about her success at such a young age, as shown in the example above, thus provoking the schemata; YOUNG AGE BLOCKS DEEP THINKING and YOUNG AGE BLOCKS CAREER ADVANCEMENT.

There are other propositions that emerge as having a minimum age for being socially acceptable in the Egyptian society. One such situation is shown in Example (10) where a 19-year-old girl posted an article to a forum with basic physiological information about sex. The forum members reacted very negatively to the post and ultimately had the girl's account frozen. The image in Example (10) was more or less repeated in other members' replies. The FD schema here is that YOUNG AGE BLOCKS SEX EDUCATION. Before blocking her, the girl had retorted back cynically to those who first offered gentle replies which triggered the harsher reactions later. This leads to the FD schema in Example (7) which indicates that YOUNG AGE BLOCKS SOCIAL INTELLIGENCE. This and other interactions between people of different age groups

are governed by cultural perceptions as to what is considered appropriate. In this regard, Example (3) shows a FD schema where YOUNG AGE BLOCKS TALKING BACK TO AN OLD PERSON.

As for young age and responsibility, the relevant age FD schemata are revealed in Examples (4) and (9). In Example (9) the writer is responding to an interlocutor who posted on a forum that the writer is unfair. The forum is created for people who are interested in a famous online game and the interlocutor was interested in being chosen as a moderator for one of the pages on the forum. In his reply, the writer invokes the FD schema; YOUNG AGE BLOCKS RESPONSIBILITY, which is repeated again in Example (7) talking about shouldering the household responsibility with a sibling.

4.2.2   Young age blocking schemata in American English

The examples in this section are chosen to portray the range of issues represented in a FD schema in the English (American) sample.

(11)   don't mind, this brandy -- " # " Nynaeve al'Meara is just <u>too young to be Wisdom,</u> al'Thor. If the Women's Circle won't do something

(12)   something could be taken the wrong way it is annihilated from the get-go. <u>The young haven't been allowed to develop a brain for the not-so-literal</u>. So don't

(13)   tell   him   to   his   face.   Somewhat   justified   by   the   fact   that he's <u>too young to know   what's   going on</u>, and   several   of   his   students (especially Chisame

(14)   ##115451 # If you <u>don't have a plan, or are too young to think that way (like many young artists)</u>, they think they will

(15)   <u>Too young for doctors to believe I can make the decision. Yet it's not too young to make the decision to have tons of kids?</u> I just keep hoping God

(16)   the development of psychosis earlier. These kids have separation complexes; they are <u>too young to deal with adulthood</u>. # " The auto industry used to be it.

(17)   and birth control pills are on my top priority list... I am WAY <u>too young to be a Nanny</u> yet!! Kirk is mowing lawns and being a typical

(18)   the first up for adoption at birth because I was still in school and <u>too young to be responsible enough for her</u>. She was raised by wonderful, loving parents

(19)   and implemrnt these ideas into my life. Most would probaly so I am <u>too young to have let the fire go out in my life</u> but it seems to have

(20)   trouble you can get into if you can't. # Jade DeLuna is <u>too young to die</u>. She knows this, and yet she can't quite believe it

The concordance line in Example (11) is from a work of fiction and it very clearly draws the FD schema of YOUNG AGE BLOCKS WISDOM. Examples (12-15) represent other instances with similar or relevant propositions. Looking at Example (12) the FD pattern can be represented as follows:

The [young ANT] have**n't** been **allowed** to [develop a brain for the not-so-literal AGO].

This is an explicit example with the construal of a physical force encounter between the entities encoded as AGO and ANT. The semantics of the negated verb identify the stronger ANT. The protagonists, *the young*, are construed in a negative way with their *youngness* failing their weaker attempts to be able to understand deeply and thoroughly. Example (13) is from another work of fiction, in this story a young and handsome teacher is totally oblivious to the fact that a number of his female students are infatuated by him. The concordance line in Example (13) states that despite being their teacher he was too young to understand what was going on around him in class. This evokes the FD schema of YOUNG AGE BLOCKS AWARENESS.

42

Example (15) evokes a number of FD schemata, but some background is needed to understand the concordance line. This line was given by a young woman reporting on a medical experience where doctors refused to give her a permanent pregnancy prevention procedure claiming she was too young to make that decision. The writer is wondering at that logic by exclaiming that she is not considered to be too young to make the opposite decision and have too many babies. The example reveals the FD schemata that YOUNG AGE BLOCKS INDEPENDENCE, YOUNG AGE BLOCKS MAKING SOUND DECISIONS and YOUNG AGE BLOCKS FUTURE PLANNING, the latter schema is repeated again in Example (14) indicating that being young keeps artists from planning for their futures.

Examples (16-18) pertain to family life. The concordance line in (16) came under a headline saying that the decline in economic conditions is forcing parents to send their children out at the age of 13. The concordance line here and the article suggest the FD schema; YOUNG AGE BLOCKS INDEPENDENCE. More than the inability to bear one's responsibility, Example (18) shows that a certain degree of *youngness* prevents people from bearing the responsibility of others, including their own children, thus provoking the FD schema; YOUNG AGE BLOCKS PARENTING. Another degree of *youngness* is thought to discourage grandparenting as seen in Example (17) where a blogger catches up with her followers after not having written in a while. The writer reports on her daughter having a new boyfriend who is a nice person, and as seen in the concordance line, the writer plans to buy her sexually active daughter birth control pills because the writer falls into the schema; YOUNG AGE BLOCKS GRANDPARENTING. These schemas could partially be attributed to the common perception that *young* means having a lot of time ahead which is reflected in Example (20), where dying is given the entity of AGO with tendency towards motion that is blocked by an ANT that is strong enough to prevent it from happening; *youngness*.

While living, the quality of *young* entails some expectations, one of which can be seen in Example (19) where the writer expresses that she is too young to have let the fire go out. According to *The Routledge Handbook of Metaphor and Language* (Kövecses, 2016), the word *fire* in this sense is a metaphor for enthusiasm. On this background, the schema in Example (19) can be interpreted as YOUNG AGE BLOCKS APATHY.

Now that we have demonstrated how YOUNG AGE BLOCKING schemata are based on the basic steady-state pattern and examined examples from the Egyptian Arabic and American English samples, we will turn to the first pattern of shift-in-state schema to be discussed in this study.

4.3   Shift-in-state ONSET OF BLOCKING schemata

Unlike the steady-state schemata, the shift-in-state of impingement schemata are dynamic. They describe the image of a change over time in the condition of the ANT resulting in a change in the force tendency of the AGO. The ONSET OF BLOCKING schema involves a stronger ANT with a tendency toward rest that was not previously in place coming into position against a weaker AGO with a tendency toward motion to prevent it from realizing its intrinsic tendency. In this context, growing into an age that is perceived to be old for a specific proposition, the strong ANT, OLD AGE starts to impinge on weaker AGOs, thus blocking them from realizing their tendency of motion. Figure (3) illustrates this force-dynamic schema. The arrow indicates the introduction of the ANT into the proposition and a slash on the resultant line separates the before and after states of activity.
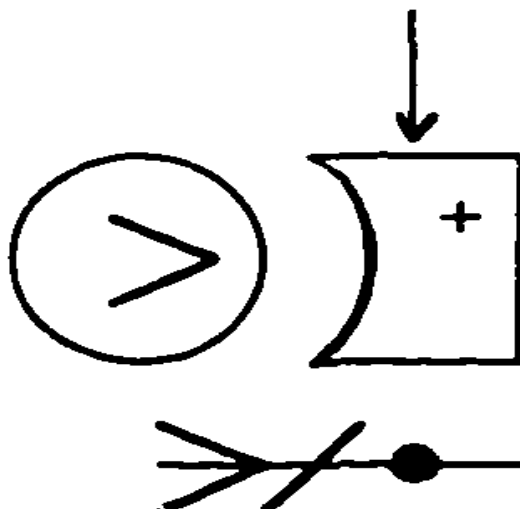
Figure 3. Onset of blocking schema *(Talmy, 2000, p. 418)*

4.3.1 Old age blocking schemata in Egyptian Arabic

To examine the shift-in-state onset of blocking schemata operating in the social domain of reference and pertaining to old age, this section analyzes instances of the OLD AGE BLOCKING schemata from the Arabic (Egyptian) sample.

(21)   تاتكد من الموضوع دا, و بصراحه <u>سنها مايخليهاش تدقق اوي</u>

'She should make sure of it, and to be honest, her age does not allow her to be so picky'

(22)   طيب انت كنت كويس ليه التريقه بس لا مركزي <u>ولا سني يسمح لي بتقبل الاستهزاء</u> فارجو ان نحافظ علي رقي الحوار.

'You were going ok, why the mockery, neither my status nor my age would let me take being mocked. Please keep the conversation civil'

(23)   نفى المستشار ناجي شحاتة، حواره مع جريدة "الوطن"، الذي تضمن هجوم على بعض الإعلاميين، اليوم السبت، قائلًا: "مقولتش الكلاد ده إطلاقًا، <u>وسنى لا يسمح لي أدخل زي القطر في الناس،</u>

'Judge Nagy Shehata declines having given the interview published this Saturday in Al-Watan newspaper which included strong attacks against some media personnel saying, " I never said such things, and my age does not let me pounce on people,'

45

(24) ردا على الاخت ام عبد الحميد من السعودية اللى بتقول ان <u>سنة ميسمحش بالبهدلة</u> احب اسال <u>وازاى سنه كان بيسمح بالسرقة</u> ؟؟ يا جماعة اللى غلط لازم يتحاسب ...

'In response to Om AbdelHamid of SA who is said he's age does not allow for rough treatment. I would like to ask; how did his age allow stealing?? I say those who do wrong must be held accountable...'

(25) كلام حب و كدة المهم مكنتش بقدر اقولها بلاش واقول عادى بتعمل شير لحاجات وخلاص ومخنقش عليها بدا يلمحلها اخويا ان <u>سنها ميسمحش بالكلام اللى بتشيره</u> دا و والدتى ٥٠ سنة

'love quotes and such. I couldn't tell her not to and I told myself it was nothing; she's just sharing stuff and that is it and I shouldn't throttle her. My brother started to hint that her age does not allow her to share the the posts she does. My mum is 50'

(26) وبرضوا <u>سننا ميسمحش نلبس شورت او ترينج ونوقف نط نطط في صالة رياضة</u> .... واغلب صلاة الجيم. علشان تربي عضلات ... بس انا مش عاوز اربي عضلات ...

'and our age does not let us put on shorts or a training suit and jump around in a gym…most gyms are for body building…I don't want that…'

(27) هو الاهم وبعدها قدرت أوازن بين الاثنين ولكن حاليا أن لو حد طلب مني أن أظهر بالمايوه سأرفض لموانع فية وكذلك شخصية ،لا مكانتي <u>ولا سني يسمح بكده</u> ".

'but now, if someone asked me to shoot a scene in swimwear, I'll refuse. Because of some things in me as a person and some private issues are going to hold me back. Neither my status, nor my age allow it'

(28) العروسة تكون ارمله او مطلقه ولا تريد الانجاب عشان هو وجهه نظره ان <u>سنه ميسمحش للتربية من اول وجديد</u> وياريت يكون سنها من ٣٥ الي ٤٠ سنة ومقبولة الشكل

'seeking a widow or a divorced woman who doesn't want to have children because he believes that his age prevents raising kids again. Hopefully the woman would be 35-40 and nice looking'

(29) لم ولن نقول أننا عملنا أو وقفنا <u>فلا نحن من هواة الإطراء ولا سننا يسمح بهذا الدنو</u> .. فقط أريد إجابة لمن سألني .. (هو انت اللي بتعمل حملة رامي بربش .. أصل بيقولوا انت كنت ...

'we will never we did this or said that, we are not looking for praise and our age won't let us get that low..I just want to answer that who asked me ..'

(30) <u>تتحرك وتهرج وتهزر وتخرج وهو طبعا سنه ميسمحش بكده</u> ومتعقدة وحالتها زفت اما انا فزوجي اكبر مني بسبع سنوات بس وطبعا عكس جوزها في كل شئ

'to be active, have fun, laugh and go out and of course his age doesn't allow it. She's depressed and feeling awful. Unlike me, my husband is only seven years older and unlike her husband in everything'

(31)   هل سني يسمح لي بمشاهدة الانمي ؟؟... ...هل سيأتي اليوم الدي ساجلس بجانب اولادي لمشاهدة الانمي ؟؟... حقيقة أرعبتني هذه الاسئلة فكلنا نحب مشاهدة الأنمي...ولاكن هدا لا يعني اننا ...

'Does my age allow me to watch anime??..Will the day come when I will sit next to my children and watch anime??..honestly, these questions scared me, we all love to watch anime.. but that doesn't mean…'

(32)   اخر ماتش فيه عرضية اتعملت ورامي ربيعه كان بيصرخ وهيتجنن لانها ف ال٦ ياردات وكان سهل ع البيه انه يطلع ويمسكها ويحل الازمة ...للاسف لا سنه يسمح بالتطور ولا هو اساسا عايز يتطور ..

'last match, there was a cross and Ramy Rabe'a was screaming, he was about to go crazy because it was in the 6 yard box and it would have been easy for his majesty to step out and pick it and solve a problem…unfortunately his age won't let him improve and he doesn't even want to…'

In order to understand the context in which Example (21) was given, the relevant forum page was checked. This snippet came as an answer to a girl seeking advice on behalf of her 31-year-old friend. The friend in question is engaged to be married and she receives news that her in-laws are mean people who had mistreated a daughter-in-law until their other son divorced her. As you can see from the answer, a FD schema is revealed construing that since the strong ANT [AGE] is now (old) in place, it blocks the AGO [HAVING A SPOUSE OF CHOICE].

Examples (22) and (23) reveal a FD schema of OLD AGE BLOCKS GIVING OR RECEIVING A VERBAL ATTACK. In Example (22) the writer tells the interlocutor that his age does not let him accept verbal attacks, i.e. his age elevates his status above certain behaviors, while in Example (23) the speaker confirms that he did not give an allegedly controversial statement by provoking the image that his old age is a compelling force that restrains the activity of verbally attacking people.

Other activities for which old age is considered to be a deterrent are depicted in Examples (24) and (25). Example (24) is one of many used in reference to the ousted Egyptian president, Hosny Mubarak. The sample included other instances referring to ordinary people who were going through situations that were not related to the political or legal systems using the same word as in this example. The word in question is the Egyptian colloquial word "بهدلة" [bəhdælæ] and can be understood in context to mean "receiving physical or verbal rough treatment". Accordingly, the concordance line in Example (24) reflects the FD schema; OLD AGE BLOCKS RECEIVING ROUGH/BAD TREATMENT. This suggests that people who grew to the age range where the ANT [AGE] becomes a strong force that is engaged in the impingement are protected by this strong ANT against being on the receiving end of such behavior. On the other hand, there are restrictions on the activities of the old protagonists as well, as the quality of *oldness* also constrains acts like stealing as revealed by Example (24) and fishing for praise in Example (29), thus revealing the schema, OLD AGE BLOCKS UNPRINCIPLED BEHAVIOR.

As for what *old* can or cannot do or express in public, Examples (25-27) shed some light on that. Starting with Example (25) which can be illustrated as follows:

Her [age ANT] does **not allow** her to [share sentimental posts on Facebook AGO]

Sharing emotional posts appears to be an AGO with an intrinsic tendency towards motion. However, at that point in time (old) when the strong ANT [AGE] steps into its path; it is blocked from realizing its tendency. Taking into consideration that sharing of sentimental posts on social media is a modern means for public expression of emotions, a behavior that *oldness* seems to restrict, the schema OLD AGE BLOCKS PUBLIC EXPRESSION OF EMOTION emerges.

Public appearance is another entity that is part of a force-dynamic relationship. This is shown in Example (27). The snippet is part of an answer given by the Egyptian actress Ghada Abdel Razek on a TV show. Abdel Razek said that as an aspiring actress, she had thought playing roles with scenes in swimwear would associate her with other big names from the golden era of the Egyptian cinema. However, she added that she had reached a stage in her career and an age that now prevents her from appearing in swimwear on the screen again. The public image schema in this example is repeated again in Example (26) where a man in his 40s says that he is now too old to wear shorts or a training suit and jump around in a gym. These examples demonstrate the schemata OLD AGE BLOCKS DRESSING UNCONSERVATIVELY and OLD AGE BLOCKS UNPOISED ACTIONS.

In addition to restricting less than poised activities and less than conservative clothing, the Egyptian sample manifests a perception of *oldness* as a force strong enough to discourage certain dispositions and capacities in protagonists who possess different degrees of this quality. Examples (28), (30), (31) and (32) describe some of these perceptions. The snippet that constitutes Example (28) is part of a post on the matchmaker page of a popular internet forum for women. In that post the matchmaker forum-member was looking for a bride for a man seeking a wife without going through again, because his OLD AGE BLOCKS PARENTING. On the other hand, in Example (30) the writer is responding to a woman's request for advice on whether to accept a marriage proposal from an older man. The writer advises against it by reporting on someone she knows in a similar situation. The young wife wants to be active and have fun, but the old husband's age prevents it. Similarly, Example (31) is posted by an 18-year-old who is told by an older sibling that he outgrew watching anime. These examples give rise to the FD schema, OLD AGE BLOCKS ENJOYMENT OF SIMPLE ACTIVITIES.

Another area where Egyptians see as age bound is improvement. According to the schema given in Example (32), OLD AGE BLOCKS IMPROVEMENT.

4.3.2   Old age blocking schemata in American English

The examples below are chosen to give the reader a broad idea of the kinds of entities in the FD relationships revealed in the sample representing the American society.

(33)   negatively about themselves and age, and they have said that, I am <u>too old to learn anymore</u>, I am too old to do things, but no on

(34)   blog has inspired me to help him before I go. You're never <u>too old to get out of the mundane and pursue your dreams</u>. # Hopefully in a

(35)   desk and kissed his cheek. " I know that look. You're <u>too old to be running around, planning takeovers</u>. Just rest. " # " I

(36)   90 minutes than its predecessors. " # So, Bob Schieffer may be <u>too old to moderate the debate</u>, unless it turns out he's as good at debate

(37)   include cosmetics. Clearly I'm still in love with the aura but am <u>too old to be waiting for parts all the time</u>. # Several have commented about how

(38)   feel like I'm letting opportunities slip by, that already I am getting <u>too old to start doing something important or meaningful</u>. But I know really that is not

(39)   this comment right here felt a whole lot like an assertion that Alex is <u>too old to pull of sexy and flirty</u>, and that's just not fair. She

(40)   focus on candidates whom I believe sincere for the future of our country, but it is difficult to sort them out. Perhaps I am getting <u>too old to believe in anything anymore</u>. However, I will try to sort out the

The FD schema in Example (33) can be broken down as follows:

LEARNING, AGO

[AGE], ANT

AGO's tendency: toward motion

ANT's tendency: toward rest

Balance of strengths: ANT is the stronger entity

State of impingement: ANT started engaging in the impingement

AGO's resultant state: stopping

The use of the word *anymore* in Examples (33) and (40) reflect the shift in state from an AGO that was allowed, until a point in time (old) when the ANT [AGE] became engaged in the impingement leading to the onset of blocking of the AGO. In Examples (34), (35), (37) and (38) we see age as a strong ANT, that at a point in time (old) comes into place to stop a multitude of traits. In Example (34) it is having enough flexibility to break the routine, in (35) it is enthusiasm and ambition, in (37) it is diligence and in (38) it is patience.

The protagonist in Example (36) is the American television journalist Bob Schieffer, who is famous for his capability in moderating presidential debates. Now that the ANT, *old* [AGE] stepped into the path of his string of successes, people were predicting that he might be too old to have the diligence to maintain his excellent work performance moderating a debate between Obama and McCain for the 2012 American presidential elections. This invokes the schemata, OLD AGE BLOCKS DILIGENCE and OLD AGE BLOCKS MAINTAINING SUCCESS. Believing the promises of presidential campaigns; however, is another issue. As Example (40) reflects, old age blocks the naiveté that would lead the protagonist to believing anything that is told, thus provoking a FD schema of OLD AGE BLOCKS NAIVETÉ.

In terms of appearance and appeal, the proposition in Example (39) reveals the schema, OLD AGE BLOCKS ATTRACTIVENESS.

Having illustrated how the shift-in-state onset of blocking schema governs instances of OLD AGE BLOCKING with examples from the Egyptian and American samples, we now turn to the first letting schema discussed in this study.

4.4   Secondary steady-state EXTENDED LETTING schemata

Referred to as the FD "concept of ENABLE" (Wolff & Song, 2003, p. 279), the secondary steady-state schemata describe a situation where the ANT remains "steadily disengaged" (Talmy, 2000, p. 420) from the AGO. Because the ANT here is the stronger entity, i.e. it represents a case of *extended letting*. Talmy (2000) explains that this pattern is considered as 'secondary' because it is conceptually derived from the negation of the basic steady-state blocking schema. A force-dynamic construal is built around the notion of an ANT and an AGO engaged in a situation that involves an opposition of forces. Any reference to an ANT and AGO not so engaged "necessarily depends on their potential for such engagement" (2000: 421).
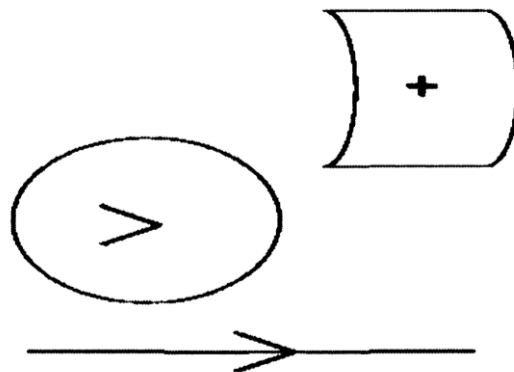
Figure 4. Extended letting of motion schema *(Talmy, 2000, p. 420)*

In the case of young age, the schema is that [AGE] is a strong ANT that remains disengaged from the AGOs, representing different propositions, whose tendency is toward motion, which results in an EXTENDED LETTING OF MOTION pattern. Figure (4) represents this FD schema.

4.4.1 Young age extended letting of motion schemata in Egyptian Arabic

This schema represents the non-occurrence of impingement while recognizing its presupposed potential, with the ANT being the stronger entity. To examine the secondary steady-state of EXTENDED LETTING OF MOTION expressed by Egyptians in relevance to young age, the following examples from the study sample are presented. The schematic relations revealed are treated using the term *ENABLE*.

(41) انى كدة بتنك وبتبطر على النعمة وممكن اوى بكرة ملقيهاش وان سنى يسمح لى انى اختار بكرة ممكن ميسمحش..

'…that I'm being arrogant and disregarding of the favor and that it is very likely not to come my way in the future. They say my age now allows me to choose, tomorrow it probably won't'

(42) قدرات الدكتور عمروخالد ١_هو شاب عمره يسمح له بالحركه و العمل ٢_افكاره نهضويه ٣_قادر علي تحقيق افكاره النهضويه ٤_قادر علي مخاطبه الاخر و اقناعه و ...

'Dr. Amr Khaled's attributes: 1- he's young. He's age allows him to work diligently'

(43) «أنا تقريبا أصغر واحد فى زمايلى» هكذا بدأ خالد (٢٨ عاما)، أحد عمال الصرف الصحى، ويضيف: «أنا عارف إن صغر سنى يسمح لى أدور على شغلانة تانية، وإن ...

'he added "I know that my young age allows me to look for another job, and that…'

(44) وفي بداية سن العشرين ـ حيث كان سني يسمح لي بتكوين الصداقات وتنمية مهاراتي الاجتماعية والاستمتاع بالحياة ـكنت اقضي هذه الأوقات في...

'In my early twenties, when I was young enough to make friends, develop my social skills and enjoy life, I spent that time in …'

(45)   يا افرام واضح ان حداثة خبرتك <u>وصغر سنك خلاك زيك زي الولاد بتوع الجماعات الاسلامية</u> <u>في الجامعات كلاكما مسير</u> يا اخي العزيز فيه فرق بين الامور ..

'it's obvious that your inexperience and your young age led you to be like those university boys who belong to Islamist groups, you're both led on dear brother. There is a difference between …'

(46)   بما إنه <u>صغير في السن</u>، <u>هيبقى مهتم بحاجات غير المفروض إنه يهتم بيها، ممكن تلاقيه بيهتم</u> <u>بشكله ومظهره، ومش في دماغه أي حاجة في البيت ومشاكل</u>

'Because he's young, he'll be interested in things other than what he's supposed to be interested in. His interests could revolve around his looks and appearance without giving any attention to the household and its issues'

The prospect in Example (41) is the exact opposite of that of OLD AGE BLOCKING in Example (21), repeated below for convenience, which is an indicator of the strength of this schema and the fact that is a widespread cultural model in the Egyptian society.

(21)   تاتكد من الموضوع دا, و بصراحه <u>سنها مايخليهاش تدقق اوي</u>

'She should make sure of it, and to be honest, her age does not allow her to be so picky'

The force relation in (41) is indicated by '*allow*' and the use of '*now*' and '*tomorrow*' carries the implicature of the ANT AGE being the stronger entity, but remains to be disengaged. This leads us to the schema; YOUNG AGE ENABLES HAVING A SPOUSE OF CHOICE.

Example (42) also represents a schema that was expressed several times in the sample with respect to diligently pursuing an activity. This example can be broken down as follows:

His [age ANT] **allows** him to [work diligently AGO].

Here, age is a strong ANT with a tendency toward rest, but despite its tendency it, for the time being (young), remains disengaged from the path of the AGO *working diligently*. This leaves us with the schema; YOUNG AGE ENABLES DILIGENCE.

Another theme that appeared in contexts related to work as well as other contexts is that of flexibility. In Example (43) it is given in relevance to shifting careers and starting anew; however, the generalizable schema as judged by the overall examples in the sample is YOUNG AGE ENABLES FLEXIBILITY.

Example (44) presents a complex image with the prospects that young age allows making friends and developing social skills, falling under the schema YOUNG AGE ENABLES SOCIAL INTELLIGENCE, while the prospect that young age allows enjoying life is part of the YOUNG AGE ENABLES ENJOYMENT schema.

So far, all the examples discussed are indicative of positive FD cultural models for young age in Egypt. However, this is not always the cas. Examples (45) and (46) portray negative prospects that represent culturally held schemata in that regard. In (45) the prospect that being young means a person can be misled indicates a cultural schema of YOUNG AGE ENABLES GULLIBILITY. Example (46) adds two more negative schemas pertaining to young age; YOUNG AGE ENABLES VAIN INTERESTS and YOUNG AGE ENABLES IRRESPONSIBILITY.

4.4.2 Young age extended letting of motion schemata in American English

The examples in this section are chosen to elaborate on the young age extended letting schemata commonly held in the American culture that were found in the English sample.

(47) professional sample. As mature as he seems to carry himself and play, <u>being young still allows for too many unknown variables</u> to suggest he's without much risk. Risk is inherent in youth.

(48) joined at 18 after high school, you could retire at 38 and <u>still be young enough to start another career</u> doing whatever you want, just for extra money.

(49)   stop-motion creatures that perpetually stampeded across basic cable monster movie marathons). I was <u>young enough to enjoy the adventurous spirit of the second movie</u> without thinking too much,

(50)   Pelosi now..... And obviously voted for Obama and were disappointed. You are <u>still young enough to be fooled</u> I think. That being said, I agree with most

(51)   more times than you succeed. " I doubted he believed it. He was <u>young enough to believe he could play forever</u>. # Caleb stood at the plate,

(52)   back in the Church, perhaps not in my lifetime (although I am <u>still young enough to have hope</u>) but eventually it must come back. I can not

The use of the adverbial *still* in Examples (47), (48), (50) and (52) indicates the extended nature of the force-dynamic relation. The use of the verb *allow* in (47) indicates the nature of the interaction as a case of letting which is understood from the implicature of the adverbial *enough* in the rest of these examples. Thus, young age is the strong ANT in these examples and remains to be disengaged from the weaker AGOs, leading to the schemata: YOUNG AGE ENABLES CHANGING BEHAVIOR, YOUNG AGE ENABLES SHIFT IN CAREER, YOUNG AGE ENABLES GULLIBILITY AND YOUNG AGE ENABLES OPTIMISM, respectively.

Example (49) represents a recurring proposition featuring here in the schema, YOUNG AGE ENABLES ENJOYMENT. Perhaps this ability to enjoy different entities is in part due to the schema proposed in Example (51). The AGO [believe he could play forever] is used in reference to a young baseball player and it reveals the schema, YOUNG AGE ENABLES SHORTSIGHTEDNESS.

This covers the two blocking patterns pertaining to age blocking schemata. The following section describes the second shift-in-state pattern, and the first letting pattern relevant to this study.

4.5   **Shift-in-state ONSET OF LETTING schemata**

This pattern correlates with the cessation of impingement. In this pattern a strong ANT with a tendency towards rest that has been blocking the AGO disengages, thus permitting the weaker AGO to realize its tendency toward motion. In the context of old age, this pattern represents schemata where a proposition remains blocked until the point in time when the strong ANT [AGE] disengages leading to the realization of the proposition. Figure (5) represents this FD schema. The arrow represents the ANT's motion out of the impingement.
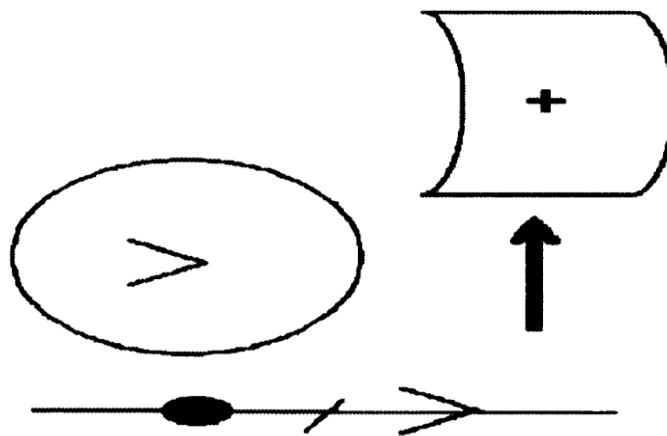
Figure 5. Onset letting of motion schema

This is the second dynamic FD pattern to be discussed in this study. Both cases involve a strong ANT with a tendency towards rest and a weak AGO with a tendency towards motion. Unlike the shift-in-state ONSET OF blocking schema, this time, the disengagement of the ANT from the interaction means that the AGO's resultant state is the same as its desire.

4.5.1   **Old age onset letting of motion schemata in Egyptian Arabic**

This section discusses how this pattern pertains to the old age letting schemata of the Egyptian culture.

(53)   في بيت عيلة والله ذل بمعنى الكلمة وبباكي بعد ما وافق تلاقيه خاف عليكي وعنده حق وهو <u>سنة</u> يخليه يفكر احسن <u>منك</u> وعلى فكرة لو فعلا خطيبك هيجيب..

'in a big family house and it is such a despicable thing, I swear. Your dad agreed but he must have feared for you later, and he's right. His age allows him to think better than you, and if your fiancé truly…'

(54)   ...العملى ـ صقل اول بأول لك ـ هناك ملحوظه ـ العلوم لا يوجد بها مصطلح حب وكره ـ <u>لا اسوق</u> اليك نصائح مع ان <u>عمرى يسمح بذلك</u> ـ ولكنى اسوق لك واقع اعيشه

'there is no such a thing as love and hate when it comes to scientific subjects. I am not offering advice, even though my age allows me to'

(55)   ...حط ف دماغك ان مافيش انسان ف العالم مالوش مدخل معين .. بس الخبرة فى التعامل و <u>سنك</u> يخليك تكتشف <u>مدخله فين</u> بالتوفيق و علاقة ناجحة ان شاء الله.

'know that there is a way to get to each person..as you gain experience, your age will allow you to discover how to approach different people'

(56)   قال شوبير، في تصريحاته خلال برنامجه "أجمل صباح" الذي يذاع على أثير إذاعة الشباب والرياضة: ربما يكون <u>كبر السن هو السبب في حديث هيكل بأي كلام.</u>

'Shobair to Agmal Sabah on the Youth and Sports radio channel: maybe old age made Heikal say nonsence'

The extended text for Example (53) shows it to be a response to a request for advice on a forum. There are two protagonists in this example, a young woman and her old father. The writer expresses that the father's age allows him to think better than his young daughter. This illustrates the whole scene for the schema of [thinking clearly], [taking sound decisions] and [wisdom] being weak AGOs with tendency toward motion, at the beginning of the scene (young), the strong ANT [AGE] is engaged in the impingement and effectively blocking the AGOs from realizing their desire. Later in the scene (old) the ANT [AGE] disengages, thus letting the AGOs realize their tendencies.

The realization of the AGOs in Example (53), makes the proposition in Example (54) its natural outcome. It can be broken down as follows:

My [age ANT] **allows** me to [give advice AGO]

We again see the image that giving advice was blocked until the ANT [AGE] ceased this blockage with time (old). This reveals the schema, OLD AGE ENABLES GIVING ADVICE, which becomes even more profound when linked to the prospect in Example (55), OLD AGE ENABLES SOCIAL INTELLIGENCE.

The majority of the prospects and the schemata they reveal in this data set were positive. Example (56) reflects one of the few negative schemata of OLD AGE LETTING. In this example the speaker is referring to Heikal, a respected political commentator, and is suggesting that old age made Heikal give an untrue or irrational statement, thus provoking the schema, OLD AGE ENABLES SENILITY.

The next section discusses the last FD pattern that concludes the four FD schematic patterns that explain age as a blocking or letting force.

4.5.2   Old age onset letting of motion schemata in American English

This section discusses how this pattern pertains to the old age letting schemata of the American culture.

(57)   the   solution   can't   just   be,   "   try   to   survive   until you're <u>old enough to choose who you interact with</u> and then make some good choices. " That

(58)   year   Predator   and   Robocop   came   out.   When   I   was finally <u>old enough to appreciate films</u>, Little Nicky was in theaters. I know, believe me

(59)   started   learning   to   play   the   violin   when   I   was   about ten   years old. Young enough to still be pliable, but <u>old enough that I could later examine how I learned best.</u>

(60)   than " save him " time and time again. 19 years old
             is <u>old enough to know what is right from what is wrong</u>. And have you
             considered looking

(61)   And that's what he sees in that photo. # But I'm <u>old enough to know
             the danger of putting my esteem in the hands of a man</u> (

(62)   later. I do not agree with abortion and I feel that I'm <u>old enough to need
             to man-up</u>, so to say. I've made my bed and

The use of the preposition *until* in Example (57) and the adverbial *finally* in Example (58) indicate the onset nature of these interactions, which is understood through the implicature of the adverbial *enough* in the rest of the examples. The nature of the interaction is most explicit in Example (57), where the verb *choose* shows that it is a letting schema. In these examples, age is a strong ANT that until a point in time (old) had blocked the path of these propositions, but has now stepped out of the interactions. This leads to the schemata, OLD ENABLES INDEPENDENCE and OLD ENABLES DEVELOPING CULTURAL SOPHISTICATION respectively.

Similar to the situation in the equivalent Egyptian data set, the American culture appears to mostly tie OLD AGE LETTING schemata with positive propositions. Examples (59-61) represent schemata relevant to wisdom and cognition. In Example (59), the AGO [examine how I learned best] indicates the higher order cognitive abilities of analyzing and evaluating. Together they represent the schema, OLD AGE ENABLES REFLECTION. The ability to differentiate expressed in Example (60) gives rise to the OLD AGE ENABLES DISCRETION schema, while the ability to realize what is wrong and avoid it suggested in (61) leads to the OLD AGE ENABLES WISDOM schema.

Finally, Example (62) represents a schema relevant to behavior. According to Macmillan dictionary, the meaning of the phrasal verb *man up* is "to be brave or to take responsibility for the

consequences of your actions" (Maxwell, 2012), which suggests the schema, OLD AGE ENABLES RESPONSIBILITY.

4.6   Egyptian and American FD Cultural Models of Age: Basic Comparisons

This section starts with presenting the frequency statistics summing up the different schemata, then proceeds to present the FD cultural models revealed in both samples.

4.6.1   Frequencies of the four overarching FD cultural models of age

Before reporting on the detailed frequencies within the Egyptian and American samples, it could be useful to consider the implications of the overall frequencies of the four FD patterns covered in this study: *young age is a blocking force, young age is a letting force, old age is blocking force* and *old age is a letting force*. In order to collect the instances needed for the American sample, the United States section of the GLOWBE corpus was utilized. Four main search queries were used to render the majority of the tokens that compose the sample that represents the American culture for the purposes of this study. These search queries are: *old enough to, young enough to, too old to* and *too young to*. Table (2) below shows the number and ratio of results in the corpus.

Table 2. Comparing frequency of results on GLOWBE

Query used	Number of results	Percentage
Old enough to	1724	49.80%
Young Enough to	198	5.72%
Too old to	604	17.45%
Too young to	936	27.04%
Total	3462	100%

The frequency of use of these expressions is an indicator of the overall American perception of age. The fact that the two *old* expressions account for 67.25% of the total frequency of use shows that old age is perceived as a strong force, one that enables significantly more than it blocks. On the other hand, with young age representing 32.76% of the sample, it could be said that the American culture attributes only half as much age causation propositions to young age, which is seen mostly as a hindrance (17.45%).

The web was utilized as the corpus for the collection of the Arabic sample representing the Egyptian culture, drawing on a similar frequency comparison had to be based on the inner division of the final data set. Table (3) below shows the number and frequency of instances under the four categories in the Arabic sample.

Table 3. Comparing frequency of results in the Arabic sample

Sub-section	Number of instances	Percentage
Old letting	29	16.20%
Young letting	28	15.64%
Old blocking	68	37.99%
Young blocking	54	30.17%
Total	179	100%

Judging by this sample, one can observe balance between old age causation (letting + blocking) at 54.19% of the sample and young age causation (letting + blocking) at 45.81%. Roughly speaking, Egyptians perceive age, young and old as a blocking force twice as much as they perceive it as an enabling force.

4.6.2 Propositions of age in the Egyptian and American samples

The two samples have undergone a process of categorization of propositions. Table (4) shows the frequency of different categories in both samples.

Table 4. Frequency of propositions in FD schemata of age

Proposition categorization	Egyptian sample (%)	American sample (%)
Social	46.93%	17.50%
Cognitive	12.29%	19.00%
Wisdom	4.47%	5.50%
Naiveté	1.68%	5.50%
Learning	1.68%	5.50%
Erring	1.68%	0.50%
Flexibility	2.23%	13.50%
Health	1.68%	0.50%
Diligence	1.12%	3.50%
Career and accomplishment	9.50%	8.50%
Culture	1.12%	3.00%
Behavioral	5.03%	3.50%
Disposition	3.91%	1.00%
Emotional	1.68%	8.00%
Enjoyment	2.23%	2.50%
Attractiveness	0.00%	1.00%
Other	2.79%	1.50%

The most striking figure in Table (4) is the one representing the frequency of FD social-related propositions in the Egyptian sample. At 46.93% it evidently indicates that the Egyptian culture perceives age to be a strong force that either permits or constrains what is considered socially appropriate or inappropriate. This implies that for successful inter-cultural communications, any second party would need to gain an understanding of the many age-related social regulations of the Egyptian culture.

Another striking figure in the Egyptian sample is the 0% for attractiveness. There are two possible reasons for a proposition not to feature as a FD schema in the discourse of a culture: either people don't perceive it as age bound, or that this proposition altogether is generally not an issue that is prominent in the public awareness of that culture. Further research is needed to explore the proposition of attractiveness in the Egyptian society.

After social propositions, cognitive-related and career-and-accomplishment-related propositions are the second and third highest frequencies in the sample respectively. This means that Egyptians perceive Age as a driving force that has a relatively high effect on propositions like thinking, understanding and evaluating, career advancement and accomplishment.

On the other hand, the American culture does not convey the impression of having a category of propositions so strongly bound by age as is the category of social propositions in the Egyptian culture. The American sample, to the contrary, appears to be more evenly distributed. Cognitive and social propositions are also the highest rating in the American sample, albeit with completely different frequencies from those of the Egyptian sample. Cognitive propositions have the highest frequency in the American sample at 19%, which implies that the entity that American culture perceives to be affected by FD interactions the most is cognition. Social propositions are a close second at 17.5%. The third category of propositions in the American sample is Flexibility at

13%. This implies that the American culture sees a close link between a person's ability to change habits, way of living or career and age.

It is worth noting that the frequency for the categories of wisdom, its counterpart naiveté and learning in the American sample is an equal 5.5% each. Looking at the Egyptian sample, Wisdom stands at a very close percentage of 4.47% while naiveté and learning fall significantly behind to 1.68% each. This suggests that in the American perception a certain level of naiveté can with learning and time turn into wisdom. However, while wisdom is age bound with a very similar percentage in the Egyptian culture, it seems not to be driven from learning. Taking the apparently high significance of social propositions in the Egyptian culture in perspective, it is safe to say that the source of wisdom in this culture is perceived to be drawn from social interaction.

Considering that social and cognitive propositions were the highest categories in both samples, the following two tables show their distribution among the sub-sections of each sample.

Table 5. Ratio of social propositions

Sub-section	Egyptian (%)	American (%)
Old age blocking	66.18%	19.57%
Young age blocking	40.74%	22.92%
Old age letting	34.48%	24.00%
Young age letting	25.00%	5.36%

As shown in table (5), social prospects comprise 25% of the total prospects that make up the Egyptian *young age letting* sample. This is the smallest percentage among the four sub-sections of the Egyptian sample, which is another confirmation of the extent to which the Egyptian culture sees social interaction and experience as age-bound. This percentage is also very close to the

highest percentage in the American sample for the sub section of *old age letting* at 24%. This indicates that the American culture puts less emphasis on age as a FD governor of social life. It is also worth noting that consistent with the frequencies of the overall sample, the distribution of social propositions among the four sub-sections of both samples corresponds to the overall age perception of the two cultures with *old age blocking* being the highest in the Egyptian sample and *old age letting* being the highest in the American sample.

Table (6) shows the ratio of cognitive propositions within each of the four sub-sections of the Egyptian and American samples.

Table 6. Ratio of cognitive propositions

Sub-section	Egyptian	American
Young blocks	25.93%	39.58%
Young lets	3.57%	1.79%
Old blocks	1.47%	2.17%
Old lets	20.69%	34.00%

As shown in Table (6), despite the difference in percentages, both cultures show a pattern of perceiving cognition to be significantly age bound, starting with a YOUNG AGE BLOCKING schema and moving along the continuum of age until it disengages from the impingement allowing cognition to be realized in an onset of OLD AGE LETTING schema.

4.7   **Egyptian and American FD Cultural Models of Age**

Referring back to the definition of cultural models given in chapter one of this study, two aspects are needed to be able to conclude that a proposition qualifies as a cultural model, it must be *cognitive* and *shared*, because "only shared (socially transmitted) mental models qualify to be called cultural models"(Gatewood, 2012, p. 366); thus, cultural models can be identified by being

"widely-circulating schemas in the society" (Yamaguchi, 2009, p. 402). Therefore, only the schemata that have three or more recorded instances in the sub-sections of each sample are considered as FD cultural models.

The more the cultural model is circulated, the more we know that it is a deeply-rooted, widely-shared cultural model in a society; therefore, counts of how frequent the model is in its relevant sub-section are given as an indicator of the strength of the different FD cultural models of age that emerged in the Egyptian and American samples.

4.7.1   Egyptian FD cultural models of age

This section reports on the age-related FD Cultural Models as revealed by each sub-section of the Egyptian sample.

a.   *Egyptian FD cultural models of YOUNG AGE BLOCKING*

Table (7) shows the FD Cultural Models of YOUNG AGE BLOCKING in the Egyptian sample.

Table 7. Egyptian cultural models of YOUNG AGE BLOCKING

Category	Cultural Model	Number of Instances	Percentage
Social	Being party to a meaningful relationship	10	18.51%
Social	Challenging a senior	6	11.11%
Social	Engaging in meaningful discussion	3	5.55%
Cognition	Comprehending thoroughly or deeply	8	14.81%
Cognitive	Judging and evaluating	3	5.55%
Cognitive	Forming/voicing an opinion	3	5.55%
Career and accomplishment	Work advancement	6	11.11%

As shown in Table (7), YOUNG AGE BLOCKS BEING PARTY TO A MEANINGFUL REALTIONSHIP is the highest rating Cultural Model. It included instances indicating that people are too young to be in love, be in a relationship, be proposed to, be married or share in family concerns. It holds that Egyptians perceive that a degree of youngness prevents a person from actively engaging in a socially meaningful relationship.

The second highest rating cultural model in this sub-section, and possibly the reason behind most, if not all of the others, is the FD Cultural Model, YOUNG AGE BLOCKS COMPREHENDING THOROUGHLY OR DEEPLY.

b. Egyptian FD cultural models of OLD AGE BLOCKING

Table (8) shows the FD Cultural Models of OLD AGE BLOCKING in the Egyptian sample.

Table 8. Egyptian cultural models of OLD AGE BLOCKING

Category	Cultural Model	Number of Instances	Percentage
Social	Having spouse/marriage of choice	15	22.06%
Social	Giving or receiving course verbal behavior	12	17.65%
Social	Receiving rough treatment	6	8.82%
Social	Dressing revealingly/informally	5	7.35%
Social	Parenting	3	4.41%
Behavior	Unprincipled behavior	6	8.82%
Enjoyment	Enjoying simple activities	3	4.41%

As can be seen from Table (8) the FD cultural models of OLD AGE BLOCKING in the Egyptian culture are predominantly social, while there is a complete absence of cultural models suggesting lack of restrictions on cognition or career and advancement.

The highest ranking cultural model in this subsection is OLD AGE BLOCKS HAVING SPOUSE/MARRIAGE OF CHOICE. Interestingly, out of the 15 instances in the sample, only one had a male referent which is a small number but still indicative of the FD cultural model applying to both genders, albeit with varying degrees. However, this appears to be a cultural model that is undergoing change, with 9 instances being forms of advice to people not to allow this cultural model to shape their decision making. Example (63) is one of the most emphatic of these instances in the sample.

(63)

... وربنا ان شاء الله هيبعتلك الى يقدرك بس اووووووووووووووووووووووووووووووووووعى تخلى <u>سنك</u> <u>يجبرك ع جوازة</u> والله يابنتى انا كلفت ابوية وامى كتيررررررر ...

'…and Allah will send someone your way who will appreciate you, but doooooooooooooooooooooooon't let your age force you into a marriage. Believe me girl, I cost my mum and a deaaaaar penny…'

This also stresses the fact that cultural models are not static entities; they are always being negotiated and renegotiated in societies as "culture comes to be (re)modeled over time" (Watson-Gegeo & Gegeo, 1999, p. 241). However, even as they are undergoing change they have a significant impact on the behaviors and actions of societal members, as when the new and emerging cultural model interacts with the older one during that transitional stage, most of the time, the earlier established models wins out (Watson-Gegeo & Gegeo, 1999).

c. *Egyptian FD cultural models of YOUNG AGE LETTING*

Categorization of this sub-section of the Egyptian sample revealed only one schema with four instances in the sample. It leads to the FD cultural model of YOUNG AGE ENABLES SOCIAL INTELLIGENCE. This is interesting since there were two instances of YOUNG AGE BLOCKS SOCIAL INTELLIGENCE schemata in the relevant sub-section. An incidence that serves to

remind us that holding a cultural model does not necessarily mean the exclusion of other or alternative cultural models (Curwood, 2014) and also ascertains the soundness of relying on frequency counts to identify which cultural models prevail in the cultures under study.

Otherwise, since the size of this sub-section of the sample is 28 instances, schemata with two instances represent 7.14% of the sub-section. While two instances are insufficient to conclude that a schema is wide-spread enough in the society to be considered a Cultural Model, they are enough to hypothesize cultural assumptions for later study. To distinguish these assumptions from concluded FD cultural models they were not treated using the all-capitals notion.

The cultural assumptions suggested by this sample sub-section are: young age enables impudence, young age enables erring, young age enables gullibility, young age enables shift in career and young age enables having spouse of choice. This last cultural assumption gains strength from its counterpart OLD AGE BLOCKS HAVING SPOUSE OF CHOICE, which makes it more likely to be recognized as a FD cultural model, subject to more evidence.

d.   *Egyptian FD cultural models of OLD AGE LETTING*

Table (9) shows the FD cultural models of OLD AGE LETTING in the Egyptian sample.

Table 9. Egyptian cultural models of OLD AGE LETTING

Category	Cultural Model	Number of Instances	Percentage
Social	Outspeaking	3	10.34%
Social	Respect	3	10.34%
Wisdom	Wisdom	7	24.13%
Disposition	Aptness	3	10.34%

Consistent with the Egyptian FD cultural models of age being more oriented toward blocking in general, the only schema with a number of instances higher than the absolute minimum, as set by this study, is the FD cultural model, OLD AGE ENABLES WISDOM.

4.7.2   American FD cultural models of age

This section reports on the Age-related FD cultural models as revealed by each sub-section of the American sample. Table (10) shows the FD cultural models of YOUNG AGE BLOCKING in the American sample.

a.   *American FD cultural models of YOUNG AGE BLOCKING*

Table 10. American cultural models of YOUNG AGE BLOCKING

Category	Cultural Model	Number of Instances	Percentage
Social	Parenting/Grandparenting	4	8.33%
Social	Being party to a meaningful relationship	3	6.25%
Cognitive	Comprehending thoroughly or deeply	12	25%
Cognitive	Foresight	3	6.25%
Wisdom	Wisdom	3	6.25%
Culture	Developing a taste in the arts	4	8.33%

The most remarkable finding of this sub-section of the American sample is that it gives rise to a strong FD cultural model of YOUNG AGE BLOCKS COMPREHENDING THOROUGHLY OR DEEPLY which constitutes a quarter of this sub-section.

The two FD Cultural Models YOUNG AGE BLOCKS BEING PARTY TO A MEANINGFULL RELATIONSHIP and YOUNG AGE BLOCKS PARENTING/GRANDPARENTING together constitute 14.58% of the relevant subsection, while the wisdom and cognition FD cultural models total 12.5% of the sample.

b. American FD cultural models of OLD AGE BLOCKING

Table (11) shows the FD Cultural Models of OLD AGE BLOCKING in the American sample.

Table 11. American cultural models of OLD AGE BLOCKING

Category	Cultural Model	Number of Instances	Percentage
Social	Parenting	4	8.69%
Learning	Learning	5	10.87%
Flexibility	Starting anew	4	8.69%
Diligence	Staying active/productive at work	5	10.87%
Career and accomplishment	Run for high ranking positions	3	6.52%
Emotion	Ambition	4	8.69%

This is the sub-section with the most diverse FD cultural models. However, the one that stands out the most is the OLD AGE BLOCKS LEARNING cultural model. With five instances, this FD cultural model represents 10.87% of the sub-section in question. Nevertheless, it is a case of a cultural model that is found to be undergoing a process of change. Two instances in the sample were in the affirmative, Example (64) represents one of them.

(64)   years to barely make ends meet, <u>but don't you think you are too old to go back to school?</u> College is for kids. I mean, you

This is one of two examples in the sample that revolved around academic learning; the other one is Example (33) above. Two other instances referred to the generic concept of learning something new and one example referred to learning a musical instrument. But two of these instances were

in the form of advice for people not to think that old age is a force that blocks learning, and one

was reporting on a real life story with this wisdom. Below is the extended text for this instance.

> # You really are <u>never too old to learn</u> something new. As I write, I'm listening to one of the zillion albums I get sent to review. It's by an Austrian musician called Gottlieb Twerdy; an architect who only learnt his first instrument at the age of 53, and has just released his debut album -- at 60! #

With more instances negating this schema in the sample than affirming it, this cultural model is

worth following up on in recent times to find out if it persists or ceases to exist in the American

culture.

Another remarkable finding that is also worth pursuing, perhaps in another study, is the

proposition of parenting in the American culture. This proposition featured in the YOUNG AGE

BLOCKING sub-section with four instances, representing 8.33% of the sub-section. Then it

featured again in OLD AGE BLOCKING with four instances, representing 8.69% of this sub-

section of the sample. With enough instances to give rise to the FD Cultural Models, YOUNG

AGE BLOCKS PARENTING and OLD AGE BLOCKS PARENTING, one must think that there

is a rather specific window in time that is perceived by the American culture as the appropriate age

for parenting. The extended text from GLOWBE in the examples below indicates that the

perceived appropriate age for parenting in the American culture is on the rise.

(65) # While the circumstances that lead to children being put up for adoption are varied, a common thread is that a child's biological parent, or parents, are not ready, willing, or able to care for their children. Sometimes the parents are too young to support a child emotionally or financially;

(66) were, in some circles, considered unfit to be adoptive mothers. I'm sorry that you have to deal with this situation, Sass! # Yep, it's ridiculous. We're also being told I'm' too young' and lack life experience (that apparently can only be gained through paid employment) at 28 -- the average age in this state for adoptive mothers is 44. And here I thought it was supposed to be about a couple's ability to care for a child. # That's kinda messed up. 28 is too young to love a child? And exactly what kind of work experience makes you a better parent? (besides some bosses I've had that resemble toddlers, I mean) I always thought it would be easier to adopt if you had the one parent works, one parent at home dynam

(67) ONE. # Cheri - posted on 04/18/2012 # 38 # 2 # Do you think it's too old? If not, then it's not too old. I stopped worrying about what other people, who are not living my life for me, think. If your OB approves you for another pregnancy and feels it's safe, go for it if that's what you want! # That said: Pregnancy wise, I know many surrogates doing this and many are between 40-45 years of age, so you're definitely not too old to be pregnant # When you're 60-wise: Your child will be able to handle themselves at age 20. It might be different if you had a 2yo at that age.... but you wouldn't. # GOOD LUCK IN TTC!!!:) # Emma - posted on 04/18/2012 # 9 # 23 # no not at all long you feel your up to having baby age do nt matter to certain point # Pamela - posted on 04/17/2012 # 654 # 9 # No. As long as you are healthy

(68) other hand, some would say it is better to have children when you're older. Presumably, the older you get, the more responsible, secure and stable you become. Hopefully, as you age you'll earn more money, so you can actually afford to raise a family. You might even have a nice home, have paid off your debts, and have gotten to a point where you are ready to take the next step. Plus, if you can't have your own children because the end-all, be-all doctors said you're too old to be a parent, don't listen to them -- there are other ways to create a family, such as adoption. A lot of people feel that people may be wiser, more mature, and prepared for the difficult moments that go into child-rearing the older they get. # This is why the baby-schedule question is so hard. I'm 26 and I can tell you right now, I'm nowhere near ready to have a kid. But am I going to be screwed later on in

From the above examples, it becomes apparent that the economic conditions and the alternatives for having a family are changing the American FD Cultural Model of age pertaining to parenting but that change is not firmly established yet.

c.   *American FD cultural models of YOUNG AGE LETTING*

Table (12) shows the Cultural Models of YOUNG AGE LETTING in the American sample.

Table 12. American cultural models of YOUNG AGE LETTING

Category	Cultural Model	Number of Instances	Percentage
Learning	Learn from experience	4	7.14%
Flexibility	Career shift or improvement	6	10.71%
Flexibility	Adjustability	4	7.14%
Flexibility	Changing way of living	3	5.36%
Enjoyment	Enjoying simple things	5	8.93%
Emotion	Hopefulness and optimism	5	8.93%

As seen in in Table (12), there are three FD Cultural Models focused around the quality of being flexible, namely; YOUNG AGE ENABLES SHIFT/IMPROVEMENT IN CAREER, YOUNG AGE ENABLES ADJUSTABILITY and YOUNG AGE ENABLES CHANGING WAY OF LIFE. This demonstrates that the American culture holds a very broad and overarching FD Cultural Model of YOUNG AGE ENABLES FLEXIBIITY.

d. American FD cultural model of OLD AGE LETTING

Table (13) shows the FD Cultural Models of OLD AGE LETTING in the American sample.

Table 13. American cultural models of OLD AGE LETTING

Category	Cultural Model	Number of Instances	Percentage
Social	Independence	8	16%
Cognition	Comprehending thoroughly or deeply	7	14%
Cognitive	Reflecting on self/society	4	8%
Wisdom	Recognizing and avoiding wrong choices	4	8%

The FD Cultural Models in this sub-section appear to be a natural conclusion of each other in the following order; since OLD AGE ENABLES COMPREHENDING THOUROUGHLY AND DEEPLY added to the fact OLD AGE ENABLES REFLECTING ON SELF AND SOCIETY, it is safe to assume that OLD AGE ENABLES RECOGNIZING AND AVOIDING WRONG CHOICES which means that OLD AGE ENABLES INDEPENDENCE.

Chapter Five: Discussion

5.1 **Introduction**

This study sheds light on the cultural models of age held by the Egyptian and American cultures.

To that end, the study relied on web corpora and adopted a cognitive linguistic approach applying

Talmy's (2000) force-dynamics of causation as a framework. This chapter starts with reviewing

and reflecting on some of the major decisions taken to explore the variable of interest, then the

main findings of this study are discussed, followed by discussing the implications of these findings,

the limitations of the study and suggestions for further research.

5.2 **Review of The Research**

Research in social cognition reports that three major factors shape our perceptions of people: race,

sex and age (Kunda, 1999; Nelson, 2004). However, not enough research has focused on the factor

of age (Basting, 2010). This study attempted to add to the limited body of knowledge on age by

adopting cognitive linguistics as an approach and applying Force Dynamics as a theoretical

framework. This section reports and reflects on these choices as foundations for the current

research.

5.2.1 Cognitive Linguistics as an approach

In the preface to *Ageism*, Nelson (2004) mentions age as one of three factors that people use to

"rather automatically" (p. ix) categorize others. Cognitive linguistics with its inherit interest in

studying linguistic production and its use to articulate thought (Etelämäki & Visapää, 2014) proved

to be an effective approach to shed light on the mental processes that leads to such categorization.

The study of cultural models within the framework of cognitive linguistics resulted in some cues

as to the sources of some of the positive and negative culturally held perceptions of age. Since

cultural models are "often expressed, contested, and modified through social interaction" (Curwood, 2014, p. 15), they are fairly stable yet subject to revision, modification, and reconstruction as needed within particular communities. They are dynamic and malleable, not static, and inflexible (Buzzanell & Burrell, 1997; Curwood, 2014). This means that the cues uncovered by this study can be further studied under a number of disciplines in order to provide scientifically-based means to enhance the cultural models of age that are positive in nature and replace the ones that are negative.

5.2.2 Corpus data and Force-dynamic analysis: a double framework

One major criticism leveled at the early endeavors of cognitive linguistics had stemmed from being perceived as a purely theoretical approach that lacks empirical rigor, leading cognitive linguistics to enrich the field with a range of testable methodologies (Evans et al., 2007; Grondelaers et al., 2007). Among these methodologies were the development of analytical cognitive linguistic tools as well as integrating methodologies from other linguistic and cognitive disciplines. The present study applied Force Dynamics as a framework of analysis, a cognitive linguistic methodology that is found to be an "analytical tool" (Morera et al., 2010, p. 503) and a system that offers "precise analytic procedure" (Oakley, 2005, p. 449). In addition, the study also adopted a "corpus-tested approach" (Grondelaers et al., 2007, p. 8) by relying on data from web corpora to test for the existence of FD schemata and detect cultural models. This double framework further the researcher's confidence in the credibility of the findings of the study.

5.2.3 Difficulties during data collection

As mentioned in Chapter 3, I utilized two corpora to collect the data for the analysis. The web-based corpus GLOWBE was used for the American English sample, easily providing the searched for tokens in sufficient frequencies. On the other hand, the Arabic language in general, and

Egyptian Colloquial Arabic (ECA) in particular, fall into the category of languages that lack enough corpora and basic language processing tools. It is generally recognized that "text collections available for Arabic dialects are sparse, including widely used dialects like Egyptian Cairene Arabic" (Al-Sabbagh & Girju, 2010, p. 288). This fact led to relying on Web-as-Corpus to compile the Egyptian Arabic sample. However, that endeavor posed its own difficulty. To find tokens that were both sufficient and representative, search queries needed to be done in both Modern Standard Arabic (MSA) and (ECA). The phonetic transcription techniques for MSA cannot be applied directly to the dialectal ECA, even though they share the same character inventory (Elmahdy, Gruhn, Abdennadher, & Minker, 2011), this left me with the challenges of estimating the various possible transcriptions for the mainly spoken ECA.

5.3   Patterns of Force-dynamic Age Schemata

Talmy's Force Dynamics of causation describe different schematic patterns of force interaction which extend from the realm of physical force to the inter psychological and social relationships by means of metaphorical extension (Talmy, 2000; De Mulder, 2012). Four of these patterns were found to describe the FD schemata of what people see as age appropriate in the Egyptian and American cultures. The YOUNG AGE BLOCKING and OLD AGE LETTING schemata followed the basic steady-state blocking and the shift-in-state onset of letting patterns, respectively. The other course of YOUNG AGE LETTING and OLD AGE BLOCKING followed the secondary steady-state extended letting and the shift-in-state onset of blocking patterns respectively.

In his analysis, Jensen (2015) looked at *young* and *old* as stable states, and from that point of view interpreted the schemata revealed by instances of [too young to V] and [too old to V] as steady state blockage patterns. However, two reasons led me to agree to that pattern as an

interpretation for the YOUNG AGE BLOCKING schemata but not for the OLD AGE BLOCKING ones. The first reason is the presence of some of the examples in the samples of this study that painted a picture so clear of an AGO that was in motion until a point in time (old) when the strong ANT [AGE], with its tendency toward stasis became engaged in the impingement leading to the blockage of the AGO. Examples of such a pattern are explicitly stated in Examples (27), (28) and (31) and implied from Examples (25) and (26) for the Egyptian Arabic as well as being stated in Examples (33) and (40) and implied in Example (36) for the American English in Chapter 4, repeated below for convenience.

(25) كلام حب و كدة المهم مكنتش بقدر اقولها بلاش واقول عادى بتعمل شير لحاجات وخلاص ومخنقش عليها اخويا بدا يلمحلها ان سنها ميسمحش بالكلام اللى بتشيره دا و والدتى ٥٠ سنة

'love quotes and such. I couldn't tell her not to and I told myself it was nothing; she's just sharing stuff and that is it and I shouldn't throttle her. My brother started to hint that her age does not allow her to share the posts she does. My mum is 50'

(26) وبرضوا سننا ميسمحش نلبس شورت او ترينج ونوقف نط نطط في صالة رياضة .... واغلب صلاة الجيم. علشان تربي عضلات ... بس انا مش عاوز اربي عضلات ...

'and our age does not let us put on shorts or a training suit and jump around in a gym…most gyms are for body building…I don't want that…'

(27) هو الاهم وبعدها قدرت أوازن بين الاثنين ولكن حاليا أن لو حد طلب مني أن أظهر بالمايوه سأرفض لموانع فية وكذلك شخصية ،لا مكانتي ولا سني يسمح بكده ".

'but now, if someone asked me to shoot a scene in swimwear, I'll refuse. Because of some things in me as a person and some private issues are going to hold me back. Neither my status, nor my age allow it'

(28) العروسة تكون ارمله او مطلقه ولا تريد الانجاب عشان هو وجهه نظره ان سنه ميسمحش للتربية من اول وجديد وياريت يكون سنها من ٣٥ الي ٤٠ سنة ومقبولة الشكل

'seeking a widow or a divorced woman who doesn't want to have children because he believes that his age prevents raising kids again. Hopefully the woman would be 35-40 and nice looking'

(31)   هل سني يسمح لي بمشاهدة الانمي ؟؟... ...هل سيأتي اليوم الذي ساجلس بجانب اولادي لمشاهدة الانمي ؟؟... حقيقة أرعبتني هذه الاسئلة فكلنا نحب مشاهدة الأنمي...ولاكن هدا لا يعني اننا ...

'Does my age allow me to watch anime??..Will the day come when I will sit next to my children and watch anime??..honestly, these questions scared me, we all love to watch anime.. but that doesn't mean…'

(33)   negatively about themselves and age, and they have said that, I am <u>too old to learn anymore</u>, I am too old to do things, but no on

(36)   90 minutes than its predecessors. " # So, Bob Schieffer may be <u>too old to moderate the debate</u>, unless it turns out he's as good at debate

(40)   focus on candidates whom I believe sincere for the future of our country, but it is difficult to sort them out. Perhaps I am getting <u>too old to believe in anything anymore</u>. However, I will try to sort out the

The second reason is the featuring of some AGOs both in YOUNG AGE LETTING schemata and in OLD AGE BLOCKING schemata. This can be seen in Examples (41) and (21) for the Egyptian Arabic as well as in Examples (50) and (40) for the American English, repeated below.

(41)   ...انى كدة بتتنك وبتبطر على النعمة وممكن اوى بكرة ملقيهاش وان <u>سنى يسمح لى انى اختار</u> بكرة ممكن ميسمحش..

'…that I'm being arrogant and disregarding of the favor and that it is very likely not to come my way in the future. They say my age now allows me to choose, tomorrow it probably won't'

(21)   تاتكد من الموضوع دا, و بصراحه <u>سنها مايخليهاش تدقق اوي</u>

'She should make sure of it, and to be honest, her age does not allow her to be so picky'

For those reasons, I find the shift in the state of impingement blocking pattern to be a better representation for the interpretation of the OLD AGE BLOCKING schemata.

Based on his view of *old* and *young* as steady states, Jensen (2015) suggests the existence of a "complex network of cultural models of age" (p 142). I propose a more linear image. Based on the findings of this study, I would like to hypothesize the existence of a framing image schema of age as a continuum with diverse AGOs with tendencies toward motion going in a directional way along that continuum, at different points along the continuum, the ANT [AGE] starts by blocking some AGOs and letting others with the potential of stopping them later. This potential is realized in later points along the continuum (old), when the ANT becomes involved in the impingement, leading to the onset of blocking of some AGOs, while it also ceases from being engaged in other impingements, leading to the onset of letting some others.
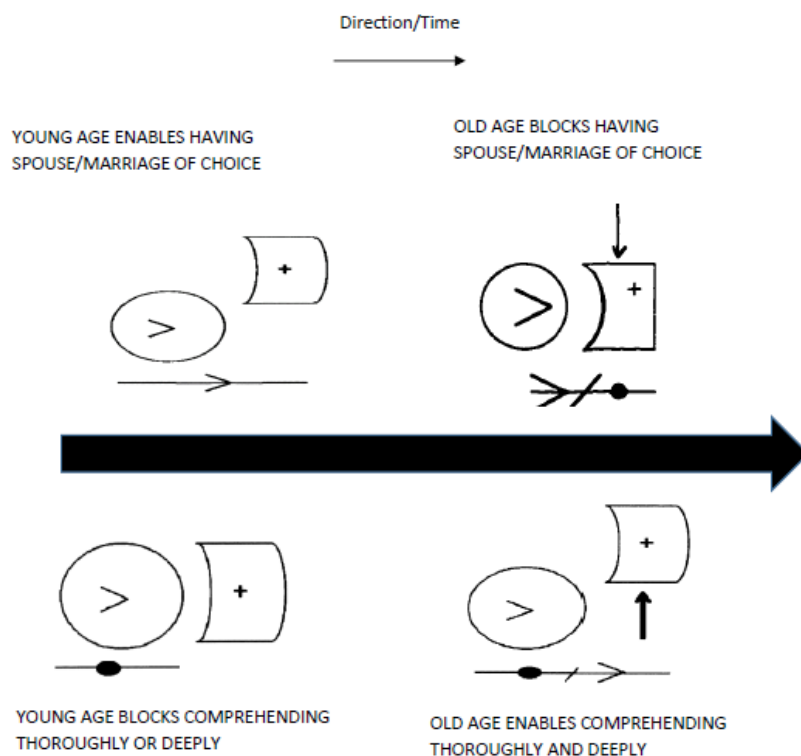

Figure 6. The proposed AGE IS A PATH schema

This conceptualization is supported considering the fact that other researchers have found it to apply to other concepts. In the first chapter of his book, Sharifian (2001) contrasts image schemata of the aboriginal people of Australia with those of western cultures. He reports that while a lot of

the image schemata of Aboriginals follow a circular or a spiral pattern, the image schema of a 'path' is the one often used in western patterns of thought. Since the continuum or path image schema holds for the Egyptian culture as well, further studies would need to follow to determine the degree of universality of the image schema AGE IS A PATH with all of the force-dynamic patterns along that path. Figure (6) above illustrates this proposed image schema.

5.4 Domains in Egyptian and American FD Cultural Models of Age

In addition to insight gained in sections 4.6 and 4.7, above, on the FD cultural models of age held by the Egyptian and American cultures, this section highlights some of the domains that featured in some of the FD age-related cultural models of the two cultures in question.

5.4.1 Age, understanding and consequences

Both the Egyptian and American cultures openly reflect a FD Cultural Model of YOUNG AGE BLOCKS COMPREHENDING THOROUGHLY OR DEEPLY. It is a more firmly established FD Cultural Model in the American culture with 12 instances that make up 25% of the relevant sample sub-section. It is also a firmly established FD Cultural Model in the Egyptian Culture with eight instances that make up 14.81% of the relevant sample sub-section. The main difference is that the American Culture further strengthens this FD Cultural Model by holding its counterpart, OLD AGE ENABLES COMPREHENDING THOROUGHLY AND DEEPLY true at a firm 14% of the sub-sample, further strengthening the American culture age-bound perceived relationship between age and understanding.

Moreover, a look at the other cultural models in the *young age blocking* sub-sections of both samples gives more insight into the age-understanding relationship in each culture. Starting with the Egyptian culture, in addition to blocking comprehending, there are the cultural models

YOUNG AGE BLOCKS FORMING/VOICING AN OPINION and ENGAGING IN A MEANINGFUL DISCUSSION, which can both be seen as social consequences for the lack of comprehension. It suggests that the Egyptian culture expects those who voice opinions and engage in meaningful discussions to come from a background of deep understanding, and to not be young. On the other hand, the American culture holds the same FD cultural model of YOUNG AG BLOCKS COMPREHENDING THOROUGHLY OR DEEPLY, conducive to the cultural models YOUNG AGE BLOCKS WISDOM and YOUNG AGE BLOCKS FORESIGHT, which can be seen as the effects of the lack of comprehension on the individual. This suggests that the American culture is more result-oriented and individual-oriented than the Egyptian culture.

5.4.2 Age and wisdom

In section 4.6.2, we discussed the source of wisdom as revealed by the statistics of propositions featuring in Egyptian and American FD cultural models of age. However, a statement by Cuddy & Fiske (2004) triggers some issues that entail a closer look at the findings of this study; they wrote "Today in America, we no longer see our elders as sources of wisdom but as feeble yet lovable, doddering but dear." (pp. 3–4). Keeping in mind that the subject here is not those who possess various degrees of oldness, but rather those who are elderly, this statement raises three issues: old age and attractiveness, old age and wisdom and old age and imparting with wisdom. Starting with attractiveness, the statement reflected a clear focus on the not very appealing physical attributes of being old, thus affirming the schema of OLD AGE BLOCKS ATTRACTIVENESS which had two instances in the relevant sub-section of the study. As for wisdom, to be able to compare the claim of this statement with the findings of the study, a note must be made on the categorization of the study samples. In categorizing the instances of the samples used for the present study, a, distinction was made between having cognitive skills, having wisdom and

imparting with the manifestations of either. One aspect of wisdom had enough instances to qualify as a cultural model according to the criterion set hereinabove. This is the wisdom of recognizing and avoiding bad choices, a rather individual manifestation of wisdom. As for giving sensible advice, there were only two instances for it in the sample, i.e. not enough to qualify as a cultural model. This is in line with the change in perception mentioned in Cuddy and Fisk's statement. An understanding of the reason behind this change could be attempted through a closer look at the American FD cultural models for old age. This study revealed the American cultural models of OLD AGE ENABLES COMPREHENDING THROUGHLY AND DEEPLY and OLD AGE ENABLES REFLECTING. However, the view of old age blocking aspects of flexibility and diligence leads to the FD cultural model of OLD AGE BLOCKS LEARNING, which is a FD cultural model that is currently undergoing change. Pairing this with the FD cultural model of OLD AGE BLOCKS AMBITION and the fact that we are now in the information age, lacking the flexibility, diligence and desire to cope with such huge amounts of information could have slowed people with higher degrees of oldness from coping with the fast and profound changes. This led to old people no longer being seen as the source of knowledge and consequently wisdom. Since the FD cultural model OLD AGE BLOCKS LEARNING is already changing, the root of the stereotypical view mentioned in Cuddy and Fiske's statement above, may cease to exist in the future. Should well-advised campaigns be held at the right time, the stereotypical behavior of not referring to the old for wisdom may turn out to exist for a short span of time.

5.4.3   Age and meaningful relationships

The Egyptian and American cultures also share a FD cultural model of YOUNG AGE BLOCKS BEING PARTY TO A MEANINGFUL RELATIONSHIP. This time, it is a firmer cultural model for the Egyptians with 10 instances making up 18.51% of the sub-section, while three instances

make up 6.25% of the American sample sub-section. Despite the differences in the two cultures in what constitutes a meaningful relationship, the age-related FD cultural models are considerably similar. The examples below illustrate these similarities.

(69) لو عرفتى اختك بتحب حد اوووى هتعملى ايه ؟ اخواتى اصغر منى كلهم ولو اختى اللى اصغر منى عملت كدة هزعلها جامد وهنتخانق لان سنها ميسمحش ودة اصلا مينفعش

'If you knew your sister is so in love with someone, what will you do? My sisters are all younger than I am and if my younger sister did that I'll make her sorry for it and we'll quarrel because her age doesn't allow it'

(70) أساسا سني صغير علي اني اطلب الارتباط دلوقتي يعني بعد أيام لسه هييقي عندي ٢١ سنة ولسه مخلص كليتي السنادي يعني مثلا حضرتك أكبر..

'actually I'm too young for engagement now, I mean I'm turning 21 in a few days and have only just graduated this year'

(71) much too young to have any kind of boyfriend. You are only now old enough to know WANT, not LOVE. Love is when you want that other person

(72) I'm leaving. " All made sense when I read the house was Rob's. # Sad. I think Kristen is too young and didn't want to be in a commited relationship; wouldn't have worked

As seen from the examples above, the same two foundations give rise to the cultural model in both cultures. The first foundation is a perception that a degree of youngness blocks a person from being emotionally vested in a meaningful relationship, as seen in Examples (69) and (71). The second foundation, seen in Examples (70) and (72), is a perception that youngness blocks the commitment of being in a meaningful relationship.

5.4.4 Age and parenting

As discussed in section 4.7.2.b, American Age-related FD Cultural Models of parenting are currently undergoing a process of change. However, the older FD Cultural Model of OLD AGE BLOCKS PARENTING appears to stem from the same notion from which it stems in the Egyptian

culture: the effort needed to care for and raise a child. This shows in Example (28), above, as well as these two examples below.

(73) ان مامتى مكملتش تعليمها بس بتعرف تقرأ سنها اكبر منى بسنين كتيرة شوية لانى جيت بعد ٣ ولاد.. مش متبعانى فى ممكن تقولى قومى ذاكرى وخلاص مش هعاتبها لان هى سنها ميسمحش انها تفضل معايا ومتابعة وكدة

'because my mum didn't finish her education, but she knows how to read. The age gap between us is a little too big because I came after 3 sons..she's not following up with me. She could tell me to study and that is it. I'm not going to blame her because her age prevents her from keeping a close eye on me'

(74) and Tonks' father died in the war and her mother felt she was too old to care for a young child. Even still, the faith they placed in

It is clear from these examples that it is the stamina needed to care for a child that derives the FD Cultural Model of OLD AGE BLOCKS PARENTING in both cultures. However, as apparent from Example (68), with alternative options for forming families in the American culture, more people feel that they are ready for this step later in their lives when they have dealt with financial and career burdens. If we take into consideration that the Egyptian FD Cultural Model, OLD AGE BLOCKS HAVING SPOUSE OF CHOICE is also undergoing change now, which would probably result in marriageable age being more culturally accepted to be appropriate at age intervals higher than they are now, then we could predict that the parenting FD Cultural Model would undergo change similar to its American counterpart later on. Nonetheless, since there are not as many options for forming a family in the Egyptian culture as there are in the American culture, the future of the Egyptian FD Cultural Models of marriage and parenting can only be re-examined in a number of years to re-assess their change.

5.4.5 Age and social interaction

Turning to the Egyptian culture, FD cultural models pertaining to social interaction represent nearly half of those revealed by the sample. For FD cultural models like YOUNG AGE BLOCKS CHALLENGING A SENIOR and OLD AGE ENABLES RESPECT, the origin is suggested to partially draw on cultural heritage with religious roots. Islamic teachings based on the hadith "He who fails to show mercy to our young and esteem to our elderly is not one of us." [*Sunan al-Tirmidhî* (1919)] and biblical teachings based on the verse "Stand up in the presence of the aged, show respect for the elderly and revere your God. I am the Lord." (Leviticus 19:32, the New International Version), have their role in shaping the Egyptians' perceptions of age as a strong force, particularly in terms of regulating social interaction.

Finally, looking at how the same social situation features in an Egyptian and an American token reveals the different viewpoints that lead to the same proposition being seen as an age letting or an age blocking schema. The proposition in question is name calling and mockery. Example (22), repeated below for convenience, and Example (75) illustrate that different view.

(22)   طيب انت كنت كويس ليه التريقه بس لا مركزي <u>ولا سني يسمح لي بتقبل الاستهزاء</u> فارجو ان نحافظ علي رقي الحوار.

'You were going ok, why the mockery, neither my status nor my age would let me take being mocked. Please keep the conversation civil'

(75)   "Name calling usually ends at 1st grade ". If you are old enough to carry on an intelligent discussion please enjoy.

Example (22) shows the Egyptian viewpoint of OLD AGE BLOCKS RECEIVING A VERBAL ATTACK, while Example (75) shows how the American culture handles the same situation through an OLD AGE ENABLES CIVILIZED CONVERSATION. Similar viewpoints could

interpret the high frequency of social interaction propositions featuring in age blocking cultural models in the Egyptian culture as compared to those of the American culture.

5.5 Implications of the Study

The purpose of this study was to explore the Egyptian and American age-related force dynamic cultural models of age. It hoped to shed light on the different propositions that the Egyptian and American cultures see as age bound, where age is a strong force that has the force to either let or block these propositions at various points in time, as well as show which ones are largely shared within the cultures subject to the study. As seen in the section above, applying the FD framework to the naturally produced discursive behavior of a community can help understand the underpinning cognitive roots behind observed social phenomena. Applying the framework to discover age-related cultural models resulted in insights that have the potential of being useful on various levels. For example, knowing which age groups are seen to have more diligence, flexibility, ability to learn, ability to understand deeply, etc. may lead to better deployment of the workforce and better workplace dynamics. On the other hand, knowing what each group is seen to have blocked from their reach may help businesses better target different age segments of their clientele, or help different organizations plan well-targeted campaigns that speak to the age groups intended. Finally, knowing the extent and types of age-related FD cultural models each culture has may lead to better inter-cultural communications among individuals and nations.

5.6 Limitations of the Study

As explained above, this study relied on data collected from the web-based corpus, GLOWBE for the American English sample and Web-as-Corpus for the Egyptian Arabic sample. The resultant sample sizes are 200 instances for the American English and 179 for the Egyptian Arabic. Each sample was further divided into four subsections with the smallest in size being the Egyptian

YOUNG AGE LETTING sub-section with 28 instances. This is a relatively small number for a corpus-based study and it affected the number of cultural models detected, particularly from the Egyptian young age letting sub-section. Had a representative corpus of Egyptian Arabic been available, it would have been better to rely on it for the purpose of this study.

Moreover, the nature of corpus data does not always provide the meta data needed to identify tokens by gender, race and socioeconomic subcultures. However, later studies that would focus on one or two domains or propositions could rely on multiple corpora to collect enough instances with meta data to enable a more detailed look with respect to the variables of age, race and socioeconomic subcultures.

5.7 Recommendations for Future Studies

First of all, in order to overcome the limitations mentioned above, an exhaustive body of Egyptian texts can be compiled and searched for a sample size that would be closer in range to that provided by a structured corpus. As well as collect enough tokens for both Egyptian Arabic and American English to break down the FD cultural models revealed in this study by gender, race and socioeconomic subcultures.

As mentioned earlier, Force dynamics can be utilized as a framework to investigate the cognitive basis for various social phenomenon. Having applied the FD framework to age in this exploratory study, a number of age-related schematic representations and cultural models were uncovered that can be the topic of more in-depth research. Of particular interest would be the possibility to carryout apparent-time studies for cultural models that seem to be undergoing change. These include the FD relationships that govern age and the concepts of parenting, learning and wisdom in the American culture, which can be studied against older tokens extracted from the

Corpus of Historical American English (COHA). Such a study has the potential of giving enough insight that would help anticipate the trajectory of these cultural models into the future. As for the Egyptian cultural models, the lack of a similar corpus would mean the reliance on people from different age groups and elicited data to obtain a diachronic study of the FD cultural models governing age and having a marriage and spouse in the Egyptian culture.

A real time study for the FD cultural model of OLD AGE BLOCKS PARENTING in the Egyptian culture would also reveal if it would follow a similar pattern to the one it followed in the American culture. Also, an exploratory study could be conducted to give insight on the notion of attractiveness in the Egyptian culture for which no instances were revealed in this study sample.

Further studies could also target comparing the Egyptian age-related FD cultural models with those of neighboring Arab countries giving insight on the commonly-held cultural models of the Arab region. This study also found evidence to suggest a degree of universality for the image schema of AGE IS A PATH which can be explored further.

Finally, during the process of collecting the samples of this study, I found a number of Arabic and English websites with advice to new parents and to care-givers for old people. While those would not particularly reveal cultural models of age, they could be useful for a study on the Arabic and English lexicogrammatical patterns for *young age causes* and *old age causes* FD schemata.

Primary Source

Davies, Mark. (2013) *Corpus of Global Web-Based English: 1.9 billion words from speakers in 20 countries (GloWbE).* Available online at http://corpus.byu.edu/glowbe/.

References

Al-Sabbagh, R., & Girju, R. (2010). Mining the web for the induction of a dialectical Arabic

   lexicon. In *LREC* (pp. 288–293). Retrieved from

   https://www.researchgate.net/profile/Rania_Al-

   Sabbagh/publication/220746429_Mining_the_Web_for_the_Induction_of_a_Dialectic

   al_Arabic_Lexicon/links/02e7e51597e45d9c5d000000.pdf

Amin, T. G., Jeppsson, F., Haglund, J., & Strömdahl, H. (2012). Arrow of time: Metaphorical

   construals of entropy and the second law of thermodynamics. *Science Education*,

   96(5), 818–848. https://doi.org/10.1002/sce.21015

Associated Press. (n.d.). How important is McCain's age? Retrieved April 23, 2017, from

   http://www.nbcnews.com/id/25671658/ns/politics-decision_08/t/how-

   important-mccains-age/#.WPwmUIiGPIU

Basting, A. D. (2010). Foreword. In V. B. Lipscomb & L. Marshall (Eds.), *Staging age: the

   performance of age in theatre, dance, and film* (pp. vii–vii). New York: Palgrave

   Macmillan.

Bergelson, M. (2014). Russian cultural values and workplace communication patterns. In

   Intercultural communication: A reader (14th ed., pp. 133–140). Cengage Learning.

   Retrieved from

https://books.google.com/books/about/Intercultural_Communication_A_Reader.ht ml?id=xt7KAgAAQBAJ

Blumczyński, P. (2013). Turning the tide: A critique of Natural Semantic Metalanguage from a translation studies perspective. *Translation Studies*, *6*(3), 261–276. https://doi.org/10.1080/14781700.2013.781484

Boye, K. (2001). The force-dynamic core meaning of Danish modal verbs. *Acta Linguistica Hafniensia*, *33*(1), 19–66. https://doi.org/10.1080/03740463.2001.10412194

Bratishenko, E. (2011). Genitive vs. dative: The case of protivu in the history of Russian/Родительный против дательного: вопрос о противу в истории русского языка. *Russian Linguistics*, 283–299.

Buzzanell, P. M., & Burrell, N. A. (1997). Family and workplace conflict examining metaphorical conflict schemas and expressions across context and sex. *Human Communication Research*, *24*(1), 109–146.

Cambridge textbooks in linguistics: Cognitive linguistics. (2004). Cambridge, GB: Cambridge University Press. Retrieved from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10110137

Collins, C. C., & Dressler, W. W. (2008). Cultural models of domestic violence: Perspectives of social work and anthropology students. *Journal of Social Work Education*, *44*(2), 53–74.

Coulson, S. (2006). Conceptual blending in thought, rhetoric, and ideology. In *Cognitive linguistics: Current applications and future perspectives* (Vol. 1, pp. 187–208). Walter

de Gruyter. Retrieved from

https://books.google.com/books?hl=en&lr=&id=kHAG451C8XIC&oi=fnd&pg=PR5&

dq=%22Gitte,+Achard,+Michel,+and+Dirven,+Ren%C3%A9,+eds.+Applications+of+

Cognitive+Linguistics+%5BACL%5D+:+Cognitive+Linguistics:+Current+Application

s+and+Future+Perspectives+:+Current+Applications+and+Future+Perspectives.+B

erlin/Boston,+DE:+De+Gruyter+Mouton,+2006.+Pr&ots=jEkaPhIvkr&sig=BgigVKCF

dPvhHdcwIk2VSErdUOY

Cuddy, A., & Fiske, S. (2004). Doddering but dear: Process, content and function in

stereotyping of older persons. In *Ageism: Stereotyping and prejudice against older

persons*. United States: MIT Press.

Curwood, J. S. (2014). English teachers' cultural models about technology: A

microethnographic perspective on professional development. *Journal of Literacy

Research*, *46*(1), 9–38.

Davies, M., & Fuchs, R. (2015). Expanding horizons in the study of World Englishes with the

1.9 billion word Global Web-based English Corpus (GloWbE). *English World-Wide*,

36(1), 1–28. https://doi.org/10.1075/eww.36.1.01dav

De Mulder, W. (2012). Force dynamics. In *The Oxford handbook of Cognitive Linguistics* (pp.

294–317). Oxford University Press. Retrieved from

http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199738632.001.

0001/oxfordhb-9780199738632-e-12?&mediaType=Article

De Schryver, G.-M. (2002). Web for/as corpus: A perspective for the African languages. *Nordic Journal of African Studies*, *11*(2), 266–282.

Dirven, R. (2005). Major strands in cognitive linguistics. In *Cognitive Linguistics: Internal dynamics and interdisciplinary interaction* (Vol. 32, pp. 69–100).

Elmahdy, M., Gruhn, R., Abdennadher, S., & Minker, W. (2011). Rapid phonetic transcription using everyday life natural Chat Alphabet orthography for dialectal Arabic speech recognition. In *Acoustics, Speech and Signal Processing (ICASSP), 2011 IEEE International Conference on* (pp. 4936–4939). IEEE. Retrieved from http://ieeexplore.ieee.org/abstract/document/5947463/

Etelämäki, M., & Visapää, L. (2014). Why blend conversation analysis with cognitive grammar? *Pragmatics*, *24*(3), 477–506.

Evans, V. (2012). Cognitive linguistics. *Wiley Interdisciplinary Reviews: Cognitive Science*, *3*(2), 129–141. https://doi.org/10.1002/wcs.1163

Evans, V., Bergen, B. K., & Zinken, J. (2007). The cognitive linguistics enterprise: An overview. *The Cognitive Linguistics Reader*, 2–36.

Fryberg, S. A., & Markus, H. R. (2007). Cultural models of education in American Indian, Asian American and European American contexts. *Social Psychology of Education*, *10*(2), 213–246. https://doi.org/10.1007/s11218-007-9017-z

Gatewood, J. B. (2012). Cultural models, consensus analysis, and the social organization of knowledge. *Topics in Cognitive Science*, *4*(3), 362–371. https://doi.org/10.1111/j.1756-8765.2012.01197.x

Gatto, M. (2011). The "body"and the "web": The web as corpus ten years on. *ICAME Journal*, *2011*(35), 35–58.

Gilquin, G. (2010). *Corpus, cognition and causative constructions*. Amsterdam: John Benjamins. Retrieved from http://site.ebrary.com/lib/aucairo/printPage.action?op=toPDF&ct=APA&rds=chapter&docID=10383978&st=329&ed=332&dt=1480112727939

Goatly, A. (2007). *Washing the brain: Metaphor and hidden ideology*. Amsterdam / Philadelphia: John Benjamins.

Grondelaers, S., Geeraerts, D., & Speelman, D. (2007). A case for a cognitive corpus linguistics. In C. Seana, I. Mittelberg, & M. Gonzalez-Marquez (Eds.), *Methods in Cognitive Linguistics* (pp. 149–169). Amsterdam: John Benjamins. Retrieved from http://site.ebrary.com/lib/aucairo/printPage.action?op=toPDF&ct=APA&rds=chapter&docID=10176616&st=177&ed=197&dt=1480111109901

Hampe, B. (2005). When down is not bad, and up not good enough: A usage-based assessment of the plus–minus parameter in image-schema theory. *Cognitive Linguistics*, *16*(1), 81–112.

Hart, C. (2011). Force-interactive patterns in immigration discourse: A Cognitive Linguistic approach to CDA. *Discourse & Society*, *22*(3), 269–286.

Holland, D. C., & Quinn, N. (Eds.). (1987). *Cultural models in language and thought*. Cambridge [Cambridgeshire] ; New York: Cambridge University Press.

Ibarretxe-Antuñano, I., Cadierno, T., & Hijazo-Gascón, A. (2016). The role of force dynamics

and intentionality in the reconstruction of L2 verb meanings: A Danish-Spanish

bidirectional study. *Review of Cognitive Linguistics*, *14*(1), 136–160.

https://doi.org/10.1075/rcl.14.1.06iba

Jensen, K. E. (2014). Force-dynamic cultural models in a scalar adjectival construction'. In

5th UK Cognitive Linguistics Conference, Lancaster, July (Vol. 29). Retrieved from

http://vbn.aau.dk/files/206865129/Force_dynamic_manuscript.pdf

Jensen, K. E. (2015). Inferring cultural models from corpus data: Force-dynamic cultural

models reflected in the discursive behavior of a scalar adjectival construction. *Globe:*

A Journal of Language, Culture and Communication, *1*. Retrieved from

https://journals.aau.dk/index.php/globe/article/view/699

Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and*

reason. Chicago: University of Chicago Press.

Kenski, K., & Jamieson, K. H. (2010). The effects of candidate age in the 2008 presidential

election. *Presidential Studies Quarterly*, *40*(3), 449–463.

https://doi.org/10.1111/j.1741-5705.2010.03780.x

Kilgarriff, A., & Grefenstette, G. (2003). Introduction to the special issue on the web as

corpus. *Computational Linguistics*, *29*(3), 333–347.

Kimmel, M. (2011). From text-linguistics to literary actants–The force dynamics of

(emotional) vampirism. *Language and Cognition*, *3*(2), 235–282.

Klein, E. (2008, June 12). Is McCain too old? Is Obama too young? *Los Angeles Times*.

    Retrieved from http://www.latimes.com/opinion/la-op-klein-mcardle12-

    2008jun12-story.html

Kövecses, Z. (2016). Conceptual metaphor theory. In E. Semino & Z. Demjén (Eds.), *The*

    Routledge Handbook of Metaphor and Language (pp. 13–27). Abingdon/New York:

    Routledge.

Kunda, Z. (1999). *Social cognition: Making sense of people*. Cambridge, Mass: MIT Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.

Langacker, R. W. (1997). The conceptual basis of cognitive semantics. In J. Nuyts & E.

    Pederson (Eds.), *Language and conceptualization*. Cambridge/New York: Cambridge

    University Press.

Lee, H. (1998). *The syntax and semantics of the Korean periphrastic causative construction*

    (Ph.D. dissertation). University of New York, Buffalo. Retrieved from

    http://search.proquest.com/openview/50bd8e67185f946ac6d5152d7941a7ce/1.p

    df?pq-origsite=gscholar&cbl=40246

Macauda, M. M., Erickson, P. I., Singer, M. C., & Santelices, C. C. (2011). A cultural model of

    infidelity among African American and Puerto Rican young adults. *Anthropology &*

    Medicine, *18*(3), 351–364. https://doi.org/10.1080/13648470.2011.615908

Malcolm, I. G., & Sharifian, F. (2002). Aspects of Aboriginal English oral discourse: An

    application of cultural schema theory. *Sage Publications, LTD.*, *4*(2), 169–181.

Mandler, J. M. (2007). *The foundations of mind: Origins of conceptual thought*. New York: Oxford University Press. Retrieved from http://www.oxfordscholarship.com.libproxy.aucegypt.edu:2048/view/10.1093/acprof:oso/9780195311839.001.0001/acprof-9780195311839-chapter-4

Maxwell, K. (2012). Man up [Def. 1]. Retrieved April 18, 2017, from http://www.macmillandictionary.com/buzzword/entries/man-up.html

Morera, Y., De Vega, M., & Camacho, J. (2010). Differences in continuity of force dynamics and emotional valence in sentences with causal and adversative connectives. *Cognitive Linguistics*, *21*(3), 501–536. https://doi.org/10.1515/COGL.2010.017

Nelson, T. D. (2004). Preface. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. ix–xiv). Boston, Massachusetts: MIT Press.

Oakley, T. (2005). Force-dynamic dimensions of rhetorical effect. In B. Hampe (Ed.), *From perception to meaning: Image schemas in Cognitive Linguistics* (Vol. 29, pp. 443–473). Berlin/New York: Mouton de Gruyter.

Ofahengaue Vakalahi, H. F., Toafa, S. G., & Moala, K. O. (2008). Grandparenting in the Tongan community: A cultural model. *Journal of Intergenerational Relationships*, *6*(3), 305–319. https://doi.org/10.1080/15350770802157885

Paolisso, M., Weeks, P., & Packard, J. (2013). A cultural model of farmer land conservation. *Human Organization*, *72*(1), 12–22.

Pederson, E., & Nuyts, J. (1997). Overview: On the relationship between language and conceptualization. In E. Pederson & Nuyts (Eds.), *Language and conceptualization* (pp. 1–12). Cambridge/ New York: Cambridge University Press.

Riemer, N. (2006). Reductive paraphrase and meaning: A critique of Wierzbickian semantics. *Linguistics and Philosophy*, *29*(3), 347–379. https://doi.org/10.1007/s10988-006-0001-4

Schneider, K. P. (2012). Pragmatic variation and cultural models. *Review of Cognitive Linguistics*, *10*(2), 346–372.

Sharifian, F., & Jamarani, M. (2011). Cultural schemas in intercultural communication: A study of the Persian cultural schema of sharmandegi "being ashamed." *Intercultural Pragmatics*, *8*(2), 227–251. https://doi.org/10.1515/iprg.2011.011

Stefanowitsch, A., & Gries, S. (2005). Covarying collexemes. *Corpus Linguistics and Linguistic Theory*, *1*(1), 1–43.

Talmy, L. (1988). Force dynamics in language and cognition. *Cognitive Science*, *12*(1), 49–100.

Talmy, L. (2000). *Toward a cognitive semantics* (Vol. 1). Cambridge, Mass: MIT Press.

Violi, P. (2003). Embodiment at the crossroads between cognition and semiosis. *Recherches En Communication*, (19), 199–217.

Watson-Gegeo, K. A., & Gegeo, D. W. (1999). (Re) modeling culture in Kwara'ae: The role of discourse in children's cognitive development. *Discourse Studies*, *1*(2), 227–246.

Wierzbicka, A. (1997). *Understanding cultures through their key words: English, Russian,*

   Polish, German, and Japanese. New York: Oxford University Press.

Wolff, P., & Song, G. (2003). Models of causation and the semantics of causal verbs.

   Cognitive Psychology, *47*(3), 276–332. https://doi.org/10.1016/S0010-

   0285(03)00036-7

Woodward, K. (1991). *Aging and its discontents: Freud and other fictions* (Vol. 13). Indiana:

   Indiana University Press.

Yamaguchi, M. (2009). Non-understanding as a heuristic to hypothesizing cultural models:

   A meta-oriented sociolinguistic strategy1. *Journal of Sociolinguistics*, *13*(3), 387–410.