

A corpus-based Analysis of Adjective Patterns in English and Arabic Newspapers from a Cognitive Perspective

Abdelrahman Hassan

English Teacher at Ibn Khaldoun International School

Abstract

The research is conducted to examine the occurrence of adjectives in English and Arabic newspaper corpora. The purpose is to find out the most frequent lexical phrases and their phraseological patterns. In addition, the study is an attempt to explain the cognitive phenomenon behind how linguistic units are constructed, produced and developed into other forms. The theoretical framework is the usage-based cognitive approach that focuses on the integration of lexical items and the role of frequency and usage in entrenching and generalizing new schematic constructions. Corpus linguistics, as a method, analyzes naturally occurring language obtained from corpora by means of specialized software. Both corpora, the Arabic Ar Ten Ten and the En Ten Ten, are processed by Sketch Engine. The Ar Ten Ten corpus, a collection of Arabic texts from the web, is contrasted with the En Ten Ten Corpus that contains materials from leading English newspaper agencies. The results show that all the constructions of the adjective category are operated by the same single category prototype in both languages. All adjective patterns are either instances or extensions of the central prototype.

Keywords: constructions, corpus analysis, phraseology, chunks, adjective patterns.

تحليل قائم على المجموعات النصية لأنماط الصفة في الصحف الإنجليزية والعربية من منظور إدراكي

تُجرى هذه الدراسة لفحص وقوع الصفات في نصوص الصحف الإنجليزية والعربية. الهدف هو التعرف على أنماط العبارات اللغوية الأكثر تكرارًا. بالإضافة إلى ذلك، تسعى الدراسة إلى شرح الظواهر الإدراكية والمعرفية وراء كيفية بناء الوحدات اللغوية وتطورها إلى عبارات أخرى. الإطار النظري المستخدم هو النهج المعرفي القائم على الاستخدام اللغوي، الذي يركز على دمج المفردات اللغوية ودور التكرار والاستخدام في تأسيس وتعميم البنى الإطارية والمخططات العقلية. يستخدم علم اللغة النصي كطريقة تحليل اللغة التي تحدث طبيعيًا والتي يتم الحصول عليها من المجموعات النصية بواسطة برمجيات متخصصة. تقوم الدراسة على تحليل مجموعتين نصيتين (Ar TenTen) و (En TenTen) بهدف المقارنة بينهما حيث أن المجموعتين تحتوي على نصوص من الصحف والجرائد المعروفة والتي تم تجميعها من الانترنت ويقوم محرك البحث (Sketch Engine) بمعالجة هذه النصوص. تشير النتائج أن الأنماط النحوية الخاصة بالصفات يتم التحكم بها عن طريق نمط نموذجي عقلي واحد حيث أن باقي الأنماط تكون اما نسخ من النمط الأساسي او امتداد منه. **الكلمات المفتاحية:** البنى الإطارية، العبارات اللغوية، تحليل المجموعات النصية، علم العبارات، أنماط الصفات.

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1. Introduction

The objective of this research is to investigate the occurrences of adjectives in English and Arabic newspaper corpora. It seeks to analyze the phraseological patterns of adjectives in context. However, the study makes a connection between phraseology, corpus linguistics, and cognitive linguistics.

Phraseology is a general term that refers to "the tendency of words, and a group of words to occur more frequently in some environments than the others" (Hunston, 2011, p. 5). The definition suggests that more language forms occur in fixed phrases or semi-fixed phrases than might otherwise be expected and that phrases are more varied than was thought.

Phraseology is meant to prove the assumption that language is a stretch of patterned structures and chunks. It is estimated that more than half of the written and spoken texts consist of pre-fabricated combinations functioning as single units (Sinclair, 1991, p.114). The combinations of multi-word units are termed by some phraseologists as *idiomaticity* (relative to Sinclair's idiom principle). As a result, idiomaticity is an undeniable fact in language that sparks interest and gains more popularity within contemporary linguistic research.

Cognitive linguistics (CL) is the framework that gives insight into the world of the brain; it grants researchers access to the internal structure and organization of thought and processing information. Being a product of the human mind, language is the only means that mirrors conceptual structure and allows the study of the different mental functions.

The concept of phraseology is summarized in Langacker's definition of construction as the "integration of two or more component structures to form a composite expression" (1987, p. 409). The definition suggests that the joining of two or more components results in a novel, unified structure with unique semantic and structural composition. Therefore, *construction* amounts to the notion of phraseology in CL.

2. Objective of the study:

- 1) To explore the phraseological patterns of frequent adjectives in both languages.
- 2) To explore the cognitive phenomena and mental representations involved in the organization and construction of the recurrent constructions.
- 3) To examine the impact of frequency and language interaction on the development of human languages.

3. Rationale of the study:

Most of the previous studies on phraseology focus on the traditional direction of analyzing some fixed idiomatic expressions, which is a narrow view of phraseology as a major linguistic discipline. Some other studies tend to extract the syntactic patterns of a lexical item with the purpose of finding the common semantic features of these patterns. However, the research attempts to relate the contextual findings of phraseology to the primary cognitive functions identified within the cognitive framework.

4. Research questions:

- 1) What are the frequent phraseological patterns of adjectives in Arabic and English newspaper corpora?
- 2) What are the cognitive phenomena and mental representations involved in the organization and construction of these recurrent phrases?
- 3) How are adjective constructions in both languages processed and produced in the brain?

5. Data sources:

The two corpora chosen for this study are the English Web 2020 (en TenTen) and the Arabic Web 2018 (ar Ten Ten 18). They belong to the larger TenTen corpus family that adopts the same method in collecting data from the web. The Arabic data was collected in 2018. After limiting its domain to the news domain, the Arabic corpus has 663,810,644 words which accounts for 12.426 percent of the whole TenTen Arabic corpus.

On the other hand, the English TenTen corpus has 2,420,719,017 words in the domain of news as the domain of news is the target of the study. The data of this corpus is collected in 2021 from a great number of online newspapers. This number of words account for around 4

percent of the overall English Web TenTen corpus. Both corpora are processed by Sketch Engine, an online software that operates a large number of corpora. The two corpora are available on this website: https://app.sketchengine.eu/#dashboard?corpname=preloaded%2Fente nten21_tt31

6. Review of literature:

Ang and Tan (2019) conducted a corpus-driven study on phraseological variations in academic writing. The goal of the study is to list three and four-word lexical bundles in order to extract the lexical frames out from the lexical bundles. The targeted corpus is a one-million word corpus of research articles in International Business Management with the bundle-to-frames approach. The characteristics of lexical frames were categorized in four aspects: the variability degree, the predictability of lexical frames, to decide whether the lexical frame has fixed slot fillers, the structure, and open slot fillers of the lexical frames. The results show that three –word sequences are more frequent in the corpus as its degree of variability has more fixed lexical frames. However, the four-word frames contain more predictable lexical frames than the three-word category. In addition, the majority of lexical frames are function word frames and the lexical frames tend to be occupied by content words rather than function words.

Hunston and Francis (2000) conducted an empirical study on large corpora. The purpose is to study the patterns and behavior of lexical items obtained from the natural language of the corpus. They find that most lexical items have their own specific phraseology and patterns. As a result, they make a list of patterns for some lexical items ranging from general patterns to specific ones. In sum, all words have particular patterns or words associated with them.

A further major contribution to the field of phraseology was made by John Sinclair (1991). In his work, he uses the corpus-driven methodology to present empirical evidence for the relationship between structure and meaning. He proposes the *Idiom Principle* which is based on the observation that "meanings are made in chunks of language that are more-or-less predictable sequences of morphemes" (Hunston, 2011, p. 21). He explains, "the principle of idiom is that a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analyzable into segments (Sinclair 1991, p. 110).

Sinclair's empirical findings have been of key importance to the study of linguistics. He extends the framework of phraseology from the traditional notion of confining the field to fixed phrases to include a wider range of language description. While the idiom principle has added a new dimension to phraseology and delineated the boundaries of the field, it also indicated that frozen idioms and proverbs are an infrequent phenomenon in language, and thus the study of the field cannot be limited to them.

Al-Shamrani (1994) provides an investigation of the syntactic occurrences of the Arabic adjective. He indicates that there is flexibility in the distribution of Arabic adjectives as they can occur either in the predicative or attributive form. When they occur in the predicative position, they may occur in either verbless or verbful clauses. In terms of function, they function as a topic to a subject (*khobar*) or circumstantial adverb (*hal*). However, when they appear in the attributive form, they are considered under the umbrella of concordants (*tawabi*) (p.7). He concludes that Arabic adjectives cannot be classified as an independent word class because it is limited to follow its noun or verb in almost all of its grammatical features. As a result, Arabic adjectives are most appropriately classified as a subclass of 'noun' (p. ix).

Ryding (2005) provides an account of the patterns of Arabic adjectives. The data sources he used are mostly from modern newspapers and magazines whose language is a formal standard Arabic language. He affirms that adjectives in Arabic are derived from other word classes, mostly nouns, by adding a suffix to the root word. Moreover, words function as adjectives in active and passive participles. For example, (جريح) takes the same pattern as the English participle (wounded) (p. 256). He also describes the comparative forms where the stem (ا) is added to the adjective (كبير) to change it into the Arabic comparative pattern (اكبر). In this case, they agree with their nouns in terms of gender, case, number, and definiteness. Overall, the Arabic adjective is considered a follower of its nouns (p. 254).

7. Theoretical Framework:

The cognitive framework is basically a usage-based approach that depends on describing natural language with the purpose of unveiling the cognitive phenomena that underlie the processing of natural

language. After illustrating how lexical items integrate to form larger structures, the relevant cognitive functions involved in the evolution and production of the recurrent constructions are explained.

7.1 Symbolic Assembly

Langacker (2008) illustrates how lexical items are combined to form an independent linguistic unit. The symbolic structure (Σ) stands for two pairs: semantic structure (S) and phonological structure (P). Symbolic structures combine with one another to form larger symbolic structures $[\Sigma 1] + [\Sigma 2] = [\Sigma 3]$ which constitute a symbolic assembly. In a more complicated structure, $[\Sigma 3]$ may combine with another symbolic structure to form a larger entity that is more elaborate $[\Sigma 3] + [\Sigma 4] = [\Sigma 5]$. In other words, we can say that the two component structures $[\Sigma 1]$ and $[\Sigma 2]$ are integrated to form the composite structure $[\Sigma 3]$. Therefore, "the composite structure is an entity in its own right" (Langacker, 2008, p. 164). "In this way, expressions exhibiting any degree of symbolic complexity can be progressively assembled: words, phrases, clauses, sentences, even discourses" (p. 161).

7.2 Frequency

A further term that is closely related to language usage is frequency. The more frequent a linguistic unit is, the more entrenched it is in the schema. "This is because cognitive linguists assume that linguistic units that are more frequently encountered become more entrenched (that is, established as a cognitive pattern or routine) in the language system" (Evans & Green, 2008, p.114). When a linguistic unit has a higher frequency than normal, it is turned to the psychological phenomena of automatization or habit formation. "Through repetition, even a highly complex event can coalesce into a well-rehearsed routine that is easily elicited and reliably executed", and thus "no longer requiring conscious attention to its parts or their arrangement" (Langacker, 1999, p. 93).

7.3 Class Schema

In Langacker's model of cognitive grammar, word classes are divided into nominal predication and relational predication. The word predication here refers to the semantic pole as it includes both the profile and the base (Evans & Green, 2004, p.541). Nominal predications profile a THING at the schematic level that could be an abstract or physical entity. On the other hand, relational predication

profiles a relation that is either temporal or atemporal. Adjectives are classified under the category of atemporal relational predication because constructions of adjectives do not involve a process of time (verbs).

7.4 Basic Cognitive Fundamentals

7.4.1 Categorization

Categorization is one of the central phenomena in CG and psychology by which the brain interprets a new experience with respect to an already existing or entrenched structure. If we have an entrenched structure A, it can be used to categorize a further structure B which will be similar to A. Langacker illustrates that "categorization is most straightforward when A is schematic for B, so that B elaborates or instantiates A." (2008, p. 17). In a categorization relationship, the categorizing structure lies in the background while the target, the categorized structure, is in the foreground (2008, p. 165). Categorization is known as *normal replication* in the theory of Selection (Evans & Green, 2008, p.125).

7.4.2 Category prototype

According to Langacker, category prototype refers to entrenched templates which are more reinforced than less frequent forms, "The most entrenched and most readily activated unit will generally be the original structure, [A], which can then be recognized as the category prototype" (p. 226). In addition, being processed by the human categorization system, category prototypes not only provide a model structure but also play an important role in organizing its category members (Evans, p.175).

7.4.3 Extension

Categorization as a basic mental activity gives rise to prototypicality, schematization and extension. If the resultant structure represents a full instantiation of the schema, it is hence an elaboration; it will be an extension, however, when there is some sort of conflict in the specifications of the expression (Langacker, 2008, 170). The process of extension is known as *altered replication* in the theory of Selection (Evans & Green, 2008, p.125).

It is argued that extensions happen as a result of three cognitive operations that explain the formation of extensions: adoption, reduction and magnification (Talmy, 2006, p.86). The adoptive extension involves the inclusion or addition of a structure by mapping it from another one while reductive extension leads to the exclusion of a substructure. The mental operation of magnification involves the process of magnifying and focusing the attention on a substructure for

a particular cognitive demand. Langacker also uses the term coextension to refer to the condition of extension when two characteristics of a structure are extended jointly (2008, p.343).

7.4.4 Constructional Schema

The high frequency and repetition of a linguistic unit create schematic templates in the brain. According to Langacker, they are both construction and schematic; this is why he calls them constructional schema. "They are acquired through a process of schematization, being abstracted from occurring expressions as skeletal representations of shared organizational features" (2008, p. 168). The acquired schema facilitates the process of creating new constructions with the same pattern. " Once learned, a schema serves as a template for dealing with novel expressions on the same pattern (2008, p. 168).

7.4.5 Trajector/ Landmark Alignment

It can be seen that trajector (TR) and landmark (LM) are manifestations of the traditional subject and object. Langacker argues that the traditional subject and object are conceptual bases in the prototype of an *action chain* that distinguishes between the trajector and landmark (Evans & Green, 2004, p.541). For adjectives, the profiled relationship between the adjective and the noun manifests within a single participant. The adjective describes its trajector, its noun, as having certain property " Adjectives and adverbs differ from prepositions in having only a single focal participant (a trajector but no focused landmark) (Langacker, 2008, P.115).

7.4.6 A/D-alignment

Component structures can be either conceptually autonomous or conceptually dependent. Autonomous structure is a property of nominal predications. They are semantically and conceptually independent structures as they are characterized by profiling a THING at the schematic level. Conceptually Dependent structure is a term associated with relational predications (Langacker, 2008).

8. Analysis:

To begin with, the most frequent adjective in the English corpus is *new* with more than 16 million occurrences in the corpus (16,226,300). From a cognitive standpoint, the adjective *new* relates to a dynamic mental domain. It maps its trajector into a temporary domain of being recently created or existed. However, this state of

being new is a temporary state that the trajector will lose this validity after a duration of time. Table 1 below describes the frequent occurrences of the adjective in the corpus.

Table 1
Prototype and schema of the adjective new

Ser	Construction	Freq	Constructional Schema	Schema F	category prototype
1	new government	15,315	[[new] {NML}]]	1,586,500	[ADJ + NML]
2	new law	14,215			
3	New prime minister	2,112	[[new] {ADJ}{NML}]]	161,474	[ADJ + ADJ+ NML]
4	new chief executive officer	142	[[new] {ADJ}{ADJ}{NML}]]	9,473	[ADJ +ADJ+ ADJ+ NML]
5	new and improved version	832	[[new] and {adj} {NML}]]	17,235	[ADJ + Conj+ ADJ+ NML]
6	I am new	14,149	[[NML]{be}new]]	60,436	[NML – Be – ADJ]

Note: NML= nominals, ADJ= Adjective, Conj= conjunctions, { } = open slots,
[] = fixed slots

The first two constructions in the table represent a combination of two lexical items: an adjective and its trajector. The adjective *new* precedes its trajector and depends on it to achieve a conceptual unit. In the first construction, the nominal *government* fills in the trajector e-site and supports the dependency of the relational adjective. The nominal *Government* is the profile determinant of this unit as the conceptually dependent adjective designates the nominal.

The constructional schema that motivates those constructions comprises a fixed slot occupied by *new* while the second variable slot is open to progressively attract more nominals and build various constructions. A more abstract structure is the category prototype that is abstracted from occurring items so as to summarize the common features of the adjective category. The following lines show the schematic construction [[new {ADJ}{NML}]] in lexical realization.

Concordance lines 1

Random lines of the schematic construction $[[^{GR}] [new [NML]]$ in lexical realization

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1	news.com.au	or city in The Netherlands, with reports the attacker is on the run.	The new owner	of this house doesn't even know she owns it yet, after her parents bought
2	ndtv.com	nauthorised colonies in Delhi need registration of their properties and not	a new law	, Chief Minister Arvind Kejriwal said on Friday, a day after the Lok Sabha
3	jammu-kashmir.c...	eft India, some Muslims wanted a country of their own and got it.	This new country	was called Pakistan. The leaders of Pakistan felt that they should
4	jammu-kashmir.c...	'akistan, Afghanistan and other places to fight in Kashmir. Most of	these new fighters	were mercenaries and were paid to fight in Kashmir. These merce
5	terradaily.com	<s>Less than two weeks before the country heads to the polls to choose	a new government	, the oil shortage has fueled the campaigns. Social Democrat Cha
6	itwebafrica.com	s>Ethiopia is the second country in Africa to establish an eWTP hub, and	this new partnership	builds upon ... all five of Vodacom's operating countries – DRC,
7	southporttimes....	archive of 2009 additions to The Southport Times. This is a list of	all new material	that was added to The Southport Times in 2009. This list is in reve
8	browardpalmbeac...	love from famed composer Ramin Djawadi and his orchestra, as well as	some new nuggets	from season seven. 8 p.m. on Saturday at BB&T Center, 1 Panther Pkwy
9	bangordailynews...	Maine State Beekeepers Association. I wanted to be sure that all	those new beekeepers	I was introducing to the hobby in adult education classes had more than j
10	laobserved.com	ultive Vice President, Information Systems and Technology. While	each new appointment	is effective January 1, 2014, our new functional executives will be meetin

In the lines, the open schematic grounding slot is filled in by different grounding elements such as *the*, *a*, *each*, *some*, etc. Likewise, the open nominal slot is occupied by various nominals. It is noticed that most of the nominals occupying this slot are abstract nominals. However, the second specific slot is limited to the adjective *new*. Line 4 and 7 shows another pattern when the schema is preceded by a relation of a preposition. The schema of which is represented in (1). The last line shows two copies of this schema related by the stative process *is* as illustrated in (2).

(1) $\{ \{_{TR} NML \} \{ P^{AT} \} [[_{LM} \{^{GR} \} \{ new \} \{ NML \}]]$

(2) $[[new \} \{ NML \}] [^{SP} Be] [ADJ \} \{ NML \}]$

The third most frequent construction in table 1 (new prime minister) is a combination of two adjectives and a nominal. At this level of organization, the former prototype [ADJ+NML] is preceded by another relation of an adjective. The constructional schema [[New+ [ADJ+ NML]] builds further 161,474 other constructions with the same pattern as shown in lines 4. The following lines illustrate the schematic construction as being realized in concordance lines:

Concordance lines 2

Random lines of the schema [[New+ [ADJ+ NML]]

1	megmunmp.org.u...	leg and they were both in the cross country running team at ...	new extra care	housing scheme has been agreed for land at the rear of Jordanthorpe M
2	alaraby.co.uk	wracked Lebanon postponed parliamentary consultations to nominate a	new prime minister	after Sunni Muslim leaders threw their support behind ex-premier Saad
3	euractiv.com	lected as an independent candidate last year and member of Slovakia's	new political generation	, said such measures are good for inhabitants. "But not for me a
4	nikkei.com	laughably unstable -- each passing year, it seemed, brought to power a	new prime minister	. Since landing in that position in December 2012, Abe has man
5	nikkei.com	p every six months to any of six Lexus hybrid models on offer through a	new joint venture	called Kinto. "Toyota has generally tried to predict where market
6	vestnikkavkaza...	rica Mogherini. "We agreed we need to find an opportunity for a	new political dialogue	with Russia regarding events in Ukraine," said Edgars Rinkevics, who of
7	alaraby.co.uk	a series of deadly attacks. The crescent moon which marks the	new lunar month	was not sighted on Monday night, and Tuesday would therefore be cons
8	devidcourse.co...	ccine developments. DIFFERING MEASURES In Tokyo,	new daily cases	hit a record 493. The Nikkei business daily reported the Tokyo g
9	newindianexpres...	> It's also possible Kim could use the party congress, to announce a	new foreign policy	approach toward the United States and rival South Korea. MOB
10	natlawreview.co...	a scheme to balance the majority-vote budget by assuming \$6 billion in	new annual tax	revenues in 2012-13 and beyond based on passage of a large personal

In case of lines 2 and 4 ,in *new prime minister*, the profile of *new* corresponds to the profile of the complex nominal *prime minister* so that the component *prime minister* as one unit is mapped into the conceptual domain of *new* at a higher level of organization. This is because *prime minister* is a highly frequent construction that is established as a unified unit. This is also the case in *new joint venture* as *joint venture* is an established unit entrenched by frequency. On the other hand, in *new daily cases* (line 8) and *new annual tax* (line 10), the profile of *new* tends to integrate with the profile of the following adjective so as to form a multiplex profile that corresponds to the profile of the nominal. By way of illustration, in *new annual tax*, the conception of *new* is limited by being mapped into the region of *annual* in the domain of time.

(3) [[new] {ADJ} {NML}]

The next frequent form is a more complex construction in which three adjectives in a row participate in profiling their nominal trajector in a complex relation of profiling. In *new chief executive officer*, the relation of the adjective *new* fills in the outermost slot. As a result, the profile of *new* corresponds with all the following components in different correspondence and overlaps with the whole construction. The following line shows the schema [[new]{ADJ}{ADJ}{NML}] in lexical realization.

Concordance lines 3

Random lines of the schema [[new]{ADJ}{ADJ}{NML}]

1	commondreams.or... ment Ban Earlier this week, the British government announced a new Tory-led parliamentary measure that will inflict "severe penalties" onto local governments and pub
2	vachss.com ie "Suffolk County District Attorney Thomas Spoda disclosed the new predatory sexual assault charges by a special grand jury looking at how county, state and
3	asiatraveltips.... li Island has upgraded its two exclusive Sunset Water Villas with new state-of-the-art private swimming pools.</s><s>At eight metres long, four metres wide and 1.2 met
4	duluthnewstribu... ohn Wagner.</s><s>Wagner is a national reporter who leads The Post's new breaking political news team.</s><s>He previously covered the Trump White House.</s><s>Du
5	guyraargus.com.... w how, or if they're meeting proposal results; record-keeping and new financial mega council data are inadequate.</s><s>"This is false," Cr Murray stated, "as
6	hilltimes.com :s>-Liberal Finance Minister Bill Morneau, March 22, 2016, wore new Canadian-made black lace-up shoes by designer Ron White</s><s>Finance Minister Joe Olive
7	hrw.org avy-handed governments."</s><s>That would involve creating a new Japanese foreign ministry post occupied by an external expert to require that Japan's Over
8	environmentamer... lectric vehicles.</s><s>The money will be used to purchase four new electric public transit vehicles, bringing the state's fleet to a total of twelve.</s><s>Sup
9	eobserver.com The case catalogue is supposed to inspire the development of a new joint Nordic strategy on the bioeconomy.</s><s>The next steps include taking the No
10	nashvillepost.c... spital operator LifePoint Health last Friday put pen to paper on a new senior secured credit agreement with a group of lenders led by Citibank.</s><s>The n

The lines illustrate that, in most cases, the three adjectives tend to profile an abstract nominal as in lines 1,2,3,7,9, and 10. Furthermore, there is a tendency for the nominal to be a two-word construction rather than a single noun. For example, *new predatory sexual assault charges*, *assault* and *charges* elaborate the nominal slot together as a complex nominal. This is seen in lines 3,4,5,6,7,8,10. To illustrate, the complex profile imposed by three adjectives entails a complex nominal (two or more nouns) to contain this complex profiling relation. This nominal also

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tends to be an abstract nominal because abstract nominals have more conceptual semantic content as opposed to simple concrete objects.

The second structure is when the attributive adjective *new* is joined with another adjective by the conjunction *and* as in the fifth example in table 1 (new and improved version). The two conjuncts (the two adjectives) are said to be conjoined by the relator; they form two coexisting profiles that participate equally in profiling the nominal TR. In 5, the skeletal schematic representation of this prototype is illustrated. The lines (4) show this schema in context:

(4) [[ADJ and [ADJ+ NML]]

Concordance lines 4

Random lines of the schema [[new [and] [ADJ] {NML}]]

1	npillinois.org	would see a 5 percent increase.	Lawmakers avoided many of the	new and higher	taxes Pritzker proposed during his budget address, like a new tax on sho
2	knpr.org	neurons will do is very amazing.	And that discovery could lead to	new and better	treatments for high-grade gliomas, which now typically kill a patient withi
3	alavibohra.org	few years back but in vain.	Mumineen of Mumbai longed for the	new and spacious	Masjid.
4	hilltimes.com	force by EU member states.	"We knew that we were doing some	new and important	things in dispute settlement, introducing really a new, progressive way of
5	news-gazette.co...	bers evident at latest meeting	MAHOMET – A clear split between	new and longer-serving	members of the Mahomet school board was evident in a contentious, mo
6	iran-daily.com	ia Today and its effectiveness among the world media is the result of the		new and different	role of Russia in the world and the region and I think this powerful movem
7	mailtimes.com.a...	e struggle with the self-control and staying on task," he said.	"It is	new and different	not to have a teacher physically there and it's not for everyone."
8	churchtimes.co...	orth wrote: "Surely an Established Church has a part to play in finding a		new and unifying	national narrative that is patriotic, besides tolerant and inclusive."
9	allafrica.com	elope...	The South African Police Service (SAPS) has accepted a	new and challenging	objective of ensuring that its crime statistics are in line with international t
10	southasiamonito...	s>"... no amount of downfall anywhere can stop me from seeking out		new and interesting	voices."
11	kathmandupost.c...	sads.	Kovind stressed that bilateral partnership was expanding to	new and diverse	fields for mutual benefit.
12	ign.com	rising and stabbing soldiers in the woods.	The new trailer offers a	new and much	different look at the upcoming series.
13	newswire.net	entrepreneurs and Internet Marketers alike are looking to the Internet for		new and novel	traffic generation techniques for their businesses.
14	ysnews.com	and, sounding an alarm that smaller, more rural communities are building		new and bigger	jails.
15	mid-day.com	rophiles who have come up with a never seen before video idea which is		new and innovative	.

The lines show the schematic construction (5) as being realized in lexical constructions. Different adjectives fill in the third variable slot after the schematic relator *and* whereas the nominal TR slot is realized progressively by various nominals. It is noticed that the second adjectival slot tends to be an adjective extended by a schematic stem (like -er, -ive, etc.) in 14 lines out of 15, which is a category changing stem. Some of such extended adjectives are in the comparative form as in lines 1,2, and 15.

The following frequent construction table 2 represents the predicative use of *new* with 60,436 occurrences in the corpus as described in the table below:

Table 2

Serial	Construction	Frequency	Constructional Schema	Schema F	category prototype
1	I am new	1149	[[{NML}]{be}new]]	60,436	[NML + Be + A]

In the constructional schema, the nominal slot is variable as similar to the open slot of the stative process *be*. The nominal slot is realized by the first-person pronoun *I* so that the stative process is modified accordingly. This is followed by a fixed slot that is limited to the adjective *new*. The following lines illustrate the schema (6) in context:

(5) [[{NML}]{be}new]]

Concordance lines 5

1	prijom.com	that we might end up together, other than when we first talked about it when	we were new	friends.</s><s>Everything between us had been built up in my mind alone.</s>
2	houstontimes.com	hIndian.</s><s>And it's got quite a history in southeastern China, even if the	cuisine is new	to Sugar Land - and new to Houston.</s><s>Chindian cuisine (also called He
3	bpnews.net	ur men, all pastors, arrived in El Paso on Aug. 7 and began to serve.</s><s>	None is new	to helping others deal with tragedy and grief.</s><s>Read More</s><s>BIRI
4	countercurrents.com	bject are incorporated in the text in modified forms, but more than half of the	material is new	.</s><s>The book may be freely downloaded and circirculated from the follow
5	westword.com	of newbies and dorks who think just because they're new to this city that this	city is new	.</s><s>And Andrew has another quibble.</s><s>RiNo is NOT a neighborho
6	albionmonitor.com	en follow where the greedy have already grazed.</s><s>Many of these poor	farmers are new	to farming, it states.</s><s>Often, they occupy land left behind by logging co
7	mustangattitude.com	id.</s><s>Here are some photos taken of Fran's 1967 Indy Pacesetter when	it was new	back in 1967.</s><s>The color of the stripes are not shown well in this photo
8	ticotimes.net	s rather than used ones.</s><s>Last year, more than 70 percent of imported	cars were new	compared to 40 percent in 2003, according to the Association of Vehicle and
9	newrepublic.com	ump era, is it possible to parse these differences?</s><s>Williamson's ideas	may be new	to The Atlantic, but not to the conservative movement.</s><s>He isn't the fir
10	stuff.co.nz	ays a week where you don't eat it.</s><s>Williams said the Beyond Burger	patties were new	to the market in New Zealand and he had ordered 300 patties for customers

In the lines, the schema is lexically realized by occurring lexical items. The nominal slot takes in different nominals and the following slot is modified according to the nominal. It is noticed that this construction tends to be preceded by the preposition *to* in 5 lines while it ends the close in two cases. Lines 2,3,6,9, and 10 reflect a schematic construction where *new* is followed by another nominal. This nominal could be a complex nominal or an atemporalized process; a process construed by summary scanning as in line 6; the atemporalized nominal *farming* is construed from the process verb *to farm* by summary scanning fashion. When *it* occurs in the TR position, the TR is thus independent from any semantic role as in line 7. However, *it* here profiles an abstract setting as a grammatical role to shift the focal prominence to the predicative part of the construction. As a result, the adjective in such a construction gains the primary focus while the nominal is demoted.

Analysis of the most frequent Arabic adjective

The Arabic TenTen corpus shows that the most frequent adjective is (العام) which has a total frequency of 1,349,730 occurrences in the corpus. It maps its TR into a conceptual domain of a broader set of

characteristics. Moreover, this domain could indicate inclusiveness or a lack of specificity. This adjective tends to occur with the noun (الأمين) in 54,527 in which it modifies a conceptually autonomous nominal. The following table illustrates it in detail.

Table 3
Analysis of the adjective (العام)

ser	Construction	Freq	Constructional Schema	Schema F	Category prototype
1	الأمين العام	54527	[[^{SS} عام ^{GR}] {NML}]	934,421	[ADJ+NML]
2	الهيئة العامة	29757			
3	الرأي العام	25,854			
4	الأمين العام للأمم	8592	[[{NML- ل}{ ^{SS} عام ^{GR} } {NML}]]	23,941	[ADJ +ADJ +NML]
5	الأمين العام المساعد	3134	[[{ADJ} [^{SS} عام ^{GR}] [NML]]]	10,551	[ADJ +ADJ+NML]

Note: NML= nominal; ADJ= adjective; be= verb to be; [] = fixed slots; {} =open slots; ^{SS} = schematic stem; ^{GR} = Grounding elements.

The adjective العام precedes its TR and depends on it as a conceptually dependent structure. Both items are grounded by the defining grounding element (ال). The trajector e-site is filled in by the nominal (الأمين) which supports the dependency of the relational adjective. The nominal in this case is the profile determinant of the construction at this level of organization.

Construction 2 in the table shows the same relational adjective occurring with another nominal. Similar to the defining grounding element, both the adjective and the nominal are suffixed by the feminizing schematic stem (ة). The feminizing elements are highly schematic substructures that play grammatical and organizational roles at the schematic level. When the nominal is a feminine, all the modifying adjectives have to be attached by the feminizing schematic stem. At the conceptual level, when the first slot is recognized as a feminine, the following schematic slots of adjectives are automatically attached with the relevant schematic feminizing substructure. The third construction follows the same pattern as the first one.

The constructional schema responsible for building these constructions has a first open nominal slot which is the TR e-site. The second slot is fixed to the adjective (العام). The open slot attracts different nouns to progressively build further structures such as (الرأي العام), (الهيئة العامة), and (التعليم العام), etc. The table also shows that this abstract schema has 425,232 elaborations in the corpus.

Constructions 4 reflects another schematic representation when the first construction (الأمين العام) is followed by an atemporal relation realized by the preposition (ل). As a result, the profile determinacy is shifted to the preposition. The construction (الأمين العام) elaborates the TR e-site whereas the nominal (الأمين) elaborates the LM of the atemporal relation; the schematic representation of which is represented in (6).

(6) [[^{LM} الأمين العام] [^{AT} ل] [^{TR} أمين العام] ^{GR}]

Concordance lines (6)

1	pnn.ps	العالمي وامتصاص ردود الفعل والانتقادات الدولية على المجزرة التي	الرأي العام	وليس على مواطنين فلسطينيين عُزل، وذلك بهدف تضليل
2	alriyadh.com	الممرور تعمل على تقييم وضع التأخير وأسبابه، ثم تقوم برفع تقرير للإدار	الإدارة العامة	إنه في حال وجود أي تأخير من قبل الشركة في مباشرة الحوادث، فإن
3	alriyadh.com	يريد التجنيد لمصلحة المملكة لو فرضنا أن المملكة وافقت على التجن	المفتي العام	ياشبخنا على هذا الموضوع الرائع وجعله في موازين حسناتك</s></s>
4	vetogate.com	قررت حبسهم 4 أيام على ذمة التحقيقات وبالعرض اليوم على قاضي ا	النيابة العامة	</s>وتحرر عن ذلك المحضر رقم 1791 إداري مركز جرجا، وبالعرض على
5	assabah.ma	المحلي، وتنظيماته السياسية والنقابية والحقوقية، التي تابعت أطوار ا	الرأي العام	ة.</s></s> وخلف قرار وكيل الملك بابتدائية أبي الجعد، استحسانا لدى
6	sauress.com	لمؤسسة العنود الخيرية عن تطلع المؤسسة من خلال هذا التبرع للتعاو	الأمين العام	يزين نائب رئيس مجلس الأمناء رئيس اللجنة التنفيذية.</s></s> وأعرب
7	garbnews.net	المدنية</s></s> دشنت الإدارة العامة للدفاع ال	الإدارة العامة	ة، وعدم الوقوف امام حب الأبناء.</s></s> (شريك حياتي)</s></s> حملة</s></s>
8	marsadpress.net	بحق "طبيب الختان" ناصر السيد والذي تسبب في قطع وإتلاف 8 أع	بالحق العام	يومًا قبل إعادة فتحه مرة أخرى.</s></s> وشهدت الجلسة الثالثة الحكم
9	zamnpres.com	الدكتور نبيل العربي و الأمين العام المساعد السفير محمد صبيح، في	بأمنيتها العام	قراقع، بالجهود الصادقة والعظيمة من قبل جامعة الدول العربية ممثلة
10	zamnpres.com	محافظة حفر الباطن المؤلفة من 3 قضاة "إقامة حد الردة عليه و	المحكمة العامة	ب ويشتم الصحابة ويمزق المصحف الشريف ويضربه بالنعال، فقضت

The lines show the schema (6) elaborated in concordance lines. Various nominals are elaborating the open nominal slots as the schema modifies the adjective with the relevant gender and number stems that correspond with the number and gender of the nominal. The first line shows the construction as a part of a larger nominal construction as it is preceded by an atemporalized process (تضليل) evoked by summary scanning from the verbal process (يضلل). In line 2, the nominal construction (الإدارة العامة) is preceded by (ان) that changed the case of the topic to an accusative case, but the predicate remains in the nominative case.

In general, the analyzed adjective is an instance of the central category prototype described in the table. Line 2 shows the prototypes in two similar divisions related by a preposition (الإدارة العامة للدفاع المدني). This reflects a more general and abstract schema (7) where two constructions of a noun and an adjective are related by a relation of a preposition. This schema is found to have 1,269,070 instances in the corpus as clarified in the following lines.

(7) $[[\{Adj\} \{NML\}] [^{ATP}]] [\{ADJ\} \{NML\}]$

Concordance lines (7)

1	sana.sy	<S></S> من جهة أخرى أكد كمال الخير رئيس المركز الو	خطوة إيجابية على الطريق الصحيح	الليبنانية التفاوض مع الإرهابيين في ملف الجنود الأسرى
2	sana.sy	<S></S> وكان شاب فلسطيني استشه	مناطق متفرقة من الضفة الغربية	تقلت قوات الاحتلال اليوم 13 فلسطينيا خلال اقتحامها
3	pnn.ps	والمالوف وفق القانون الدولي ومنظومه	وحتى المواقف الامريكية ولم تخرج عن ما هو مالوف وفق القانون الدولي ومنظومه	بطينية التي تتناسب وتندرج في اطار قرارات دولية وفق الشرعية الدولية
4	alriyadh.com	والتنفيذي هدفها الإصلاح ورفع كفاءة الأجهزة التنفيذية	على المستويين التنظيمي	وأحدث على الصعيد المحلي تغييرات إدارية خلال الاحتفال بعيد
5	assabah.ma	وخصه ذات المصدر الخارجي من 30 إلى 15 في المائة، وخصه	المداخل الناتجة عن القيم المنقولة	على <S></S> كما تقرر تخفيض ضريبة الشركات على
6	vetogate.com	<S></S> انطلقت بالونات تحمل صور شه	القاهرة الجديدة خلال الاحتفال بعيد	<S></S> صور الشهداء تملأ سماء
7	turess.com	أو الثانية، عدل الحارس علي العياري الملقب بكاسياس	بالمشاركة أساسيا في البطولتين الأولى	في ذلك لإثراء تجربته
8	zamnpress.com	بحق الشعب الفلسطيني ، وهي شن حرب برية على قط	المرحلة الثانية من حملته الشرسة	إلى تمهيدا للانتقال إلى
9	albwahnews.co...	المقبلة، وذلك لتحفيزهم على بذل أقصى جهد في المبار	للأهلي خلال الأيام القليلة	<S></S> وسيتم صرف المكافأة
10	al-ain.com	القديم، تبعت طاولاته وكراسيه فيما تغطي بقع كبيرة	مطعم مبني على الطراز الدمشقي	صورا تظهر قاعة

The lines show the schematic construction in lexical realization. Two instances of the central prototypes are related by various relations of Arabic prepositions. Line 6 shows a complex nominal (سماة القاهرة) elaborating the first nominal slot in schema (7). Line 7 shows another adjective as being related with the construction by the schematic relator of option (أو) in a larger integration of a nominal construction.

The construction (الأمين العام المساعد) number 4 in table 3, mirrors another schema when two relational adjectives participate in profiling the nominal (الأمين). Typically, the three items, the noun and the two adjectives, are grounded by the defining schematic element (ال) as described in (8). At this level of organization, the nominal (الأمين) is still the profile determinant as the whole construction designates it.

(8) $[[\{Adj\} \{Adj\} \{NML\}^{GR}]$

Concordance lines (8)

1	sana.sy	، هو رهان أثبت التاريخ القريب أنه خاطئ، فبعد أن ضربت واشند	الرأي العام الغربي	إن الرهان على <S></S> يبقى القول:
2	sauress.com	جنيف - سويسرا (17 ما	الجمعية العامة الثالثة	اجتماع <S></S> 2010م - 2010م)
3	assabah.ma	ومجموعة من المتهمين المتابعين ف	المدير العام السابق	الرئيس
4	turess.com	للشغل في الإحاطة بالمرأة ليس من منطلق أنها ضعيفة تحتاج لا	الاتحاد العام التونسي	نهج
5	alwatan.com	مع قضية المهاجرين اليهود! <S></S> هذا من جهة، ومن جهة آخر	والرأي العام الدولي	وذلك لكسب التعاطف
6	albwahnews.co...	عبر مواقع الشبكات الاجتماعية، ويُعرّف المؤلف مفهوم الرأي العا	الرأي العام الإلكتروني	<S></S> يتعرض الكتاب لماهية
7	turess.com	<S></S> فهذه الهيئة، وبالصورة التي هي عليها الآن، :	الرأي العام التونسي	والمجمعي ومشعة في أوساط
8	albwahnews.co...	عقود المقاولات والتوريدات والخدمات ال	الجلسة العامة المسائية لإقرار قانون تعويضات عقود المقاولات والتوريدات والخدمات ال	وقام بافتتاح <S></S>
9	yemress.com	مع جميع الأطراف اليمنية لاتخاذ	الأمين العام المعني	عن دعمهم وتقديرهم لجهود مبعوث
10	maghress.com	<S></S> ويضم المكتب الجماعي الجديد، أعضاء من حزب العدا	الشأن العام المحلي	المجلس في المساهمة الايجابية في خدمة

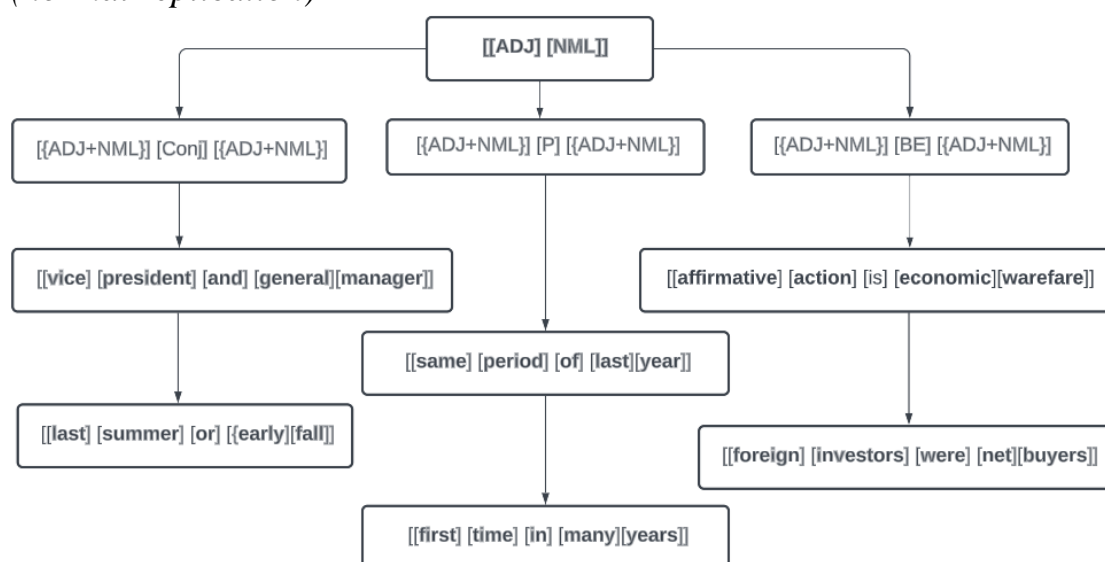
In the above concordance lines, the schematic structure (8) is realized in context. In most cases, the construction is grounded by the defining grounding element which, in turn, is applied to the two adjectives. The adjective and the nominal in all cases show close adjacency as they constitute an independent frequent unit such as (الرأي العام، المدير العام، الشأن) (الجلسة العامة، العام). The second relation of an adjective then profiles the two-word nominal construction that stands at a lower level of organization.

Results and Discussion:

The analysis reveals that adjective constructions are governed by a central high-level category prototype that categorizes a tremendous number of expressions. This central category prototype ([ADJ] [NML]) is highly schematic in that it lies in the background in order to allow rapid categorization for other occurring expressions. All the attributive forms of adjectives such as *new government*, *new book*, *new report* are categorized by this central structure. This central prototype underlies as high as 72,356,415 category member structures in the English corpus. Therefore, all its family members instantiate the same schematic description that summarizes their common features. The following figure details the different instances of the central prototype.

Figure 1

Model network for English elaborations for constructions of adjective (normal replication)



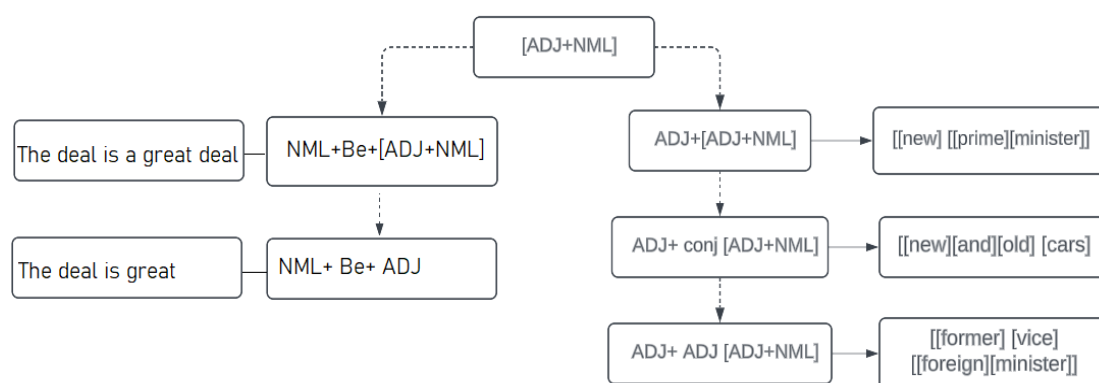
As indicated in the figure, the central prototype divides itself into identical divisions to have the configurational system attached to them with the relevant connectors. All the structures in the figure are just instances of the central prototype that there is no deviation from characteristics of the parental prototype in any one of its instances. The schema in the middle [[ADJ+NML] [P] [ADJ+NML]] is a combination of two identical constructions connected by a relation of a preposition with as high as 1,413,636 representations in the corpus. On the left, two similar structures are related by a conjunction with 494,149 instances in the corpus. On the right, however, two similar constructions are joined by the atemporalized process *be* in the schema [[ADJ+NML] [Be]

[ADG+NML]]. The relation made by *be* has a grounding function that determines the tense and aspect of the clause.

Nevertheless, some structures divert from the central prototype because of some conflict from the categorised structure with the categorising one which results in a distorted structure. This process of conflict is driven by some cognitive and interactional demands. The following figure details the extended structures from the central prototype.

Figure 2

Model network for English extensions for constructions of adjective (altered replication)



The figure details the altered replication of the central prototype. During categorization, some characteristics of the categorized structure conflicted with the categorizing structure which resulted in a novel distorted structure (extension). The dotted arrows refer to processes of extensions while the normal arrows indicate instances or elaborations of schemas. The typicality of adjacency placed by the central prototype is represented by square brackets where adjectives are limited to follow their nominal trajector. In the second icon in the middle, the adoptive extension [[ADJ [ADJ+NML] shows an adjective as being adopted to precede the central prototype by the mental function of adoption.

Likewise, the construction [[ADJ+ conj [ADJ+NML]] is extended when a conjunction intervenes between two adjectives to connect them to each other. This construction is regarded as an adoptive extension because it is extended from the previous structure [ADJ+ADJ+ NML] by the metal operation of adoption. In this operation, a schematic relator [Conj] is adopted to establish a conceptual relation between the first adjective and the central prototype. Although this construction is

extended from the basic prototype, it established itself as a high-level schematic prototype by means of frequency and use.

The following coextension [[ADJ+ADJ [ADJ+NML]] shows two cognitive operations: the reduction of the conjunction and the adoption of another adjective. Hence, the coextension is a result of a complex operation of an adoption and reduction. As illustrated in the example (1), the lexical items elaborating the central prototype slots (prime minister) retain special correspondence between one another, a unit status, whereas the two other adjectives overlap differently with the whole unit.

(1) The new elected **prime minister**.

On the left, the diagram shows the predicative use of adjective in two different structures. In the first construction [[NML+ BE+ [ADJ+NML]], the central prototype is still able to impose its typicality of adjacency on the adoptive extension although the construction as a whole is atypical to the central category prototype. An instance of this construction is shown in (2) in which the frequency and use was not adequate to affect the typicality imposed by the central prototype.

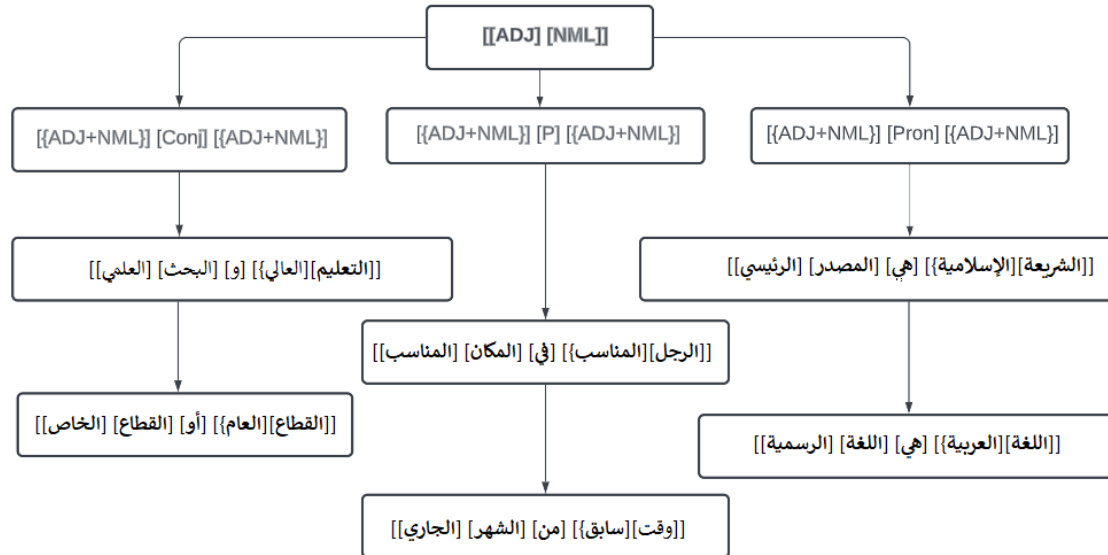
(2) The deal is a **new deal**.

In order to avoid the redundancy represented by the repetition of the same noun in construction (2), the cognitive system used the function of reduction to reduce the last nominal *deal* so as to finally produce the predicative form of adjective constructions (the deal is new). This demonstrates that the predicative form of adjectives was schematized by extending it from the central prototype in what is called an extension of magnification. This extension is meant to confer the primary focal prominence to the adjective at the expense of the nominal, which is given the secondary focal prominence.

Similar to the English corpus, the analysis of Arabic Ten Ten corpus reflects that construction of adjectives are governed by the same category prototype taking into consideration the production directionality. Following the same cognitive activity, the parental replicator is divided into identical copies as the cognitive configurational system works to relate those divisions by different schematic connectors.

Figure 3

Partial network for Arabic elaborations (normal replication).

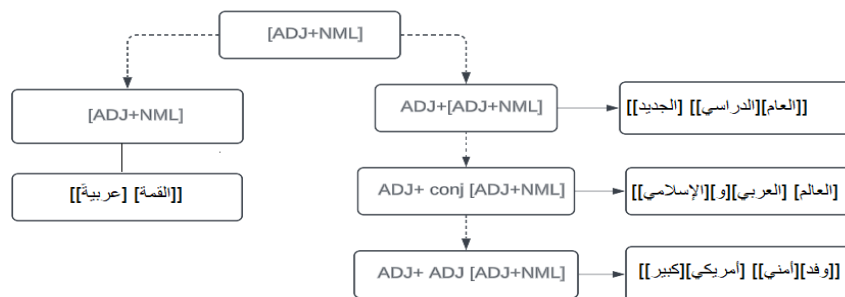


As indicated in the diagram, the parental prototype is split into identical skeletal structures. The solid lines connecting the constructions indicate that they are instances of the central prototype. On the right of the diagram, two instances of the prototype are connected by an Arabic pronoun. In the middle, prepositions intervene to relate the two copies by a schematic relation while conjunctions work to conjoin them on the left of the diagram.

By way of illustration, the central prototype in both languages is the same, but this prototype is stored in the brain in a pre-linguistic form to be construed either in Arabic or English. When construed in Arabic, the cognitive function of conversion works to convert the order of production while the cognitive configurational system works to equip the Arabic schema with the relevant grounding and schematic stems.

Figure 4

Partial network for Arabic extensions (altered replication)



The figure illustrates the schematic structures extended from the central prototype [ADJ+N]. The boxes are related by categorizing relationships. The dotted lines connect extended structures to their categorizing ones while solid lines relate lexical structures to their conceptual motivating schemas.

The first adoptive extension [ADJ+[ADJ+NML]] is formed by adopting a substructure after a conflict between the categorizing structure and the categorized one. However, the central prototype retains its typicality in the resultant structure as represented in square brackets. In the second structure [ADJ+ and [ADJ+NML]], conjunction intervenes between the two adjectives to connect them to each. A schematic relator (conjunction) is adopted because of a cognitive demand to establish a conceptual semantic relation between the two adjectives. Although this construction is extended from the basic prototype, it established itself as a high-level schematic structure by means of frequency and use. The last construction is a coextension as one substructure is reduced and another structure is adopted. The basic prototype still retains its typicality in the novel structure. There was a cognitive semantic demand to adopt another adjective so as to participate in profiling the nominal in a complex relation of profiling.

Overall, the predominant cognitive function involved in the production of adjective constructions is the cognitive function of reduction. This corresponds with the mental capacity of cognitive economy that aims at minimizing cognitive effort and maximizing production.

Moreover, Component conceptions (meanings) are stored in a form of raw data that can be construed in Arabic or English. This indicates that lexical adjectives in both languages evoke the same conceptual content. By way of illustration, there is only one semantic content of NEW stored as a pre-linguistic raw data. This content could be construed to either Arabic or English by a bilingual speaker.

Typicality effect

The results of the study reveal that every syntactic category is governed by a single parental prototype that later evolves into different various forms. This parental structure holds its family members by tight restrictions of typicality. The analysis reflects three types of typicality placed by the central prototype of adjective constructions: the typicality of adjacency, the typicality of agreement, and the typicality of unit status.

A typical feature of adjective constructions is the adjacency of adjectives and nouns. The adjective follows its nominal TR without any intervening items. This tight typicality is imposed by the central category prototype that involuntarily operates the integration of all adjectives.

The central prototype also places a strong typicality of unit status at lower-level constructions which are direct instances of the central prototype. For example, in *former vice foreign minister*, the lower-level construction *foreign minister* is characterized by special schematic and semantic corresponds because it is used individually in the corpus with a high level of frequency. The same applies to the Arabic corpus; (وفد أمني) has a close correspondence between its components in the longer construction (وفد أمني أمريكي كبير).

Furthermore, the typicality of agreement limits the Arabic adjective to agree with its nominal TR in terms of gender, number, and case. As shown in figure 4, the extensions are strictly controlled by its parental prototype. The only diversion from the parental structure in Arabic occurs in the predicative form when the adjective disagrees with its TR in terms of grounding. However, English adjectives show more flexibility in disagreeing with its central prototype motivated by a high degree of language use. The English adjective could violate all types of typicality placed by the central prototype in the predicative form; a quality that enabled English adjectives to achieve full conceptual autonomy from its nominal TR.

Class schema of adjectives in Arabic and English

The attenuated typicality of adjacency in the English predicative form enabled the English adjective to achieve a state of conceptual autonomy from its nominal TR. This, in turn, allowed the syntactic category of adjectives to entrench itself as a major class schema (major word class) in English. In Arabic, however, frequency and language use are not adequate to diminish the tight typicality of adjacency placed by the central prototype. The Arabic adjective is highly dependent on its TR at the conceptual level and is limited to agree with it in terms of grounding, number, case and gender. Hence, the Arabic adjective is not sanctioned to establish itself as a major class schema. Since the tightness of the typicality effect is proportional to frequency, the standard Arabic language requires more frequency and language interaction for its predicative form to evolve and extend to further different atypical forms.

Conclusion

The results of the study demonstrate that the production of adjective constructions in both Arabic and English is governed not only by the same cognitive functions but also by the same central category prototype. However, this prototype is stored in a prelinguistic form and can then be construed to English or Arabic. There is also a similarity between the employment of constructional schemas to build patterned constructions in both languages. The human brain adopts the same pattern of deducing constructional schemas from frequent constructions and employing them in building interconnecting structures. This mechanism is universal in the sense that all languages are processed in this way of abstraction. However, frequency and language use have a great role to play in sanctioning or inhibiting certain aspects of these conceptual patterns of schemas.

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