



Investigating Nominalization in Arabic and English Research Article Introductions:
Systemic Functional Grammar in Focus

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by:

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Abstract

This study explores the notion of nominalization in both languages Arabic and English. The present study carefully investigates the frequency of the nominalized expressions according to the six English nominalization patterns and maps them on the Arabic. This study examined research articles written in Arabic and English and the goal was to show the features of nominalization in both languages. The method of analysis was top-down, applying macro-structure models. The data of this study included 50 research articles (RAs) representing Arabic and English in the discipline of linguistics and the research followed both qualitative and quantitative approaches. The qualitative analysis of RAs introduction showed analyzing the forms, patterns and functions of nominalization in both English and Arabic. The findings show that Arabic employs more nominalization expressions in academic journals than English. Moreover, after analyzing the Arabic articles, new patterns of nominalization emerged and the same applies to English. It has been concluded that while analyzing Arabic nominalization instances, it has been found out that there are patterns and functions which are not available in Arabic. Moreover, it has been proved that Arabic nominalization processes have verbal force, a case which shows that Arabic nominalization processes have the force of finiteness, a case which is not available in English.

Keywords: nominalization, research articles, introductions, Arabic, English.

Chapter one

introduction

1.1 Introduction

This study examines the functions of nominalization categories in introduction sections of the Arabic and contrastively manipulated with English ones. In Arabic, there are two types of nominalization: explicit nominalization categories and interpreted – like verbal nouns. There are differences between these two types of nominalization regarding their configurations, usages and functions. This study also aims at examining the various functions of nominalization and comparing them with those arrived at in the English studies. As far as English is concerned, there are plethora of studies that examine the notion of nominalization.

1.2 Notion of nominalization

The process of nominalization is an effective linguistic notion adopted by academics to achieve certain goals. These functions as revealed by the literature on nominalization include: lexical density, constructing knowledge, impersonal style, organizing a text, evaluating things, easy flow of information. Some of these functions are referred to by Martin (1993). In this study, the researcher will adopt Systemic Functional Linguistics by Halliday (1994) as the theoretical framework in analyzing the process of nominalization in Arabic academic writing and contrasting it with English ones. The basic aim behind choosing this framework of analysis is that " Functional grammar looks at how language works in terms of the functional relationships of its constituent parts, and systems of choice which we make whenever we use language" (Feng, 2014, p. 86). This framework approaches the linguistic categories from the three levels of language: ideational (representing experience and logical relations), interpersonal (enacting social roles and relationships in discourse) and textual (packaging information flow into a given text) (Mwinlaaru & Xuan, 2016). One of the textual items that is of significance in academic writing is the process of nominalization and its functions.

Nominalization is a grammatical process that is utilized by academics to achieve certain functions. In fact, discourse structures have many cognitive, interactional and social functions. None of them are exclusively ideological. For instance, passive

sentences and nominalizations hide or background agency (Van Dijk, 2006). Nominalization is regarded as a transcategorical operation because one can derive nominals from non-nominal categories (Comrie & Thompson, 1985, p. 349). It is a process that can be morphologically encoded especially in rich morphological language such as Arabic.

1.3 Statement of the problem and the purpose

The process of nominalization is highly prevalent in academic discourse. This study will shed light on the use of nominalization in Arabic academic research articles with a parallel reference to those utilizing nominalization in English research articles. The study will examine nominalization use in the introduction sections of the Arabic and English research articles. Arabic as a rich morphological language differs from English in a variety of ways, a case which signifies important findings. Arabic is a language that includes sentences called nominal sentences. Thus, the proposed study will deal with cross-linguistic analysis of nominalization as an aspect that has hardly been explored in previous research. Contrary to a host of studies of nominalization use in English, the study of nominalization in research articles (RAs) introductions in Arabic has not been in the limelight of research. It is unfortunate to say that we know very little about the distribution and the patterns of nominalization use in RA introductions, and this calls for further research on nominalized expressions in RAs" (Jalilifar, Saleh & Don , 2017).

1.4 Research questions

This study attempts to provide answers for the following questions:

1. Is there any difference between Introduction sections of linguistics RAs in Arabic and English in terms of the frequency of nominalization use?
2. What nominalization patterns are used in the Introduction sections of linguistics RAs in Arabic and English?
3. Can the use of nominal expressions determine the way that knowledge is claimed in Introduction?

1.5 Design of the study

In the present study, an analysis will be done on introduction sections of Arabic and English research articles in terms of use and frequency of nominalization. The method of analysis will be top-down, applying macro-structure models by Halliday and Matthiessen (2004). The approach embedded for analysis will be eclectic, incorporating both qualitative and quantitative analyses.

1.6 Significance of the study

The findings of the previous and the present study will do good in the process and product of academic writing. This study is hoped to add a lot to the pathways of examining nominalization in research articles. The significance of the present study lies in the fact that it adds to the notion of nominalization in Arabic discourse due to the paucity of such studies. It also attempts to determine whether there are any differences between Arabic and English with respect to the use of nominalization. Since it is across two languages, the findings of this study will do good in the field of translation. Following previous research, the researcher can tentatively predict that there should be some differences holding between the two languages in the use of nominalization. Thus, this study is significant as it extends the boundaries of contrastive rhetoric. The results of this study will enhance our knowledge of academic writing in Arabic and thus implications can be drawn from the study to improve pedagogy. This study will add to the understanding of the behavior of the process of nominalization especially in the formation and its pragmatics.

1.7 Organization of the study

This study comprises five chapters. Chapter one incapsulates the introduction, notion of nominalization, statement of problem and purpose, research question, design of study, significance of study and organization of study. Chapter two includes the literature review, academic writing, grammatical metaphors, nominalization in English and Arabic, and how to form the Arabic verbal noun and patterns of nominalization. Chapter three explores methodology, data, the analytical framework, procedure and data analysis. In chapter four, the researcher presents the analysis of the nominalization in Arabic and English according to qualitative and quantitative approaches. Chapter five includes the conclusions, limitations of the study, implications of the study and suggestions for further research. This study closes with references followed by two appendices.

Chapter two

Literature Review

2.1 Introduction

As a genre in itself, academic writing is believed to be an area of language study that has its own conventions of structure, vocabulary and content organization. The basic aim behind this style of writing is to widen the scope of knowledge in a given domain or discipline. Disciplines differ in terms of their own writing conventions, vocabulary and types of discourse that characterize them. Compared to general writing, academic writing can be distinguished via its features including being planned and focused, structured, formal, supported topics, and an intended audience. The targeted audience can include researchers, scholars, reviewers, or students who attach themselves to that discipline. One of the examples of academic writing is research articles. This study is confined to the realm of research articles written in Arabic and English and the goal is to examine the features of nominalization in both languages. In other words, academic writing has various tools that are adopted to highlight certain goals. One of these significant and effective tools is what is called 'grammatical metaphor', which was coined by Halliday (2000). The idea behind grammatical metaphor, according to Halliday, is that certain ideas are conveyed through dressing them with a different grammatical form. For instance, verbs can be transformed into nouns, a case which results in a variation in the shaping of a new meaning. As far as grammatical metaphor is concerned, it has different categories. One of these categories is called 'nominalization'.

Nominalization is the act of naming entities. In academic writing, this notion has its scope widened through acquiring different shades of meaning. That is, nominalization is used to convey a variety of functions in order to achieve certain goals. As for the process of nominalization, it refers to "instances in which noun phrases replace subject – predicate constructions thereby turning actions into things (Roe & de Ouden, 2018, p. 287). In Arabic, the process of transforming verbal categories into nominal has taken different routes, a case which makes its functions varied. According to Halliday (2000), the process of nominalization is the most powerful resource for creating grammatical metaphor and this process reflects profound meanings in given contexts. In functional linguistics, the focus on the process of nominalization is exerted via reflecting upon both

structure and context. In fact, context is the hub of revealing the given intention of writers and speakers. According to Bussmann (2001), nominalization is defined as a process which involves the creative formation of words of different parts of speech that can be turned into nouns. Similarly, Biber, Conrad, and Reppen (1998) showed that nominalizing words can be achieved from adding suffixes to verbs and adjectives. These definitions are restricted to the lexical level, but Halliday widened the scope of nominalization to include the syntactic level in the sense that a nominalization process functions as a noun group (Hu, 1989). To Halliday, the nominalization process can be represented through the ideational meaning, which puts nominalization within the area of ideational metaphor.

In the linguistic literature, academic writing is characterized by the use of "full forms, nominal groups, passive voice, concise vocabulary, objective and impersonal" styles (Hamp-Lyons & Heasley, 2006, p.20). Research on academic writing, particularly in English, has demonstrated academic English to be highly nominalized. However, in regard to academic writing in Arabic, little if any research has been documented. Given the paucity of research in this area, this study aims to examine the types and functions of nominalization categories in Arabic and English research articles in applied linguistics. Thus, it can be concluded that the notion of nominalization is a common linguistics phenomenon in academic writing. In academic writing, nominalized is used both to convey abstract and concrete things.

2.2 Academic writing

Academic writing can be viewed as the fulcrum upon which a variety of scholarly aspects rely. It is a process which represents the hub of academic performances and success; a process that reflects the "proactive positioning of [the writer's] academic voice" (Murray & Moore, 2006, p. 4). In addition, academic writing is one of those steps of the academic research process through which scientists report situations of thinking, experience, observation, application, testing. Basically this is carried out to arrive at the solution of a scientific problem or an academic one. In addition to following the genre rules of text genre, in academic writing all principles are considered while reporting an academic research and process of textualizing it" (Bahar,2014, p.213). Academic writings are "written and printed" report (Day.2005.p.4) that describe " original research result", " with a strongly structural intellectual system" (Bayat, 2014, p. 157). This system requires " Logic, clarity, truth" (Aceto, 2003, p.8). There should be an understanding of the construction of texts by writers who try to find a suitable way of interacting with their readers. In other words, academic writing is an iterative and continuous process amalgamating "reflection, improvement, development, progress and fulfilment of various types and in varying measures"(Murray & Moore, 2006, p. 7). This can be achieved via exploring discourse studies focusing on academic writing and discourse.

Lots of studies in discourse analysis has been conducted in the field of academic genre. A considerable amount of this research, following in the tradition of Swales (1990) and Bhatia (1993) has focused on schematic structure and the sequential patterning of communicative acts within genres into moves and steps. There is a plethora of studies in this regard such as (Paltridge, 2007). More recently, research has started to investigate the potential relationship between moves and steps and their typical lexicogrammatical realization (Flowerdew, 1998; Upton & Connor, 2001). Such matters are highly related to studies in genre analysis. In addition, such matters can be utilized to fulfil certain objectives.

Academic writing is a process used in the academic domains so as to achieve certain academic goals. Murray and Moore (2006) identified other important characteristics in academic writing: interactivity and iterativity which represent important and motivating aspects of academic writing. These two features spur writers on to construct their own texts according to the conventions of the genre in which they are

expressing their own ideas and claims. What is important is the fact that academic writing is characterized by its objective, impersonal, concise, and relevant style. Another important feature is that writing should "produce logical structure idea with well-thought out, verified point and consider different opinion" (Gillet, Hammond & Martah, 2004, p.88). That is to say, academic writing should be objective through utilizing an academic style. For example, academics opt for using hedges which help employing an objective point of view (Monippally & Pawar, 2010, p.77). In addition, the grammatical structure in academic writing is highly complex in the sense that the sentences used in a given text are dense and structurally complex.

In academic genres, the construed language should be lexicogrammatically technical and specialized, a feature which is encouraged by writers. Furthermore, the other features include things like being abstract, lexically dense in comparison with informal spoken language. As for the ranks in which nominalization constructions occur include being elaborated in nominal groups, extensive in a relational process, impersonal and evaluative (Biber, 1988, 2006; Christie & Derewianka, 2008; Halliday, 1993a; Hyland, 2009; Schleppegrell, 2004).

These features can be manipulated via systemic function grammar (SFL). In this regard, Liardét (2013, p. 163) shows that SFL represents a powerful language resource that "simultaneously builds cohesion, foregrounds meanings in static nominal groups, and backgrounds personal and subjective voice". One of the powerful aspects of SFL in academic writing is grammatical metaphor because it can convey more complex ideas.

2.3 Grammatical metaphor

Grammatical metaphor (GM hereafter) is a term which was proposed by Halliday (1985a). In fact, GM is one of the most important features of academic and scientific discourse. It represents one of the crucial contributions of Systemic Functional Linguistics (SFL hereafter). In this study, the semantic model presented in Halliday and Matthiessen (2004) will be adopted. Halliday & Matthiessen (1999, p. 238) has identified the congruent and metaphorical realization of semantic categories in grammar in the sense that

When a sequence is realized as a clause complex, or a process as a verb, this is congruent: it is the clause complex, and the verb, in the function in which it evolved. When a sequence is realized as something other than a clause complex, or a process as something other than a verb, this is metaphorical. Some other grammatical unit is supplanting them in these functions.

Thus, the process of nominalization is considered as one instance of GM since it involves the transformation of a given grammatical category or rank into a nominal group. The (SFL), is one aspects of " Grammatical metaphor". Halliday (1994) has shown that written language generally displays higher lexical density than spoken language. Grammatical metaphor was typical manifestation of nominalization by Halliday based his calculations on the sentence. Nominalization " allows any observation, or series of observations to be restated in summary form-compressed, as it were, and packaged by the grammar" (Halliday,2004). In nominal structure, " Grammatical metaphor increases the power that a language has for theorizing, because it creates virtual phenomena, virtual entities, virtual processes" '(Halliday,2004, p.12-20). Functionally, there are types of GM.

As a manifestation of GM, Kazemian and Hashemi (2014) identified the major objectives regarding the function of nominalization in terms of Halliday's Grammatical Metaphor, Rhetoric and critical Discourse analyses in the field of political discourse. They identified strategies reflecting the dominant principle and tropes. Their result showed that in Barack Obama's 2012 selected speeches there dominated nominalization, passivation, parallelism, unification strategies and modality. To round things up,

nominalization is one of the lexico-grammatical manifestations of grammatical metaphor. However, not every instance of nominalization can be regarded as a grammatical metaphor especially those that represent technical terms (Kaidan, Jalilifar & Don, 2021).

Brions, Fortunes, Sastre and Pocovi (2003) explored the terms 'nominal compounds, complex nominal phrases' nominalizations and grammatical metaphors with a focus on nominalizations and grammatical metaphors. These two play a significant role in constructing scientific discourse. In fact, scientific language is one which is highly dominated by nominalized constructions due to " an increasing conceptual complexity together with economy constraints....." (Briones et al., 2003, p.132). Being dominated by nominalized constructions, scientific language achieves the functional notions of **objectivity, thematic progression, synthesis, concise referencing and summary**. Referring to Bhatia (1993, p.148), Briones et al., (2003) showed that complex nominal phrases, compound nominal phrases and nominalizations are types of nominal expressions. As for nominalization instances, Horsella and Perez (1997, p. 104 cited in Briones et al, pp. 135 -136), there are types such as nominalization by affixation, by-ing affixation, by other type of affixes, and nominalization by conversion such to change and the change.

As for grammatical metaphor, Briones et al. (2003, p.138) have identified two phenomena: lexical density concerning the density of information and syntactic density. They have also referred to the fact that GMs utilize lexical items for their function, i.e their meaning do not change. One the other hand, meaning changes in the lexical metaphor with a ' non-literal' use if the example of 'a flood of proterts' which means ' a large quantify of protests'. According to Vento'a (1997, p.33 cited in Briones et al. (2003, p. 140), GMs are resources for supporting the cohesion of the text in which they are used.

Zohar Livnat (2010) highlighting on impersonality and grammatical metaphor in scientific discourse according to Halliday's concept (2004) that " in classical lexical metaphor one word takes over from another, in grammatical metaphor one grammatical class takes over from another" p.38. And then he puts his idea in grammatical metaphor as way of "reconstructing the relation between the grammar and the semantics" (p. 10). The ordinary everyday language that found in language of young children before to get

educational knowledge was assumption by Halliday calls "congruence". In congruence mode of language that "noun represent things, verbs represent happenings, adjective represent qualities and connectors represent logical relation" (p:110). Thus, shows that the relationship between grammar and semantic. In incongruence mode of language " qualities might be realized by noun, happening by nouns or adjective, and logical relation by verbs" (p:110). The typical example, for metaphorical grammar that is nominalization. Nominalization concept by Halliday " is motivated in the discourse of science, because of its massive potential for creating new knowledge" (p 111). "grammatical metaphor increase the power that a language has for theorizing, because it creates virtual phenomena-virtual entities, virtual processes-which exist solely on the semiotic plane; this make them extremely powerful abstract tools for thinking with" (p: 111). In scientific discourse common has wide distribution of grammatical metaphor and has various causes or causes or "pay-offs". The first of this distribution that serve to " construe technically". The most powerful was creating taxonomies (categories and sub-categories) by the nominal group. In addition, the technical meaning was creating by nominalization "classifier + thing" structure. The second, reconstructing qualities, processes and logical relations as "thing". The semiotic universe of 'thing' is create by grammar. In other hand serve of nominalization that turns from Theme into Rheme. This movement considers a characteristic of scientific discourse as a chain of reasoning. Nominalization " allows any observation, or series of observations, to be restated in summary form –compressed, as it were, and packaged by the grammar-so that it serve as the starting point for a further step in the reasoning" (p:111). Theme that is a noun, stable part of the sentence moreover it was packing preceding information. Zohar Livnat (2010) has tackled the relationship between adopting GMs and impersonality in scientific discourse. This relationship has been explored via corpus-based research in Hebrew. It has been concluded that impersonal constructions of GMs are used to " serve the rhetoric of objectivity ' and enhance the ethos of the credible and uninvolved researcher" (p.116). One of the mechanisms of impersonality is the reader in exploring the cognitive activities. To sum up, GMs help the author to be included within the scientific community

Hadidi (2012) in his paper addresses grammatical metaphor in term of the ideational function. He has analyzed a corpus of 3 business and 3 political texts. In term of ideational metaphor, these texts were analyzed to reveal its uses, frequencies and its

role and function. It was found out that ideational metaphor was dominant in these texts where nominalization has been frequent in these business and political texts. This domination of nominalization results in more abstract and more formal style. In addition, grammatical metaphor there is a picture of reality represented by lexicogrammatical features. One of these features is the use of nominalization which reduces the number of clauses and condenses the bulk of information through the use of nominal groups. Another interesting feature behind the use of nominalization is that a process is turned into object. This gives us the introduction that the use of nominalization affects both the grammar of the texts and the reaction of the readers. As far as the ideational metafunction is concerned, the transitivity system is adopted to reflect upon the world our experiences through a set of processes such as material, rational, mental, behavioral, verbal and existential.

Hadidi(2012) studied the two types of metaphor: grammatical and lexical where there is a kind of realignment between the strata of semantic and grammar. The corpus being analyzed contains nearly 1000 words from business and political texts which were analyzed by using systemic function grammar. Illustrative examples can be taken from the discourse of Tony Blair in which metaphors are used to reflect upon the country's reality. Let us take the following example from mental clauses: *In the face of future challenges*. In this example the metaphorical wording reduces the congruent wording which is (up against when facing the changes in the future). An example of a mental process is a metaphorical wording (Dynamism) which reduces the congruent wording (Dynamic attitude or style). In the first example (future challenges) represents a grammatical metaphor where (challenges) is a (thing) which is taken from the process (to challenge) and there is an epithet (future) which is used for modification. In this example there are cognitive perlocutionary effects on the minds of the hearer. In the example being analyzed, Hadidi (2012) showed that adopting grammatical metaphor gives condensing information by which politicians and stakeholders express their ideological position critically. Another advantage, which is highlighted by Hadidi is that using nominalization paves the way to execute the agenda which are power oriented.

Without using grammatical metaphor politicians cannot affect their people and convince them to accept their political purpose and worldviews. An example, given by Hadidi (2012, p: 358) is the nominalization (*government subsidy*) which is "said to realize the meaning of thing (the metaphor: *subsidy*) as well as that of process (the

congruent paradigmatic variant, *subsidize*"). Another feature being analyzed is syntagmatic plurality. Where using grammatical metaphor is based on another process of metaphor (Simon-Vandevbergen, 2004). This syntagmatic plurality differentiates between two level where ideational metaphor can be represented. Example and syntagmatic plurality include (*providing security, workforce regulation, rising investment*) (Hadidi, 2012, p. 359). There are roles and functions produced by grammatical. This is called generalization whose function is to "absorb as much as possible of people's attention". This function of generalization plays a great textual role in order to get "desirable persuasive effects and material gains" (p. 360). An example is the metaphorical wording (*new sales*) which is the equivalent of congruent wording (*thing we sell for the first time*) which represent the material process.

It has been concluded that nominalization is used in business texts" in order to achieve materially suasive ends of marketing, selling and wining sustainable customer faith, while also making the writing not too flat, too artificial or too contrived" (Hadidi, 2012, p. 361). In political adopting nominalization instances are "fuel political discourse and its textual manifestation" (p:363). Another basic function of using grammatical metaphor in politics is to show:

powerful and subtle inculcation of sociopolitical ideologies in the minds of the masses, ideologies and conceptualizations desired by the politicians and stakeholders so that these power relations and the unbounded margins of profit targeted therein are left intact and continue to survive unnoticed by awakened ideology and sensitized understanding and perceptions on the part of the citizens. (p, 364)

2.4. Nominalization

The process of nominalization is an effective linguistic notion adopted by academics to achieve certain goals. These functions as revealed by the literature on nominalization include: lexical density, constructing knowledge, impersonal style, organizing a text, evaluating things, easy flow of information and other related ones. Some of these functions are referred to by Martin (1993). In this study, the researcher will adopt Systemic Functional Linguistics by Halliday (1994) as the theoretical framework in analyzing the process of nominalization in Arabic academic writing and contrasting it with the English one. The basic aim behind choosing this framework of analysis is that "Functional grammar looks at how language works in terms of the functional relationships of its constituent parts, and systems of choice which we make whenever we use language" (Feng, 2014, p. 86). This framework approaches the linguistic categories from the three levels of language: ideational (representing experience and logical relations), interpersonal (enacting social roles and relationships in discourse) and textual (packaging information flow into a given text) (Mwinlaaru & Xuan, 2016). One of the textual items that is of significance in academic writing is the process of nominalization and its functions.

Nominalization is a grammatical process that is utilized by academics to achieve certain functions. In fact, discourse structures have many cognitive, interactional and social functions. None of them are exclusively ideological. For instance, passive sentences and nominalizations hide or background agency (Van Dijk, 2006). Nominalization is regarded as a transcategorical operation because one can derive nominals from non-nominal categories (Comrie & Thompson, 1985, p. 349). It is a process that can be morphologically encoded especially in rich morphological language such as Arabic.

2.5 Nominalization in English

The linguist Halliday is considered the first scholar who introduces the concept of nominalization examining different perspectives. Halliday (1994) has analyzed nominalization within academic and particularly scientific texts. Eggins (1994, p. 94) defines "nominalization is a process turning things that are not normally noun into noun, with consequences for another part of sentences". Warnock's expression (2003, p. 140) " every nominalization is holding a verb beneath the surface". In English grammar, *nominalization* is a type of word formation in which a verb or an adjective (or another part of speech) is used as (or transformed into) a noun. This process can also be referred to as 'nouncing'. In transformational grammar, nominalization refers to the derivation of a noun phrase from an underlying clause. In this sense, an "example of nominalization is *the destruction of the city*, where the noun *destruction* corresponds to the main verb of a clause and *the city* to its object" (Leech,2006)". The process of nominalization has some rules such as supporting cohesion of a text.

Sarnakaite (2011, p.45) explores the cohesive role of nominalization in political texts and examine the concept of nominalization and function in texts. Sarnackaite (2011, p. 45) examined the cohesive role of nominalization in politics texts. The basic aim was to present the rhetorical material in relation to nominalization and its cohesive function. Another aim was to give an analysis of the textual functions of nominalization. The result showed that the frequency of explicit cohesion was much lower than implicit cohesion devices. It was concluded that there are frequent suffixes that are used to create nominalization such as the suffix (- ment). The basic conclusion was that " nominalization is a ubiquitous linguistic phenomenon in political discourse". He refers to a variety of definitions of the term 'nominalization' such as, Bassman (2001, p. 327) who shows that nominalization "productive process of world formative through which words of all word classes can be used as noun". In addition, take another definition by Trask (1992) nominalization as " a noun derived from a member of another lexical category, especially from verb". He clarifies that " nominalization can also refer to noun phrase originated from another word class" (Trask, 1992). In his paper, he points out the process of nominalization from verb to noun. For example, (I had **knowledge** that my **speech** Spanish was poor) and (I **know** very well that **spoken** Spanish poorly) (Trask, 1992). When comparing two sentences, the first sentence refers to nominalization (**knowledge, speech**). While, second sentence takes the verb only (**know, spoken**). And

then, he introduces the concept of nominalization by Ziff (1984, p. 25) whose notion is that " nominals are the result of the linguistics process of nominalization". Thus, the result of this process is that a verb functions as noun in the text and still in the same position in the sentence when nouns are found. Nominalization in syntactical grammar is quite simple in such examples.

As noticed by Thibault (1991, p. 282), nominalization is used to mean " **packing**" which is the process- participant relation utilized into a signal grammar entity'. Moreover, Lock (1996, p. 60) encouraged the idea mentioned above and claims that "**packing** the content of clauses into noun groups is known as nominalization ". He provides an example to clarify this point (Arthur's *has* a new car) and (Arthur's *possession* of new car). In this case, noun can be considered as nominalization in while *possession* is not beyond to verb *has*. The second sentence, noun is represented process having. (Thibault (1991). Not only nouns can be used as nominalization instances.

Lock (1996) states another type of nominalization which is an adverb turned into an adjective as in (I strongly believe in what we are doing) and (My strong belief in what we are doing). In addition, he considers a nominalization as adjective into noun group (they are very tall) (Their great heights). Lock shows three types of nominalization: Nominalization at the level of the word (e.g. *teacher*, *Sam's washing of the windows*). Nominalization which demonstrates a structure that lies in between a verb and a full clause (e.g. *Sam's washing the windows*) and, finally, nominalization consisting of full clauses (e.g. *That Sam washed the windows*). He points out main advantage of nominalization in academic discourse and scientific language:

1. Nominalized language deals with the conciseness. Packing information into a noun group leaves the rest of the clause available for adding new information.
2. It is much easier and practical to start a clause or a sentence with a noun group rather than with a verb group.
3. nominalization is an implement which helps scientists to treat processes as if they were things. It reflects science's concern with categorizing, labelling, and describing phenomena and is a crucial thing in scientific discourse.

Banks (2003, p. 129) proposed different ways process of nominalization from verb, but it is not mean that verb is available. Thus, he distinguished three types of option

to nominalization of a verb: (1) Nominalizations which are morphologically identical with the agnate verb (e.g. *estimate, change, haul*) 2. Nominalizations which have no agnate verb, but which still point out a process (e.g. *trend, occasion*). 3. Nominalizations which have an agnate verb, but are not morphologically identical (e.g. *growth, translation, occurrence*) (Bank (2003)).

The last type of nominalization is derived from verbs, but according to morphologically is not alike. It is adding suffixes. These suffixes are common in English. Such suffixes are added to verbs in order to form verb-based nominalizations:

1. age (e.g. to pass → passage);
2. al (e.g. to remove → removal);
3. ance/ -ence (e.g. to assist → assistance; to exist → existence);
4. er/-or (e.g. to read → reader);
5. (e)ry (e.g. to discover → discovery);
6. ion/ -sion/ -tion/ -ation (e.g. to confess → confession; to identify → identification);
7. -ing (e.g. to walk → walking);
8. -ment (e.g. to excite → excitement);
9. -sis (e.g. to analyze → analysis);
10. -th (e.g. to grow → growth);
11. -ure (e.g. to fail → failure)

The studies that focused on nominalization have examined it through its use, frequency, utilization in some sections of research articles. To the best of the researcher's knowledge and via examining the most influential studies on nominalization, all of these studies have focused on this notion in terms of grammatical metaphor. What distinguishes this study is that it examines the role of sentence and/ or clause type in the process of nominalization. In addition, few studies have examined finiteness and nominalization, a case which is highlighted in this study.

As noted by Jalilifar, Saleh and Don (2017), they introduce the idea about comparing between using nominalizations in the introduction and method sections as characteristics of academic writing in Applied Linguistics. The academic requirements demanded both the linguistic choices and textual organization (Lim 2006). Suggested by Swales (1990) RAs must be organized as Introduction, Method, Result, and Discussion

(IMRD). In fact, the introduction section is considered as the most important section within the academic communities. Writers of research article were contextualizing their own research within discipline and in relation to a body of theory or research, for argument their own study was using as a platform (Hood 2004).

In the method section, the approach to the study was described by the research writer – the methodology, materials, procedures. It is an important move to other researchers. The function of the method section was its use as connectors of " the section itself with other key sections, especially the introduction and result" (Lim 2006, p. 283). A lot of studies depended on systemic functional linguistics (SFL) for analysis academic writing. And some of these studies focused on microstructure aspects such as ideational grammatical metaphor. Systemic functional linguistics (SFL) related with language of people in different context and how language is structure use for semiotic system " as interrelated of options for making system" (Halliday 1994, p. 15).

Jalilifar, Saleh and Don (2017) have clarified the notion of grammatical metaphor and introduced some definitions given in Halliday and Martin (2005, p. 87). For example, it is seen as "substitution of one grammatical class, or one grammatical structure by another". Grammatical metaphor "adds a further dimension of depth to semantic construal of experience" (Halliday and Mathiessen, 1999, p. 291). Nominalization is a tool or a repository employed for creating metaphor (Halliday, 1994). It is also shown that introduction sections " writers of RAs compete for the acceptance and recognition". The basic function of nominalization is to maintain cohesion in academic texts (Baratta, 2010). The data of his study included the introduction and method sections of 16 empirical papers. The result of his study revealed that these sections were not very much used in the distribution and the patterns of nominalization expressions in RAs. And he proposed some ways which could be fed into ESP\ EAP courses.

As for the forms of nominalization, Taher (2015) examined the problematic forms of nominalization in English and presented three forms of nominalization. Then she points out the similarities and differences between three forms (Gerund, verbal noun, and deverbal noun), in grammatical terms seem same forms, but internal structure has different. she also mentions the explain and details with example in every forms. For example, Gerund is a noun that is derived from verb and always ending with(-ing) forms

such as (asking, refusing, painting), gerund can be modified by an adverb, preceded by not allows auxiliary verbs. Take the following example:

(Brown's deftly painting his wife is wonderful) (Taher, 2015, p. 33).

One of the differences between the verbal and deverbal nouns can be stated through the aspects notion. Verbal nouns are defined as those which " do not take direct objects as verbs can, and they are modified by adjectives rather than adverbs" (Taher , 2015, p. 31). In English, a verbal noun is the same as gerunds ending (-ing) form. Such as an example (John's refusing of the offer was polite) (Taher, 2015, p. 30). While deverbal nouns " are nouns that are derived from verb or verb phrase, but that behave grammatical purely as nouns, not as verbs" (Taher, 2015, p. 31). Structurally, a deverbal noun ends with (-ing) such as (asking, refusing) and (non-ing form) such as (limitation, information. arrival, refusal). She provided some definitions. For example, the definition by Janigova (2008) which states that "nominalization refers to the process of conveying a verb-related meaning by a noun phrase whose underlying structure is clausal" (Taher, 2015, p. 32). Then she divided nominalization into simple and complex. As an example of the latter type is the following:

(Her **sudden arrival** surprised us) simple

(**Studying volcanoes** is dangerous work) complex

One can see that the bold type phrase is a nominalization example, which is taken from a clause. Thus, it can be deduced that simple, complex nominalization type structures are taken from reduced clauses. In her conclusion section, she mentioned six points. The most important points are the following:

1. Semantically, gerunds are verbs by form and nominal by position
2. Verbal nouns are abstract noncount nouns with one form and one meaning. They are nouns by form and nominal by position.
3. Deverbal nouns are considered autonomous common

As for Jalilifar, White and Malekzadeh (2017), the comparison between applied linguistics and physics is clarified and the manner of using nominalization in the two disciplines is explained. Physics academic writers use (a) more complex, lexically dense

style of writing and package more information into compound nominal phrases by deploying a pattern where nominal are followed by strings of prepositional phrases in comparison to writers in Applied Linguistics; and (b) express particularity using nominal preceded by classifiers more frequently than Applied Linguistics writers' (Jalilifar, 2017, p. 1).

Halliday (1978, 2004) analyses of the text was well suited to provides for investigations of academic discourse by stigations of academic discourse by systemic functional linguistics (SFL), and then he defined the concept metaphor as movement from a literal to a new figurative meaning (Taverniers, 2004, 2006). To Halliday (2004) defines metaphor" as congruent realizations of the given meaning, are non-metaphorical variants" and " a set of incongruent expressions or metaphoric variants (Halliday, 1985, p. 20). Jalilifar gives us two examples extracted from the corpus of this study to illustrating Halliday's perspective in grammatical metaphor: a. Student participates in class, b. student participation in class. The first sentence talks about the student's role in class, but in second one talk about the student's role in different manner. (Halliday, 1985). In addition, he asserts in his article about nominalization and how process or attribute is reformulated metaphorical as noun and explain how derived from verb (e.g. transform), an adjective (e.g. unstable), or a circumstance (e.g. with) transform into nominal group (transformation, instability, and accompaniment). (ibid)

In academic contexts, language is used to display information using technical lexicon, and with an authoritative stance (Martin, 1993; Schleppegrell, 2004). He analyzed each instance of nominalization which was counted and classified based on the four types of nominalizations enumerated by Halliday and Matthiessen (1999). This study is based on three phase data sets (1) identification, quantification, and classification of nominalization (2) identification, quantification, and classification of patterns of the nominal groups (3) exploring the nature and functionality of the dominant patterns of nominal groups. The first phase is based on four types of nominalization enumerated by Halliday and Mattissen (1999). For example, nominalization is derived from adjective by suffixes such as ending – ity and –ness, second one nominalization derived from verbs by suffixes – age, -al, -(e)ry, -ion\ -tion, -ment, - sis, - ure and –th. The third type is the nominalization which has zero –derivations from their corresponding adjectives, verbs, prepositions, conjunctions (adjective e.g. unstable into instability...verb (transform) derived as transformation ... circumstance (with) deriving into accompaniment....

conjunction (if) into condition. Finally, there are nominalizations with verbs ending with –ing (ask- asking).

The second phase of analysis manipulated a grammatical context in which nominals can occur. The order of the words is identifying of nominal groups in which instances of nominalization were found. Halliday (2004) suggested experiential functions and word classes (Deictic, Numerative, Epithet, Classifier, and Qualifier). As a result of this study that no significant frequency difference in deployment of the four types of nominalization. Jalilifar, Alipour, and Parsa (2014) study "did not indicate any significant difference between Applied Linguistics and Biology textbooks in terms of the types of nominalization".

Jalilifar et al. (2018) examined nominalization in the disciplines of Applied Linguistics (AL) and Medicine. They show that academic genre in previous studies include abstract, introduction, presentations, lectures. And many of these studies begin with introductions. Jalilifar et al. (2018, p,314) refer to academic introductions " as an example of an interested genre, seems to be promoting the work, which even sometimes takes precedence over the original purpose (i.e. introducing the work)."

In recent years, there has been the subject of a wide array by the use of nominalization in scientific discourse. Nominalization has played a crucial role in the skillful orchestration of academic discourse (Jalilifar et al. , 2014). In fact, different types of nominalization have been considered by indicating variation use in abstract and research article (Holtz, 2004). Jalilifar et al. (2018, p:316) show that " the realization between disciplines specificity text scientificity, and nominalization has yet to be adequately examined". Moreover, full understanding of meaning of any text has been achieved by functional role and textual consequences of grammatical metaphor.

This study is based on the investigation of nominalization in the introduction text and book review in different two disciplines and analysis of these texts. The analysis includes four stages. The first stage of analysis depended on identifying the frequency and grammatical metaphor. The second stage of analysis was examining how semantics texts move to the process of nominalization. The third one of these stages examines the density of nominalization. Finally, the researcher calculated the proportion of nominalization to grammatical metaphor and grammatical patterns of nominalization deployment are also illustrated. The data in this study are based on the account of words

and their frequencies in corpora of Applied Linguistics and Medical texts. The results revealed that the proportion of nominalization instances to grammatical metaphors equals (i.e. 51602 nominals vis-à-vis 633338 grammatical metaphors in Applied Linguistics, and 39966 nominals vis-à-vis 52994 grammatical metaphors in medicine. In Applied Linguistics, a preposition to noun was used more frequently than in medicine as revealed by chi-square.

Jalilifar et al. (2018) explored using items of nominalization in the introduction section and in book reviews. They found out that there were functional variations in the use of nominalization in the introduction section in Applied Linguistics, but in the medical texts there was a lower tendency in the use of nominalization. It was stated that "the inspiration for comparative study of textbook introductions and book review comes from the need to determine how far the nominalization patterns are distinct in two disparate disciplines of applied linguistics and medicine, representing soft and hard sciences" (Jalilifar et al., 2018, p. 315). The data in this study are based on the account of words and their frequencies in the corpora of Applied Linguistics and Medical texts.

Maria (2002) clarified that the process of nominalization requires realizing the following: (a) the selection constraints imposed by the nominalized compound head, (b) the fact that the relation of the modifier and the head noun can be ambiguous, and (c) the fact that these constraints can be easily overridden by contextual or pragmatic factors. She argued on the relations holding between a head and its modifier which are not readily available in the corpus by interpretation of nominalizations. The results showed that taking advantage of smoothing methods that rely simply on verb-argument tuples extracted from a large corpus and surface contextual information without strictly presupposing the existence of annotated data or taxonomic information. In a similar vein, Howell and Zamaraeva (2018) explored nominalization occurrence in grammar matrix. They prosecuted an analysis of clausal nominalization instances and different levels in the parse. It is revealed that "nominalization clauses in the grammar matrix" are presented at different levels in the parse tree: (1) Low: the nominal constituent is built out of a lexical verb (V) (2) Mid: the nominal constituent is built out of a VP constituent comprising the verb and its complement (3) High: the nominal constituent is built out of a full S: a verb plus all of its dependents. (Howell & Zamaraeva, 2018, p. 69).

Paul (2014) investigated in her book of nominalization in across linguistic. And shows core issues about nominalization. She found out three main issues in her study. The first issue is related to how much verbal material inside the nominalization. The second issue, how internal structure related with semantics sciences (nominalization meaning). The last issue investigated the nature of nominalization. According to Chomsky (1970), nominalization does not behave like a verb where "derived nominals have the internal structure of noun phrase, not a verb phrase". Such as in this example (John criticized the book before he read it) and (John's criticism of the book before he read it), the first one verb in the sentence criticized its modifier by verb phrase the book before he read it, while the second criticism derived from verb criticism does not. Nominalization has been tackled by many researchers such as Chomsky (1970) who suggests that nominalization occurs at the level of lexical items. As for nominalization, Abney (1987) notices that much different verbal structure was indicated in different structures by attachment. Marantz (1997) distinguishes noun or verb according to deep and surface structure where in surface it is unmarked.

As advocated by Grimshaw (1990) and Alexiadou. Grimshaw model undoubtedly, they pinpoint the differences in the syntactic patterning of regular and lexicalized deverbal nominalization and there is merit to the idea that the analysis of nominalization should take into account aspectual distinctions. distinguishes that nominalization divided into three sub-classes, complex nominal (the instructor's examination of the student) simple (the instructor's examination) or result nominal (the instructor's exam) the first one allows to argue, but the two other types do not.

As for Jalilifar et al. (2014) explore using nominalization in his article comparative study between two disciplines Applied Linguistics and Biology. He introduces research question in his study. *Are there any significant differences between the sample textbooks in applied linguistics and biology regarding the frequency of nominalization?* In comparative study was identified by nominalized expression, and nominalization types were accounted by chi-square. There is no significant difference in using nominalization was revealed by result. This study based on systemic function linguistics (SFL) and provide relationship between function and grammatical system by Halliday (1994). Systemists focused on "how the grammar of language serves as recourse for making and exchanging meaning" (Lock,1996: p;3).

Scientific and technical register was construed as noun instead of verb and adjective by nominalization and give most powerful for creating grammatical metaphor (Halliday,1993,1994). In writing, language was used complexity by nominalization for embedding as much words turn into packing a few words in on information structure of nominalization like this example (*.is impaired alcohol*) becomes into (*alcohol impairment*) and (*they allocate an extra packer*) becomes into (*the allocation of extra packer*). In this two expression, analysis meaning and focused on metaphorical and congruent realization and essential (Halliday,1994; Heyvaert,2003).

Thus, the original words *alcohol* and *extra packer* are displaced by the metaphoric expressions, and so are reduced to modifying these expressions: Alcohol becomes a classifier of impairment; an extra packer goes into the prepositional phrase function as qualifier to allocation. The of study based on four stages: first, the frequency of nominalized expression from the perspective of grammatical metaphor was obtained through the division of nominalization instances by the total words the 27 pages. Second stage, the various types of nominalization used in the two texts were identified. Third stage, the density of nominalization in the texts was estimated by dividing the total number of nominalization expressions to number of clauses. Finally, the fourth stage, the proportion of grammatical metaphor to nominalization was calculated. The concept nominalization in this study was a part of two academic textbooks and giving idea " how grammatical metaphor is relevant in sample of this genre" (p:41).

As a comparative study of nominalization in English Applied linguistics and Persian translation by Jalilifar et al. (2014). They explored the nominalization role and function in two disciplines. They presented research question that how and what extend is nominalization reflected in an English applied linguistics textbook and its Persian translation? The method of this study relies on mixed quantitative and qualitative. In addition, the study was collected three essential textbooks as considered to be important at Bachelor level suggested by ten professors were visited in the English Language Teaching (ELT) departments of two state universities.

These three books were *Principles of Language Learning and Teaching* (Brown, 2007), *Approaches and Methods in Language Teaching* (Richards & Rodgers,2001), and *Techniques and principles of Language Teaching* (Larsen-freeman ,2000). The result of quantitative analysis was different in using nominalization turned out to be significant,

the result of these different was realized in different language. While, the qualitative that tend to recur more in English than in Persian " noun to noun modifier was frequently exploited in the Persian translation"(p,185). The result of this study showed implications for textbook writers, English for academic purpose students and translators.

Liu, Fang and Wei (2014) reports on a corpus-based quantitative study of the use of nominalizations across China English a British English in two comparable media corpora. The presents study is different from previous studies in some important points: first, the study is not about variation of nominalization across registers and genres, but will explore variation across different English variation. Second, the study will attention a syntactic approach to nominalizations, an approach that has not been undertaken in previous corpus-based studies. Third, there are some methodological innovations in the identification and retrieval of nominalizations in this study. This study will not be relying on suffix-based in its method.

The large lexical database and syntactically annotated corpora will be shown by this study and can complement with fruitfully in research into syntactic feature which is not easily extracted from corpora. The study depends on research question: Are there significant quantitative differences in the used nominalization across Chinese and British media English? The study shows significant by data and many previous studies which is used in this study. That is to say, the quantitative data shows that are significant in the used nominalization across these two English varieties. In addition, that many studies describe the significant of used nominalization in English. As investigated by Chef (1982), nominalization can be used in formal written and informal spoken and describe that written language occurs 11 times than spoken language. Biber (1986) investigates the nominalization instances in words ending with (-tion -ment -ness and -ity). Interpreted by nominalization processes, this " marks a highly abstract, nominal content and highly learned style' (Biber,1986: 395).

Nominalization instances are more dominant in written texts (e.g. official document, academic prose, and editorial letters) than spoken texts (e.g. telephone and face-to-face conversation). which have instances of nominalization. Furthermore, Leech (2006) examined of nominalization ending in 12 suffixes in four corpora (i.e. LOB, BRWN, FLOB and FRWN) in two different English varieties. Concluded that American English distinguished with highly level of density of nominalization than British English.

The quantitative method was not sufficient to describe two corpora Chinese and British English. As a result of quantitative study finding " the uses of nominalizations in terms of the lexical patterns and syntactic structures in the future, which might offer more useful insight on variations in nominalization across different English varieties "(p109)

Vinh To, Le and Le (2013) have investigated nominalization in IELTS writing test papers. The aim of this study was to identify the frequency of the nominalization in texts of the tests and distribution verbal and adjective nominalization. Halliday and Martin (2005) points out that typical features in scientific text was distinguished by nominalization. There are two main reasons in scientific discourse feature in high degree: the structure of scientific argument and structure of scientific knowledge. In any language its grammar "packages what has gone before by nominalization the process (attribute or event), and making the medium of that process possessive modifier" (Halliday & Martin, 1993, p.131). There are two types of nominalization given by Halliday (1994): verbal nominalization (*press- pressure*) and second adjective nominalization (*hot- heat*). On the other hand, Hartnett (1998) classified five types of nominalization relying on the morphological endings:

1. These where the verb and noun maintain the same form, also called non-zero derived de-verbal noun (e.g. to plan – plan)
2. Gerunds (e.g. to run – running)
3. Adding a suffix to the verb (e.g. to engage – engagement)
4. These from adjective (beautiful – beauty)
5. When the verb and noun have a different meaning (e.g. to birth – birthday)

Carolyn (2004) introduces verb-change of nominalization into two sub- types such as nominalization change verb internally (sell – sale) or by adding -al (portrayal), –ance (attendance), –ee (payee), –ment (achievement) , -tion (recommendation), -ure (creature) and –yst (analyst). As for Carolyn (2004), nominalization " is most frequent in writing, less common in standard speech, and least often in non-standard varieties; heavy nominalization makes a text sound authoritative, formal, impersonal and prestigious" (pp.79-84). This study investigated the nominalization in writing test papers and looks at the other aspect that contribute to the complexity of writing: lexical density and readability the result of this study stated by Halliday (1994, p. 200) " the nominal group is the primary source used by the grammar for packing in lexical items at high

density". In addition, it is shown that the number of nominalization in writing test papers at band 7 doubled the amount of nominalization in band 5. And seems that the verbal nominalization was mainly used while the adjective nominalization was low. Moreover, there was a description of the relationship between nominalization, lexical density and readability in the IELTS writing test papers revealed that " the text with higher marks was denser and more difficult to read whilst the lower-graded text was less dense and easier to comprehend". The conclusion of this work shows two sides. Firstly, nominalization packed the information in a text and made it denser and difficult to read. Secondly, marking tends to reflex the complexity of grammatical features.

Holtz (2009.) examines nominalization on a corpus-based comparative analysis of research articles and abstracts. Abstracts have the distinguishing feature of information density. In general, that investigation information is not in context itself, but also in all texts of articles. As considers abstracts is a part of articles. In scientific discourse distinctive with complexity and requirement specific terminology. Nominalization was considered a part of grammatical metaphor which is to be powerful linguistic resource for realizing grammatical metaphor. Nominalization is " the signal most powerful resource for creating grammatical metaphor" (Halliday2004b:656). In scientific discourse includes " various form of discourse in which the activities of 'doing science' are carried out" (Halliday, 2004c: 49)

A scientific text consists of a different type, e.g. research presentation, theses, dissertation, short written communications, scientific. So, abstracts were a part of research articles and introduce mainly thoughts of all texts. Most of the linguistic study concerned with just abstracts not comparing them with full articles (e.g. Hyland 2007, 2009; Swales 1990, 2004; Swales and Feak 2009; Ventol 1997). This work focused on the qualitative and quantitative analysis of instance nominalization in a corpus of abstract and research articles. Consisting of the study was 94 research articles from several scientific journals in English of the disciplines of computer science, linguistics, biology, and mechanical engineering, consisted over 420,000 words. The result of nominalization suffixes in abstracts and research articles all these disciplines a great predominance of –sion \ -tion nominalizations (originally processes), followed by –ity (originally properties). Furthermore, nominalization presents in biology the most frequent used of –sion\ -tion (e.g. *methylation, expression, interaction*), while in computer science used

they are much less frequent. Nominalization instances that are frequently used end in (-al) such as (*functional, external*) particularly in linguistics and those ending in (- ure) such as (e.g. temperature) especially in mechanical engineering.

2.6 Nominalization in Arabic

In Arabic, as mentioned previously, there are two types of nominalization: (المصدر الصريح) /al-masdar al-sareeh/ explicit nominalization and (المصدر المؤول) /al-masdar al-mu'awwal/ interpreted as verbal nouns. There are differences between these two types of nominalization regarding their configurations, usages and functions. As far as English is concerned, there are plethora of studies that examine the notion of nominalization.

A verbal noun in Arabic resembles a verb in its action and has no time reference. It takes different names in parsing (according to the structure of a sentence). The cognate object is one of them. The cognate object is a verbal noun that is mentioned after its verb either to emphasize its meaning, to show its number, to show its kind, or to substitute the pronunciation of its verb. In a cross linguistic study on nominalization across Arabic and French, Tayalati and Van de Velde (2014) adopted the framework of Lexical Conceptual Structure (Jackendoff, 1983, 1990; Levin, 1993). They studied the nominals that trigger the event meanings. Such event meaning nominals are related to their verbal bases. They worked on the two types of Arabic nominal groups according to their transitive and intransitive verbal roots. Sometimes, the nominal groups retain their verbal force through their impact upon their external and internal arguments. Such nominalizations are basically taken from accusative verbs such as / mäta / (die) and /sä'a / (spread). As an illustrative example, they provided some examples as in the following:

(قصف المدينة من طرف العدو)

(qasf l-madinati min tarfil- 'aduwwi)

(the bombing of the city by the enemy)

They labelled such type of nominalization as unaccomplished nominalization that has an idiosyncratic feature. This feature is that this nominal group cannot be modified by an adjective but by an adverb as in the following example:

(قصف المدينة بشراسة)

(qasfu I – madinati bi-šarāsitin)

(the bombing of the city ferociously)

A verbal noun or what is called Masdar is a very important derivative in Arabic grammar. It is a noun that is taken from a verb in order to refer to the action or activity implied in the verb. Such derivative nominalization instances can be used in similar contexts to the use of those instances in English. Take the following examples:

1. (أحب السباحة) /uhibu il-sibaahata/ (I like swimming)
2. (هوايتي المفضلة هي القراءة) /hiwaayeti il-mufadhala hiya il- qiraa'a/ (My favorite hobby is reading)

Verb forms are extremely important for the formation of verbal nouns. In Arabic, verbs have forms patterned as Verb form I, II, III, etc. Verbal nouns from form (II – X) follow certain patterns in order to construct verbal nouns. However, there is no rule for deriving verbal nouns from form I. In spite of the absence of such a rule indicating a verbal noun from form I, there are some patterns that are common in this form. Consider the following instances:

1. The pattern (فعل) /fa'ala/, e.g. (عَمَلَ) /'amal/ “working”, (جَمَعَ) /jama'/ “collecting”, (زَرَعَ) /zara'/ “growing”, (فَتَحَ) /fatH/ “opening”
2. The pattern (فِعَالَة) / fi'aala/ , e.g. (دِرَاسَة) “studying”, (تِجَارَة) “commerce”, (قِرَاءَة) “reading”, (كِتَابَة) “writing”
3. The pattern (فِعَال) /fa'aal/ , e.g. (نِجَاح) /najaaH/ “success”, (ذِهَاب) /ḍahaab/ “going”
4. The pattern (فُعِيل) /fa'eel/, e.g. (رَحِيل) /raheel/ “leaving”, (بَرِيق) /bareeq/ “glimmering”
5. The pattern (فِعُولَة) /fa'ula/, e.g. (سَهُولَة) /sahula/ “ease”, (صُعُوبَة) /su'uuba/ “difficulty”

These are only few of the patterns that can be used to make verbal nouns from form I verbs. Sometimes, there could be more than one verbal noun from the same verb. There are usually some differences between them in meaning or usage or both, e.g. from (صَنَعَ) which means “to make”, we have 2 verbal nouns (صِنَاعَة) which means “industry” and (صُنْع) which means “making”; and from (زَرَعَ) which means “to plant”, we have 2 verbal nouns (زِرَاعَة) which means “agriculture” and (زُرْع) which means “planting”.

Another type of Masdar in Arabic is called /al-masdar al-mimy/ (a verbal noun prefixed by m-/). This /m-/ exerts a change in the length of the lexical item to which it is prefixed. In fact, this type has more rhythm and melody than the original one. For example, from the verb (سأل) (sa'ala/ (to ask), there are two forms of its masdar: (سؤال) /su'aal/ (question) and (مسألة) (question or problem). In addition, this masdar mimy can show a stronger meaning and thus strengthen the illocutionary force of the original masdar. Another function of masdar mimy is to reflect a kind of exaggeration on the part of the action intended.

If a nominalization is fully accomplished, it means it loses its dominance over the arguments. Guillen Galve (1998, p. 369) points out "GM [grammatical metaphor] operates primarily by turning clauses into nouns [where GM] applies in general to any instance of lexicogrammatical transference". Lexical cohesion can be achieved via grammatical metaphor which can be created by the process of nominalization which is "the single most powerful resource for creating grammatical metaphor" (Halliday, 1994, p. 352). Another important function of nominalization is that lexical density can be realized via nominalization (Guillen Galve ,1998, p. 366).

This study aims at investigating nominalization in Arabic research articles and it also attempts to contrast the functions of nominalization across Arabic and English. Fakhri (2012) investigates the functions of nominalization in Arabic discourse with a particular focus on legal genres.

Arent (1998) examined in their research (nominalization in Discourse A gene analysis perspective). He shows his idea in Arabic discourse and focused on legal genre. He also defined nominalization is " process via which a finite verbal clause .is convert into a noun phrase " (Givon, 2004). For example, these sentence clarify idea (she knows mathematics *extensively*) when turn it to noun phrase (*her extensive* knowledge of mathematics). This study related with two phases: first, it expands the scope of the still relatively limited research on Arabic discourse by building on few studies on Arabic genre. Second, by exploring novel data from Arabic legal genre. Bhatia (1992,1993) discusses of used nominalization in discourse and " how nominalizations are frequent in legislative discourse because they help achieve a high degree of conciseness for the formulation of comprehensive legal rules". Thus, use frequent of nominalization in text may be integrated into complex structure.

In three Arabic legal genres was based on by the present a qualitative discussion of nominalization: court judgments, legislative provisions, and fatwas. The function of nominalization in court judgment have two main points: robust advocacy and concise anaphoric reference. That is to say, reference back to information were presented earlier in the text by nominalization. While the function nominalization in legislative discourse considered main purpose of legislative provision. Bhatia (1993) stated " to impose obligations and confer right" writing in legislative discourse is directive. In fatwas aspect the functions of nominalization were full-fledged clauses from the Qur'an or hadith-the saying by the prophet Muhammed.

Significantly, legal discourse manipulates nominalizations in order to achieve what is called by Fakhri (2012) " a high degree of conciseness for the formulation of comprehensive legal rules". He compares the introductions section of RAs from the fields of the law and Humanities. The comparison with other area of Arabic linguistics, legged was a bite by the study of Arabic discourse. Eid (1990) has wrote:" In the area of discourse analysis, I have not found anything on spoken; on written discourse or texts some work is now emerging especially that of Johnstone and Al-Batal". Najjar (1990) and Fakhri (2012), they investigated the nominalization in introduction of RAs in Arabic using model by Swales (1990). Furthermore, they raised the analysis that concerns variation resulting from the choice between nominalization and equivalent finite clauses. In the next section, the researcher sheds light on the process of forming a verbal noun in Arabic.

2.7 How to form the Arabic verbal noun

Out of the samples studied, lots of scholars focus on the formation of the Arabic verbal noun. The first major way of forming a verbal noun is through the three - tier verb, i.e. a verb which consists of three letters Al- Samarra'i (2007). In Arabic, there are patterns for the three – tier verb. All the patterns have the form / fin'l / (فعل) but with different pronunciations due to different vowels added to this form. For example, the pattern / fa'ala / (فَعَلَ) which can be transitive as in

(ضَرَبَ زَيْدٌ خَالِدًا)

/Daraba zaidun xalidan /

(Zaid hit Khalid)

Some three-tier verbs which refer to an occupation have their verbal noun in the form /fi'aalah/. For example, the verb / tajara/ (make trade) has its verbal noun as /tijaarah/ (trade). Some verbs denote a change or disturbance; such verbs have their verbal nouns as /fa'alaan/. For example, the verb /ġala / (boil) becomes / ġalayaan / (boiling). In addition, there are verbs that show an illness, which have their verbal nouns in the form of / fu'aal/ as in /sa'ala/ which becomes /su'aal/. In this regard, viz. three-tier verbs, some denote a sound where their verbal noun has the form of /fa'eel / and / fu'aal/. For instance, the verb /šahala / (neigh) becomes / šaheel / (neighing) and the verb /šaraxa/ (scream) becomes /šuraax / (screaming). There are three – tier verbs that denote a deficit and have their verbal nouns as / fa'al / such as / 'arija / (limp) which becomes /raj / (limping). Those verbs denoting colour have their verbal nouns as /fu'lah/ such as the verb /hamira / (became red) whose verbal noun is /humrah/ (redness). There are transitive verbs having the forms of /fa'ala / and /fa'ilah /: these verbs have their verbal nouns as /f'l /. For example, the verb /'axaḏa / (took) becomes /'xḏ/ (taking). Another example is the verb /ta'iba/ (became tired) whose verbal noun is /ta'b / (tiredness).

There are other patterns concerning the formation of verbal nouns out of three – tier verbs. For instance, three – tier verbs in the form of / fa'ala / can have their verbal nouns as /fu'ool/ such as /qa'ada/ (sat) which becomes / qu'ood/ (sitting). Sometimes, such verbs have their middle sound a vowel one; in such a case the verbal noun becomes in the form of / fi'aal / as in the verb /šaama / (fasted) whose verbal noun is / šiyaam / (fasting).

Intransitive three – tier verbs of the form /fa'ula / generally have their verbal nouns in the patterns / fa'aala / and / fu'oola /. For example, the intransitive verb / šaju'a / (man up) has its verbal noun as / šujaa'a / (bravery). Another example having the second pattern is the verb /sahula / (became easy) has its verbal noun as / suhoola/ (easiness).

All Arabic verbs that are not trilateral are regular, unlike the three – tier verbs which can have irregular verbs. Quadrilateral verbs in the form / fa'lala / have their verbal nouns as / fa'llala / such as the verb / dahraja/ (roll) whose verbal noun is / dahraja / (rolling). Another pattern is when the middle sound is geminated as in the verb /zalzala / (shook) whose verbal noun is / zalzalah / (lit. earthquake) or / zilzaal /. Some three-tier verbs are introduced by the letter / alif / or Hamza. These verbs have their verbal nouns in the form of /'if'aal /. An example is the verb /axraja / (send out) becomes as a verbal noun as /'ixraaj/ (sending out). There are other rules regarding three-tier verbs that have their middle letter geminated. Such verbs have the form / fa"al/ and their verbal nouns have the form /taf'eel/. An example is the verb /qaddas/ (made sacred) and the verbal noun is /taqdees/ (sacredness). If such verbs end in a vowel, their verbal noun has the form /taf'ila / as in /rabba/ (raise up) whose verbal noun is /tarbiyyah/ (raising up).

These are the basic rules concerning the most recurrent patterns of the Arabic verbs. There are verbs that consist of five and six letters. These also have their own rules for the formation of their verbal nouns. In Arabic, a verbal noun functions on behalf of its deleted verb, a case where the verbal noun assumes the role of its deleted verb. For example, if one says the following:

(صبرا يا اخي)

(Sabran yaa 'xi)

(Be patient my brother)

In this example, the verbal noun / Sabran/ (Being patient) functions just like its verb, which is here interpreted as an imperative verb (Be patient). Syntactically, this verbal noun can be parsed as a Cognate object taking into consideration its deleted verb (Be patient).

There is a test in Arabic through which one can know whether a verbal noun can function instead of its verb or not. This test is through using the infinitival particle

/an / which precedes the present simple verb. Let's take the following illustrative example:

(يسرّني فهمك الدرس)

/ yasurrani fahmuka l-darsa/

(Your understanding of the lesson pleases me)

The verbal noun in this example is / fahmuk / (your understanding), which can be replaced by the particle /an/ and the present simple verb. Thus, one can get the following:

(يسرّني أن تفهم الدرس)

/ yasarrunai 'anka tafham l-darsa/

(I am pleased that you understand the lesson)

In the version containing the verbal noun, the noun /l-dars/ (the lesson) is syntactically considered as the object of the verbal noun, which is a kind of nominalization in Arabic. One can recognize that Arabic nominalization instances have a verbal force: in this case it assumes the role of a transitive verb that requires an object. However, there are constraints that hinder this function in Arabic verbal nouns. For instance, if the singularity (-t) is annexed to the verbal noun, such a verbal noun cannot function as its verb. Take the following example:

(سرّتني سفرتك الرياض)

/ sarratni safratuka l-riyaD /

(Your travel for Riyadh pleased me)

The singularity morpheme (-t) is annexed to verbal noun / safar / (travel), a case which prohibits its functioning instead of its verb.

Another case in which a verbal noun loses its verbal force is when it is modified by an adjective. An illustrative example is the following:

(سرّني إكرامك العظيم خالدا)

/ sarrani 'ikraamuka l-'aDeemu xaalidan /

(Your great rewarding for Khalid pleased me)

Here, the verbal noun does not work, but if the adjective is retained after the object (Khalid), in this case it reassumes its verbal function.

One of the most recurrent cases in which the Arabic verbal noun works is when the verbal noun goes in a Construct relationship with its subject. Consider the following example:

(سَرَّني فهم زهير الدرس)

/ sarrani fihm zuhair l-darsa/

(Zuhair's understanding of the lesson pleased me)

Here, the verbal noun / fihm/ (understanding) is in a Construct relationship with its subject (Zuhair). On the surface structure of this sentence, the subject (Zuhair) is in the genitive case because it is the second part of the Construct: it is added to the verbal noun / fihm / preceding it. On the deep level, this subject is nominative to assume the role of the subject.

Arabic is a language that has two basic word orders. It has two sentence types; verbal and nominal. One of the characteristics of a verbal noun in Arabic is that even in nominal clauses it can function. In the following example:

(إعطاء فقيراً كوساءً صدقة)

/ 'eTaa'u faqeeran kisaa'an şadaqatun /

(Giving a poor man a garment is a charity)

the verbal noun / 'etaa' / is the Theme, i.e. the initial NP. Here, it takes two objects: / faqeer / (poor) and / kisaa' / (garment). So, even in nominal clauses a verbal noun in Arabic can have a verbal force.

In Arabic, as shown by AL Samaria (2007, pp. 142-144), one of the functions of a verbal noun (Masdar) is to reflect the meaning of an imperative. Consider the following:

1. صبراً جميلاً

/ Sabran jameelan /

(lit. a beautiful patience)

(Be patient beautifully)

In this example, the meaning of the verbal noun (صبراً) (Patience) is to give an order or a suggestion or advice to the addressee to be patient. Sometimes, in Arabic, one can use an explicit imperative verb taken from the verbal noun used. This example can be rephrased as:

2. اصبر صبراً جميلاً

(‘isbir Sabran jameelan)

(lit. Be patient with a beautiful patience)

However, the meaning here differs in the sense that the verbal noun (صبراً) /Sabran/ (Patience) functions as an emphatic.

In (4), the meaning of the verbal noun is show invocation. It assumes the role of its deleted verb, which in the imperative verb (AL- Samarra'a, 2007, P. 143).

Discussing the functions an Arabic verbal noun, (AL- Samarra'a, 2007, pp.149-151) show that verbal nouns in Arabic can be used to reflect similarities or exemplification. Take the following example:

3. له صراخ صراخ الثكلى

(lahu suraaxun il-θakla)

(lit. He has screams like screams of a vilomah)

So, here, it is evident that a verbal noun reflects the role of a simile. Item for the imperative verb (اصبر) ('isber) (be patient), which has the same root as its verbal noun (Al-Samarra'i, 2007, P .143). Such instance where one can use the imperative verb or root can be seen in expressions of invocation or supplication. Both cases can be used, with an imperative verb **or** without. Consider the following example:

4. (رعاك الله رعيًا)

(ra'aaka al-laha ra'yyan)

(lit. May God take care of you caringly)

(May God support you)

It is also possible to use the verbal noun only, saying:

5. (رعيًا)

(ra'yyan)

(lit. caringly)

(May God support you)

This type of Masdar (verbal noun) is called al-tashbihi (a verbal noun of similarities). It is important to show that this masdar which is in the accusative case reflects the fact that the action represented is done at the same time of the action represented by the verb. An illustrative example is the following:

6. (له بكاء بكاء الثكلى)

(lahu bukaa'un bukaa'a il-θakla)

(He cries like a vilomah)

Here, the meaning is that you met him while he was crying like a vilomah. That is, the referent was crying bitterly when you met him (AL- Samarra'i, 2004, P. 150).

Al-Ghalayini (2004, p.127) adds another important function of masdar. It is to show the number of something. It is derived from a trilateral verb on the pattern (فعللة) such as:

7. (وقفت، وقفه)

(waqafta, waqfa)

(I stopped, stoppage)

8. (وقفين)

(two stoppages)

9. (وقفات)

(more than two stoppages)

Thus, it indicates the number of something, which is generally an action. In this example, it shows the number of stoppages. Another type is to show the type or the manner of an action or its quality. Let's consider the following examples:

10. (مات ميتة سيئة)

(m aata mitattan sayyatan)

(lit. He died abad death)

(He died a grisly death)

11. (علي حسن الجلسة)

(ali hasaan il-jilsah)

(lit. Ali has a nice sitting)

(Ali sits nicely)

In these examples, the verbal nouns (ميتة) (death) and (جلسة) (sitting) clarify the quality and the manner of the actions of death and sitting respectively Al-Ghalayini (2004, P.129).

To sum up, a verbal noun in Arabic or what is called masdar is an accusative lexical item which refers to an action devoid of time. It is derived from the stem of the verb from which it is taken. In Arabic, Masdar is the source of Arabic verbs and all other derivations are taken from masdar. Masdar in Arabic are formed according to certain patterns and their respective verbs. Arabic masdars have their own generic and ideosyncratic functions and roles.

2.8 Patterns of nominalization use

In this study, the nominalization instances in Arabic linguistics that are deployed in introduction sections are examined. There are various patterns of nominalization by which meaning can be depicted. The following nominalization patterns are adopted from Jalilifar, Salih and Don (2017, pp. 70 – 75). They have mentioned 15 patterns; the most important ones are the following:

1. (Premodifier) + Nominalization + Preposition + (Premodifier) + Nominalization + Preposition + (Premodifier) + (Nominalization)

This is a recurrent pattern which is a complex nominal group. As stated by (Bloor & Bloor, 2004, p. 145, as cited in Jalilifar et al., (2017, p. 70), it is "often a prepositional phrase post modifying a Head noun". It is clear from this pattern that post modifiers have a nominalization instance which can be used for another modification. This elasticity in its construction paves the way for academics "to produce long and complex nominal group strings" (Halliday, 1994, Jalilifar et al., (2017, p. 70). Thus we can have two instances of grammatical metaphor conveying a given meaning but via two different grammatical categories. An example illustrating this pattern given by (Jalilifar et al., (2017, p. 71) is the following:

(As an *illustration* of the *difficulty* of *acquiring* definiteness in languages without articles ...)

The italicized items are instances of nominalization representing grammatical metaphors.

2. Preposition + (Premodifier) + Nominalization

This is another recurrent pattern in the sections of introduction and method where premodifiers preceded the nominal categories (Jalilifar et al., 2017, p. 71). This pattern is used to avoid repeating long strings and it "helps to construct texts economically and maintain cohesion in texts [... and] it also allows authors to retrospectively introduce evaluative stances into their arguments (Jalilifar et al., (2017, p. 71).

3. (Premodifier) + Nominalization " Prepositional Phrase (Qualifier)

In this pattern, categories that work as a premodifier include deictic, numerative, epithet, and classifier. These can modify a Thing. In this pattern, it is concluded that "prepositional phrases constitute the most common type of postnominal Qualifier" (Jalilifar et al., 2017, p. 71), a pattern which is also regarded as 'a complex nominal phrase'. This is characterized by "the degree and the complexity of modification of the noun head" (Bhatia, 1993, as referred to by (Jalilifar et al., 2017, p. 72). An example of this type provided by ((Jalilifar, Salih and Don (2017, p. 72) reads as follows:

(Many students need teachers' *guidance* on how to work together constructively)

The congruent realization of the above example could read as (Many students need their teachers to guide them) where the author has utilized a nominal group instead of a clause to convey the intended information (Biber & Gray, as cited in (Jalilifar et al., 2017, p. 72).

4. Nominalization + Noun Phrase

This pattern has a verbal force; therefore, it achieves the functions of "condensation, conciseness, objectivity, and formality" (Jalilifar et al., 2017, p. 72). They provided some examples such as:

(... blending the results of three types of qualitative analysis)

This example reads congruently as (we blended what resulted from three types of qualitative analysis).; thus, *blending* is derived from the verb *blend*. Another significant implication through the use of nominalization is to avoid subjectivity. That is to say, it maintains an impersonal academic style.

The use of two nominal groups has the feature of the presence of a verb that is usually followed by a gerund. Basically, these gerunds include the lexical item *using*. Consider the following example provided by Jalilifar et al. (2017, p. 72):

(The interviews were transcribed using NCH Express Scribe software)

The use of nominalization occurrences helps academics reduce the number of clauses and provides "a greater concentration of the experiential meaning and a smaller incidence of

interpersonal elements, such as personal pronouns and modal verbs, thus presenting information in a less personalized way" (Briones, Fortuny, Sastre & Pocovi, 2003, p. 132, as cited in Jalilifar et al., 2017, p. 72). In addition, the pattern of deploying two nominal groups can be restated via the use of the passive constructions.

5. Nominalization + Nominalization

Two adjacent nominalized expressions are also used to convey more information through using fewer words. Jalilifar et al., (2017, p. 73) provided the following example:

(The ways of **expressing disagreement** ...)

Its congruent structure can read as (ways that are used to express how to disagree.). The aim of this feature is to reduce the number of words used, a feature that characterizes academic writing. In such instances the first nominalization works as a classifier of the second one. There are cases where we have three nominalization occurrences adjacent together. These are called univariate structures which match compound nominal phrases. These carry more content words and less grammatical ones than their corresponding congruent ones (Briones et al., 2003, as cited in Jalilifar et al., 2017, p. 74). Sometimes, these instances of adjacent nominalizations are preceded by a preposition. Such prepositional phrases convey information about the circumstances of that clause in which they occur. An illustrative example provided by Jalilifar et. al (2017, p. 74) is the following:

(... preparing them specifically for **workplace communication**)

6. (Premodifier) + Nominalization + Participle Clause

As the pattern shows, there is a participle clause occurring after the nominalization occurrence, which are deployed in 'integrated and informational texts'. Jalilifar et. al (2017, p. 74) exemplified this pattern as follows:

(... the effort put into preventing misunderstanding...)

It is shown that the high frequency of participle clauses is a remarkable feature in the domain of academic writing (Chafe & Danielewicz, 1987, as cited in Jalilifar et. al (2017, p. 75). These participles syntactically work as nominals, adverbials, and postmodifiers.

Chapter three

Methodology

3.1 Overview

In the present study, an analysis was done on the introduction sections of the Arabic and English research articles in Applied linguistics, sociology, history and literature. The method of analysis was top-down, applying macro-structure models by Halliday and Matthiessen (1994). The approach embedded for analysis was eclectic, incorporating both qualitative and quantitative approaches. In this chapter, what is presented includes data collection, analytical frameworks, procedures, and data analysis.

3.2 Data

The data of this study includes 100 research articles (RAs 50 representing RAs in Arabic and English. The Arabic papers introductions were taken from the accredited journals available at the University of Basra such as the journals of *the College of Arts*, *the College of Education*, *Arab Gulf Centre*, and *Basra Studies*. As for the data of English, they were also extracted from accredited RAs in English linguistics and literature.

Table 1.

Such English journals are shown in the table below:

N	Journal title	Volume	Year of Publication
1	Journal of Research in Applied Linguistics	1	2010
		4	2013
		5	2014
2	Journal of the College of Arts	48	2009
		52	2010
		59	2011
		60,62	2012

		74	2015
		76	2016
		79-81	2017
		90	2019
		93,94	2020
		95	2021
3	Journal of the College of Education for Human Science	34	2019
		44	2018
4	Journal of Arab Gulf and Basra Studies	49	2021

Table2.

Descriptive information about the Arabic research articles :

N	Name of journal	Volume	Year of Publication
1	Journal of Isalamic	5	2021
		7	2019
		8	2014
2	Adab AL-Rafedain	4	2009
		10	2013
		12	2018
3	Iklil Jorunal	14	2021
4	Adab AL-Kufa	4	2020
5	Adab AL-Basrah	1	2020
		5	2020
		7	2021

6	Qirtas AL-Ma'rifa	14	2020
		18	2021
7	IRAQI Journal for information	4	2019
		6	2019
8	Journal of Historical study and Archaeology	12	2021
9	Journal of historical studies	23	2021
10	Religions studies	2	2021`
		4	2021
11	Athar AL-Rafedain	6,7	2021

3.3 Analytical framework

The theory adopted in this study is Systemic functional grammar which views nominalization as grammatical metaphor. Nominalization is primarily related to a shift on the ideational level which is related to the concept of clause as representation and to the realization of transitivity structures, which express the ideational meaning, i.e. what the sentence is about, which typically involves a process and its participants (and circumstances) Halliday (1994). For each meaning to be expressed, there are choices which are natural and such choices lead to realizations that are called 'congruent': there are what speakers recognize as typical patterns of wording. Building an experience in the form of language is already inherently a metaphorical process. So as well as recognizing what is congruent, we also recognize that there are other possibilities, where the typical pattern has not been adopted and the speaker or writer has selected to state things differently (Halliday, 1994:343). These choices are incongruent realizations.

Halliday (1994, p. 323) accounted for an important theoretical framework, which is grammatical metaphor. This grammatical metaphor means "using one grammatical structure or grammatical category to replace another, instead of using a word to replace another". In other words, in the lexicogrammar of any language, one can deduce the fact that for there are different realizations out of which different functions can be achieved. As far as nominalization is concerned, Halliday uses the terminology *congruent* and *incongruent* (or metaphorical) forms. Congruent forms are the typical ways by which a speaker can construe experience. The "typical" is "the way it is commonly said or the

way it is said in the absence of any special circumstances” (Halliday, 2000, p. 343). Nevertheless, the incongruent or the metaphorical realization expands the meaning or adds further semantic features. This is a powerful resource for expanding the meaning potential of language, which is marked as grammatical metaphor (Lakoff & Mark, 1980). Halliday (2000) claimed that nominalization is a process in which groups of elements are employed to function as a nominal group in the clause. In addition, he noted that the process of nominalization is considered as a powerful resource by which speakers can grammatical metaphors. Via adopting nominalization, processes (congruently worded as verbs) and properties (congruently worded as adjectives) are rephrased metaphorically as nouns or nominal groups; instead of functioning in the clause, as Process or Attribute, they function as Thing in the nominal group (Bloor, 1995; Raveli, 1988). Through nominalizing a certain process, the nominalized items necessarily undergo lexical-grammatical as well as semantic change.

Grammatical metaphors are therefore alternative realizations in which certain meanings are expressed through other grammatical means rather than the ones that have developed especially for them. Nominalization is then defined as both the action Mathieson (2004:636), wording a process as a noun, i.e. nominalizing, it is a more sophisticated realization than the congruent one and is not part of every-day spontaneous speech.

Halliday (1994) presented a theory of SFL. Nominalization in SFL theory is related to grammatical metaphor as it indicates the process or attribute. Halliday classifies grammatical metaphor into three crucial types: (1) interpersonal grammatical metaphor accommodates "the expression of mood and modality". And (2) the ideational grammatical metaphor that is closely tied to the transitivity system. (3) textual. As first type of grammatical metaphor. Semantically, grammatical metaphor was extended in modality system and it includes explicit indication of "subjective" and "objective" orientation. The modality system proposal was a realization of the projection sequence by nexus two clauses rather than single clause. Systemically, metaphorical attends to an expansion of the meaning potential, which can create new structures and new patterns by a new systemic domain of meaning. The orientation system is extended and include 'explicit' and 'implicit' which it is make describe explicit such as wording "*I think*, and *it is likely that*, which, in turn, makes it possible to increase the delicacy of differentiations

(cf. *I think/imagine/expect/assume/suppose/reckon/guess; I would think/I would have thought; I imagine/I can imagine; and so on*). As for, this same principle extends beyond modality and applies to modal assessment more generally (e.g. *I regret, it is regrettable that*). The metaphoric strategy "is to *upgrade* the interpersonal assessment from group rank to clause rank — from an adverbial group or prepositional phrase serving within a simple clause to a clause serving within a clause nexus of projection"(p.626). The speakers and addressee as 'projector': 'I think', 'I say'; 'do you think', 'do you say' is involve by Interpersonal projection.

(*I don't believe* that endorsing the Nuclear Freeze initiative is the right step for California Common Cause. Tempting as it *may* be, **we shouldn't** embrace every popular issue that comes along. When we do so we use precious limited resources where other players with superior resources are already doing an adequate job. Rather, *I think* we will be stronger and more effective if we stick to those issues of governmental structure and process, broadly defined, that have formed the core of our agenda for years. Open government, campaign finance reform, and fighting the special interests and big money — these are our kinds of issues. Let's be clear: I personally favour the initiative and ardently support disarmament negotiations to reduce the risk of war. But *I don't think* endorsing a specific freeze proposal is appropriate for CCC. **We should** limit our involvement in defense and weaponry to matters of process, such as exposing the weapons industry's influence on the political process. Therefore, **I urge you** to vote against a CCC endorsement of the nuclear freeze initiative (p. 227).

This example illustrates the connection between projection and mood in interpersonal grammatical metaphor. The modulation expression is (we shouldn't, we should) and expressions of modalization are italicized. In other hand the metaphorical expression is underlines wording (*I don't think, I don't believe, I urge you*). In this example, pinpointed that is modalization was largely explicit while the case of modulation was implicit. The last clause (I argue you to vote Is you must vote) is characterized as "imperative" or "obligation". i.e. which is an 'imperative' clause — the congruent realization of a proposal of the subtype 'command'. This indicates the connection between 'imperative' clauses and modulation. (p. 227)

Interpersonal metaphor grammar has metafunctions in language as interactive. Through linguistic interactive can be focused on enacting interpersonal relation. The

interpersonal metafunction can be seen in expressions of language of subjective meaning through evaluative words (*as in you damn fool, a stupid remark*). As for, modality aspect that refers to how can be express in evaluation about likelihood and it is defined as meaning (certainty, possibility, probability and the like), that is usually used the modal verb or modal adverb. For instance, these examples show this fact:

- She might\ may\ can\ could\ will come to the meeting tomorrow.
- Maybe he hasn't left yet; the lights are still on.
- He surely hasn't left yet; the lights are still on.

Another type of grammatical metaphor in the interpersonal component of language is mood. Mood includes (interrogative, declarative, imperative and the like).

- **Where have you put the bottle?** In this example used interrogative mood, when asked about information by mean of question. But, when given information by means of statement which used declarative mood such as this an example:
 - **The bottle is in the fridge.**

In commands, these express the interpersonal mood such as

- **Give me the bottle.**

Halliday (1985) introduced his notion of lexical metaphor to grammatical metaphor. According to Halliday's notion that as typical instance of grammatical metaphor considers various type of nominalizations. The following an example illustrated this notion:

- John's writing of a letter to his sister surprised me.
- They started a letter writing campaign

In first sentence of above an example refers to process taking place a time in reality. As not Halliday's view that processes are normally expressed in conjugate verb with number of participants. The verb and participants come together to make full clauses (the verb *write*, participants *john+ a letter+ to his sister*). i.e. grammatical metaphor has a type from a process as clauses (the default encoding of process) to process as noun phrase. Thus, grammatical metaphor is based on variation between common, standard, default (i.e. process realized as clause) and other form that known process by noun phrase. In grammatical metaphor has two aspects. These aspects involved in the movement or metaphorical extension that are not referred to lexemes and lexical meaning (as with

lexical metaphor). Rather, they refer to grammatical forms, or expression to grammatical means, for instance (clause and nominal group)

The second type of grammatical metaphor is ideational grammatical metaphor. Ideational grammatical metaphor of language is based on the shaping reality and role of language in representing. In language can be able subdividing reality into process, it means that place, entity that take part in these processes (living being, concrete and abstract things). And entity is used to describe by qualities. Taking an examples illustrate the ideational metaphor.

- **Mary liked the present very much**
- **The book is very interesting**

In these above example display process verb *like* accrues between two participating *Mary* and the *present*. While, the other example the quality *very interesting* describe the entity *the book*. The ideational or (representational) has a major aspect of systemic functional grammatical models, therefore the classification of different types of processes and participants they can take.

Functionally, the notion of a " process' in 'the systemic functional model' is represented a shape and reality in living as human being. Processes are considered as complementary to other ideational notions such as 'entity 'and 'quality'. According to Halliday (1984), the different types of processes are expressed by means of a clause, but they can metaphorically be expressed by means of noun phrase. The importance of a noun phrase is considered also 'normal'. The following examples illustrate the a process rephrased metaphorically in the form of a 'noun phrase':

- John's writing of a letter to his sister surprised me.
- They started a letter writing campaign.

In contrast, sometimes adjectives can be adopted where they can be used metaphorically to express quality. Such a quality can be encoded by using an adjective. For instance, in the example below, the quality of being (dishonest) can be restated metaphorically:

- She is dishonest.

- You cannot really count on her honesty.

Another form of the sub-types of ideational metaphors can be expressed by an adjective which can be conceived of as quality instead. An example is the following:

- You cannot wash these trousers in the machine.
- These trousers are not machine washable.

Out of what is proposed above, ideational metaphors are considered as a powerful resource in grammar and one of the effective forms of ideational metaphor is the use of a noun phrase to restate a given process in the grammar of any language.

To round up what was stated above, as for the classification of nominalization raised by Halliday, there are five types of nominalization including **nominalization of process**, **nominalization of quality**, **nominalization of circumstance**, **nominalization of relator** and **nominalization of zero**. In addition to the fact that nominalization does not only incorporate the transformation of grammatical classes, but more importantly, it also involves functional changes.

Table 3.

Nominalization Types (Halliday, 1996)

Semantic Functions	Grammatical Functions	Lexicogrammar Class
Quantity → entity	Epithet thing	Adjective noun
Process entity	(i) Event thing (ii) Auxiliary thing	Verb noun
Circumstance entity	Minor process thing	Preposition noun
Relator entity	Conjunctive thing	Conjunction noun
Entity expansion	Head modifier	Noun various

In fact, one of the most effective functions of nominalization is to reduce the scope of a sentence into a nominal group. This can be achieved by the use of rank shift. Packing information into some noun phrases allows writers to expand semantic meaning of the

process of nominalization by using modifiers or qualifiers. Furthermore, via the adoption of rank shift, noun phrases or clauses are replaced by clause complexes, therefore, writers can simplify the sentence structure, condense the textual space (Vyatkina, 2013). So when expressing the same content, in terms of conciseness, metaphorical expressions are superior to congruent expressions. A better understanding of how this works can be explained by this illustrative example:

5) On the basis of the findings, pedagogical implications are discussed. (Applied Linguistics, No.9)

On the same level, Halliday and Mattiessen (2004) classified the grammatical metaphor into 13 types, but four types considered as nominalization. In terms that shift from congruent into incongruent, this shift by semantic movement (adjective to noun, verb to noun, and circumstance into noun).

Table 4.

These are shown grammatical metaphor in the table below:

Type	Grammatical shift		Example	Semantic element	
	Grammatical class	Grammatical functions		Congruent=>	metaphoric
1	Adjective=>noun	Epithet\Attribute	Unstable=>instability	quality	thing
2	Verb=>noun			process	
	I	Event=>thing	Transform=>transformation	event	
	Ii	Auxiliary=>thing	Will\going to=>prospect; can \could=> possibility, potential	Tense; modality	
	Iii	Catenative=> thing	Try to=> attempt; want to=> desire	Phase; contingency	
3				Circumstance	

	i	Preposition(al phrase)=>noun	Minor process=> thing	With=> accompaniment; to=> destination	Minor process	
	ii	Preposition phrase	Location, Extent & c=> classifier	(dust is) on the surface=> surface dust	Minor process +thing	
4		Conjunction=>noun	Conjunctive=> thing	So=>cause, proof; if=> condition	Relator	

In a nutshell, the process of nominalization is an endeavor to make scientific texts more impersonal and detached because entities will be focused upon and not the actions represented by the different types of processes. Such processes are made objective through the use of nominal groups. In terms of the classification of G M, the researcher adopted the one provided by Halliday and Matthiessen (1999) wherein 13 types were labelled as instances of nominalization. Metaphor, according to Halliday, is a verbal transference or a variation in the expression of meanings which involves a non-literal use of a word. All the types involve a process of shifting from a grammatical category into a noun or a nominal group. These include shifts from quality (e.g. unstable – instability); process (e.g. educate – education); can/ could – possibility; potential, try to – attempt; want to – desire); circumstance, relator, and prepositional phrase to an entity (e.g. with – accompaniment; to – destination; (thing is) on the surface – surface thing), conjunction (e.g. so – cause, proof) and a shift from noun to noun modifier, etc. in Hallidayan terminology, what counts as an instance of nominalization is regarded a Thing or it is the Head noun set within a nominal group (Halliday & Matthiessen, 1999, p. 245). This notion of GM has its own objectives. These classification are going to applied to the analysis of Arabic selected instance of nominalization. This is going to be done in accordance with the Arabic nominalization patterns and forms.

3.4 Procedure

This study is an attempt at investigating nominalization instances in Arabic and English Research Articles in Applied linguistics, sociology, history and literature. The data comprises 100 RAs: 50 in each language. The data was taken from academic journals in Arabic and English. After collecting the data, the researcher conducted a pilot study focusing on Arabic RAs due to the lack of information regarding nominalization processes in Arabic. The nominalization tokens in Arabic are obtained depending on the grammatical rules available in the Arabic grammatical books. In addition, the results sent to an expert in Arabic to achieve inter-rater reliability (Al-Samarra'a,1997, Al-Samarra'a, 2007; Al-Mishkin,1992, Amin,2000;;Anis,2007; Al-Mustafa,2007; Al-Rajihi,2003;Al-Saqi.1977, Shahin,1987; Yusufi, n.d.; Ukasha,2005;; and others). On the other side, RAs in English were taken from accredited JCR-indexed journals. Moreover, the researcher was rely on the rich literature written on nominalization processes in other studies dealing with this issue in English. On the other side, RAs in English was taken from accredited JCR-indexed journals. Moreover, the researcher was rely on the rich literature written on nominalization processes in other studies dealing with this issue in English. Verbal nouns in Arabic have a **complex morphophonological structure**, as discussed by McCarthy and Prince (1990). Syntactically, on the other hand, they appear rather straightforward. A verbal noun (المصدر) is a very important derivative in Arabic. It is a noun derived from the verb to refer to the action or activity implied in the verb, e.g. drive/driving, eat/eating, work/working, etc. They can be used in similar contexts to the use of verbal nouns in English, e.g.

(هوايتي المفضلة هي القراءة)

/huwayati al mufadhala hiya alqiraa'a/

(My favorite hobby is reading.)

There are approximately ten forms for Arabic verbal nouns. Verb forms are significant for the formation of verbal nouns. The verbal nouns that lie in the range (II – X) obey certain patterns. However, in the first form (I), there is no rule for deriving the verbal nouns. In spite of this fact, i.e. no derivation rule, there are some patterns that are prominent in this form, e.g.

- a. (فعل), e.g. (عَمَلَ) “working”, (جَمَعَ) “collecting”, (زَرَعَ) “growing”, (فَتَحَ) “opening”
- b. (فِعَالَةٌ), e.g. (دِرَاسَةٌ) “studying”, (تِجَارَةٌ) “commerce”, (قِرَاءَةٌ) “reading”, (كِتَابَةٌ) “writing”
- c. (فِعَال), e.g. (نِجَاح) “success”, (ذِهَاب) “going”
- d. (فُعَيْل), e.g. (رِحِيل) “leaving”, (بِرِيق) “glimmering”
- e. (فِعُولَةٌ), e.g. (سَهُولَةٌ) “ease”, (صُعُوبَةٌ) “difficulty”

To make verbal nouns from form I verbs, these are only few of the patterns that can be employed. In some instances, the same verb can yield more than one verbal noun. There are some discrepancies between them in function or usage or both, e.g. from (صَنَعَ) which means “to make”, we have 2 verbal nouns (صِنَاعَةٌ) which means “industry” and (صُنْعٌ) which means “making”. Thus, context and form play a significant role in deciding the intended function behind using a verbal noun in Arabic (for further details about the difficulty of classifying Arabic verbal nouns, see 4.4 and 4.5). In the analysis of Arabic nominalization, the researcher adopts the classifications of Arabic scholars.

In these RAs, the section which **was** the corner stone in this study is the introduction section in both Arabic and English RAs. After analyzing the samples taken from both languages, a cross – linguistic study was conducted to check the similarities and differences in both languages as far as nominalization instances and functions are concerned.

3.5 Data analysis

The identification of nominalization instances in the Arabic papers was done according to the rules of nominalization in the Arabic grammar books. In this study, after collecting the occurrences of the Arabic nominalization categories, and to achieve a degree of accuracy, the researcher was send the nominalization instances to an expert in Arabic linguistics in the department of Arabic. This was to achieve the inter-rater reliability. After analyzing part of the Arabic academic papers, the researcher was reported the findings concerning the rules of the formation of the Arabic verbal nouns and findings regarding the behavior of such verbal nouns in Arabic. Thus, In terms of article length in English and Arabic, they differ a lot. Lots of journals in English have guidelines for the maximum recommended length. In fact, they tend to be economic in length but with vast scope of knowledge to be provided. In addition, things also rely on the type of the article. Arabic articles, to a large extent, do not follow guidelines and lots of digressions are found.

Chapter Four

Analysis

4.2 Introduction

This chapter explores the nominalization instances only in the introduction sections of both RAs in Arabic and English. The researcher examines 50 articles in Arabic and 50 articles in English and analyzes them qualitatively and quantitatively. There would be certain selections of the most recurrent nominalization instances and mapping the six patterns that are employed in the English articles. On the other hand, in the Arabic ones, what is going to be highlighted and discussed are new instances and accordingly new patterns.

4.2 Qualitative and Quantitative Analysis

In the present study, there are six patterns of nominalization which are the expressions that appear in the introduction sections in RAs in the two languages of English and Arabic. With each pattern, there is a table in which frequencies and percentages are shown. Numbers (1- 28) are Iraqi journals, and (29 – 50) are international journals in linguistics and literature.

Before starting the recurrent patterns of nominalization, the average of the word count of introduction sections in the English articles in relation to the total word count of research articles will be presented in the following table:

Table 5.

Word counts and average of word counts of English articles and their introduction sections

Number of articles	Word count of each article	Average word count	Total word count of introduction	Average word count of introduction	Longest introduction	Shortest introduction
1	5895	0.003	175	0.12	1490	127
2	6428	0.002	127	0.14		
3	2810	0.008	135	0.17		
4	2810	0.016	795	0.07		
5	5349	0.010	958	0.05		
6	6034	0.007	713	0.06		
7	6705	0.004	372	0.08		
8	4512	0.003	157	0.09		
9	7937	0.004	1593	0.02		
10	7396	0.006	604	0.07		
11	3937	0.003	162	0.08		
12	11079	0.001	206	0.09		
13	6615	0.003	251	0.07		
14	6274	0.008	731	0.07		
15	15033	0.003	594	0.08		
16	7941	0.004	390	0.09		
17	5879	0.006	460	0.7		
18	3657	0.005	188	0.11		
19	8254	0.003	600	0.05		
20	5907	0.011	280	0.25		
21	6871	0.002	307	0.05		
22	5583	0.003	327	0.06		
23	10314	0.002	229	0.13		
24	3716	0.006	286	0.08		
25	6612	0.004	250	0.13		

26	5213	0.004	365	0.07
27	4312	0.003	355	0.05
28	5401	0.006	269	0.13
29	6336	0.018	1380	0.08
30	4212	0.018	1450	0.05
31	6084	0.002	396	0.04
32	6720	0.001	312	0.03
33	6760	0.005	564	0.06
34	5928	0.019	1490	0.07
35	7880	0.009	1560	0.05
36	5328	0.007	1470	0.02
37	7140	0.009	648	0.10
38	6120	0.003	336	0.06
39	6480	0.007	828	0.06
40	4752	0.011	456	0.11
41	5472	0.014	900	0.09
42	7344	0.019	864	0.13
43	5616	0.005	384	0.10
44	4992	0.016	876	0.10
45	6523	0.013	864	0.07
46	5478	0.012	648	0.10
47	5480	0.009	814	0.06
48	4687	0.009	792	0.05
49	4396	0.006	468	0.05
50	5745	0.011	612	0.10

In the following, these patterns are used and explained functions of nominalization in RAs:

1.(Premodifier) + Nominalization + Preposition + (Premodifier) + Nominalization + Preposition + (Premodifier) + (Nominalization)

As shown in the examples in which this pattern occurs, we can note the characterizing nominalized structure expansion of the lexicogrammar of the text, which generate a high lexical density. In this pattern, nominalization is a rarely using in these RAs introduction. It is used the nominal expression preceded by the premodifier, for instance (the *receivers*, the *intension*, *figurative*, the *investigation*, the *discussion*, *dissertation*).The congruent form of these examples as is (An assessment was received intensely behind two uttered devices); the second one has its congruent wording as (the section is investigated by research doctoral discussed dissertations); the nominal expression in this example has a functional role as packing the information and avoided the long structure in text.

1.... the *receivers'* assessment of the *intension* behind the two uttered *figurative* devices, namely metaphor and similes.

2.... the *investigation* of the *discussion* section of research papers doctoral *dissertation*

In the following table, the frequency and percentages of pattern (1) are shown:

Table 6

Density of nominalization expressions in the RAs (pattern 1)

Number of articles	Frequency of pattern 1	Percent of nominalization
31	1	0.5
36	1	0.2

Table 6. shows that the number of pattern (1) in all RAs introductions. This partten is available only in two international journales (31- 36). As one can see, this pattern is not frequent too much. That is, this pattern is not utilized heavily due to its complexity.

2. Preposition + (Premodifier) + nominalization

This pattern is more frequent than the previous one. In fact, it is dominating in the introduction sections simply because it is the easiest nominal expression and the use of a modifier gives its more specificity and description. Note the following instances:

3....in the *translation* as a response to the original, how and why it is done in that way in that context

4.....critical analysis in language teacher *education*....

5.....in *education* field move in nature

5.....analysis in *education* tend to shade light on areas vaster than language.

6.....within any culture *wedding* invitation serve as the formal announcement.

7.....for creating grammatical metaphor construed as noun....

In these examples above, they clarify the second pattern which includes a preposition and premodifier preceding the nominal expression in the introduction RAs. The congruent wording in these examples are (*to educate, to wedded, to create*). Table (7) below shows the number and frequency of pattern (2).

Table 7.

Density of nominalization expression in the RAs (pattern 2)

articles	Frequency of pattern 2	Percent nominalization	of
1	6	0.04	
2	7	0.05	
3	9	0.01	

4	19	0.01
5	12	0.01
6	10	0.02
7	4	0.02
8	4	0.002
9	9	0.01
10	3	0.18
11	5	0.02
12	4	0.01
13	22	0.03
14	5	0.006
15	11	0.02
16	7	0.01
17	8	0.04
18	11	0.01
19	21	0.07
20	3	0.009
21	3	0.009
22	7	0.03
23	3	0.01
24	5	0.02
25	4	0.01
26	9	0.02
27	7	0.019
28	6	0.022
29	5	0.003
30	4	0.002
31	3	0.007
39	3	0.003
40	2	0.004
41	6	0.006
42	7	0.008
43	5	0.001

44	8	0.009
45	11	0.012
46	7	0.010
47	7	0.008
48	8	0.010
49	1	0.002

Table 7. reveals pattern (2) which is available in 50 articles and explore the percentages of this pattern in all articles of international journals, as shown this pattern is dominant of all articles, thus we can say this pattern is heavy use in all RAs introduction.

3. (Premodifier) + Nominalization + Prepositional Phrase (Qualifier)

Nominalization in this pattern has a compact meaning and unpacked "as verb form that endorses the claim that academic writers rely on noun phrase rather than clauses to present information" (Biber and Gry 2010). Almost of these nominal forms occur in beginning of the clause. Such as example 12. Nominalization, in this pattern "takes advantage of the meaning potential and the elasticity of the nominal group to assemble and compact meaning, giving the text an elevated style" (Jalilifar, 2017,p.72)

9. their *conceptualizing* skills of the world around them.

10 The language *learner* in this study

11.The main *objective* of the current study.

12. The *predictability* of FL proficiency.

13. The *retrieval* of proper noun is more difficult.

Table 8.

Density of nominalization expression in the RAs (pattern 3)

articles	Frequency of pattern 3	Percent of nominalization
1	3	0.023
2	1	0.007
3	1	0.001
4	5	0.005
5	1	0.001
6	4	0.010
7	2	0.012
8	5	0.003
9	3	0.004
10	2	0.012
11	3	0.01
12	3	0.01
13	8	0.010
14	4	0.006
15	2	0.005
16	4	0.008
17	2	0.010
18	5	0.008
19	11	0.039
20	3	0.009
21	2	0.006
22	4	0.017
23	2	0.006
24	1	0.005
25	2	0.008
26	1	0.002
27	4	0.011
28	3	0.011

29	4	0.028
30	14	0.009
31	4	0.010
32	1	0.003
33	6	0.010
34	3	0.002
35	9	0.005
36	2	0.001
37	2	0.003
38	1	0.002
39	3	0.003
40	2	0.004
41	4	0.004
42	4	0.004
43	1	0.002
44	4	0.004
45	7	0.008
46	5	0.007
47	2	0.002
48	3	0.003
49	3	0.006
50	3	0.004

Table 8. demonstrates the density of pattern 3. (Premodifier) + Nominalization + Prepositional Phrase (Qualifier) in research articles of introduction sections. This third pattern higher than other in quantity. The density of this pattern is highly used in the introduction sections of RAs.

4.Nominalization + Noun Phrase

The below examples can be congruently represented as (...to understand the linguistics differences and similarities and regardethe latter upon to examin the relevant literature, showing that both of these nomonalizations in examples are taken from verb. Thus, this pattern (4) consist of nominalization + noun phrase nominalization , two clauses are" packed in one nominal group to perform the functions of conciseness, formality and semantic expansion" (Jalilifar, Saleh & Don ,2017, p.72):

14.... **understanding** the linguistics differences and similarities

16..... *regarding* the latter upon *examining* the relevant literature

17.... *Capability* regarding fresh knowledge and technique

Table 9.

Density of nominalization expression in the RAs (pattern 4)

articles	Frequency of pattern 4	Percent of nominalization
4	1	0.001
5	5	0.001
7	1	0.006
8	3	0.001
9	1	0.001
10	1	0.006
11	3	0.014
13	2	0.002
14	2	0.003
17	1	0.005
19	1	0.003
22	1	0.004
23	1	0.003

24	1	0.005
25	1	0.004
26	1	0.002
27	2	0.005
28	2	0.007
29	22	0..015
30	21	0.014
31	7	0.017
32	4	0.012
33	1	0.001
37	3	0.004
38	2	0.005

Table (9) demonstrated the pattern (4). In the inyrttional journals, this pattern appears a lot in the introduction sections.

5. Nominalization + Nominalization

As for this pattern of nominalization, it describes a nominalized expression besides another (adjacent) one such as the following examples: If we can be analysis these example below according to pattern 5 (nominalization +nominalization), note the sequences the of nominalization in introductions of RAs. Most of these examples seem that there is a preposition preceding the nominalization expressions. Thus, it represents a function of nominalization in scientific texts, complexity and density of information. The features of writing academic discourse are used in fewer words with density or more information. The nominalization function in this pattern is density of information, condensate structure, concise referencing and tightly packed lexical items.

18.....The characteristic of the *learning situation*

19.. There are some factors *influencing learning* strategy choice

20... the text-oriented nature of *translation necessarily*

21... This results in *markedness or unmarkedness* on the semantic level.

22.... supporter of the Palestinian *liberation organization*.

Table 10.

Density of nominalization expression in the RAs (pattern 5)

articles	Frequency of pattern 5	Percent of nominalization
4	1	0.001
6	5	0.007
7	1	0.006
10	2	0.012
11	1	0.004
12	2	0.007
13	4	0.005
14	1	0.001
15	3	0.007
16	7	0.015
17	2	0.010
18	1	0.001
19	4	0.014
21	1	0.003
24	3	0.017
25	1	0.004
27	1	0.002
28	1	0.003
29	4	0.002
30	1	0.000
31	3	0.007
35	1	0.000
41	5	0.005
42	9	0.010

Table (10) reveals the pattern (5) in all RAs introductions. We note this pattern (5) demonstrates in almost of introductions. All percentages in all RAs were similar.

6. (Premodifier) + Nominalization + Participle Clause

This pattern shows the juxtaposition of a participle with a nominalization expression. In fact, the use of a given participle whether it is present or past shows functions related to abstraction in academic writing and according to Granger (1997) participles reflect an integrated and compact style.

23.. any strategy *instruction including* concept map.

24.in Iranian EFL *educational setting* ...

25.. which *being achieved* through the language learning.

26...*caution concerning* such as issue which take place over time.

The researcher explores the nominalization and frequency of pattern (6) in the table below.

Table 11.

Density of nominalization expression in the RAs (pattern 6)

articles	Frequency of pattern 6	Percent nominalization	of
11	1	0.004	
15	1	0.002	
16	2	0.007	
18	1	0.001	

19	2	0.007
26	1	0.002
29	1	0.007
30	1	0.000
31	1	0.028
42	1	0.001

Table (11) reveals the frequency of pattern (6) and percent of nominalization is used in RAs introductions. This pattern (6) used in a few RAs introduction and these introductions which appear on or two nominalizations of this pattern due to this pattern utilized in a few.

The researcher noticed through the present study the nominal derivation in RAs introductions in various journals that the six patterns utilized in international journals more than other journals. Iraqi journals used nominalization in the introduction very little frequency and percentage in these articles was few due to Iraqi researchers and writers utilizing simple sentences and less to packing the information by using nominalization.

It has been noticed that the patterns (1 & 6) are utilized in few positions of introductions while patterns (2,3,4 &5) are utilized in almost of all RAs introductions. In a paper by Dekange and Geo (2020), it has been shown that there is a kind a polysemy of participle nominalization by which they are unified. To a large extent, these nominalization expressions and participle are grouped into time and place –denoting nouns. This is highly evident in abstract nouns. The researchers note that during the present study nominalization in all RAs introduction in different journals the six pattern in these articles

After reviewing all the introduction sections in the English RAs, the researcher arrived at the following nominalization pattern which is not found in the previous studies on nominalization. This pattern reads as follows:

(nominalization + conjunction + nominalization)

Examples of this pattern include the following:

1. ... illuminating and informative studies dealing with CM learning.(46)
2. ... a resource for making and exchanging meaning.(45)
3. ...the meaning, both connotative and denotative to the readers...(33)
4. ... its brevity, attractiveness and clarity. (33)
5. ... attention-grabbing and effective (33)
6. School administrators and professional teacher should not remain.... (47)
7. Understanding the linguistics differences and similarities... (33)
8. ... the relationship between morphology knowledge and translation ... (4)
9. ... the spirit shrouded with mystery, superstition and mysticism. (5)
10. . the teacher training and teacher development courses...(47)
11. Left us with detailed and analytic written.
12. Wester ways of thinking and writing are very different way..
13. ...structure to comprehension and clarifying
14. ...metaphor as a maintaining and resisting ..
15. ... the teachers professional knowledge and professional skills....(47)
16. Language education comes down to designing and administering...(48)
17. ... the ways mean of developing and implementing. (50)
18. Thus, implementing satisfying and gratifying techniques...(50)
19. ... the mental states of speakers and hearers....(34)
20. ... of language teaching and learning ...(37)
21. ...of L2 teaching and learning...(37)
22. rhetorical norms, expectations, and conventions...(39)
23. ... the creation and dissemination of knowledge (39)
24. ... means of classification, exemplification, and description. (39)
25. ... its help teachers and administrators. (40)

4.3 Analyzing Arabic nominalization constructions

In Arabic, there are two types of nominalization: (المصدر الصريح) /al-masdar al-Sareeh/ (Explicit nominalization) and (المصدر المؤول) /al-masdar al-mu'awwal/ (Interpreted as nominalization) (having a particle plus a verb) verbal nouns. There are differences between these two types of nominalization regarding their configurations, usages and functions. As far as English is concerned, there are plethora of studies that examine the notion of nominalization. According to Chamoreau and Estrada-Fernandez (2016, p. 6), nominalization is "a re-categorization process, the creation of a nominal constituent that fulfills the most essential nominal function; that is, the referring expression". Basically, this process involves turning a finite clause into a non-finite one, a case which was discussed extensively in all of the papers in Chamoreau and Estrada-Fernandez (2016). However, in Arabic, this is not the case as it is going to be approved in the articles to be analyzed.

A verbal noun in Arabic resembles a verb in its action and has no time reference. It takes different names in parsing (according to the structure of a sentence). The cognate object is one of them. The cognate object is a verbal noun that is mentioned after its verb either to emphasize its meaning, to show its number, to show its kind, or to substitute the pronunciation of its verb. In a cross linguistic study on nominalization across Arabic and French, Tayalati and Van de Velde (2014) adopted the framework of Lexical Conceptual Structure (Jackendoff, 1983, 1990; Levin, 1993; Levin & Rappaport, 1999). They studied the nominals that trigger the event meanings. Such event meaning nominals are related to their verbal bases. They worked on the two types of Arabic nominal groups according to their transitive and intransitive verbal roots. Sometimes, the nominal groups retain their verbal force through their impact upon their external and internal arguments. Such nominalizations are basically taken from unaccusative verbs such as / mäta / (die) and /šä'a / (spread). As an illustrative example, they provided some examples as in the following:

(قصف المدينة من طرف العدو)

(qasf l-madinati min tarfil- 'aduwwi)

(the bombing of the city by the enemy)

They labelled such type of nominalization as unaccomplished nominalization that has an idiosyncratic feature. This feature is that this nominal group cannot be modified by an adjective but by an adverb as in the following example:

(قصف المدينة بشراسة)

(qasfu l – madinati bi-šaräsitin)

(the bombing of the city ferociously)

If a nominalization is fully accomplished, it means it loses its dominance over the arguments. Guillen Galve (1998, p. 369) points out "GM [grammatical metaphor] operates primarily by turning clauses into nouns [where GM] applies in general to any instance of lexicogrammatical transference". Lexical cohesion can be achieved via grammatical metaphor which can be created by the process of nominalization which is "the single most powerful resource for creating grammatical metaphor" (Halliday, 1994, p. 352). Another important function of nominalization is that lexical density can be realized via nominalization (Guillen Galve (1998, p. 366).

This study aims at investigating nominalization in Arabic research articles and it also attempts to contrast the functions of nominalization across Arabic and English. Fakhri (2012) investigates the functions of nominalization in Arabic discourse with a particular focus on legal genres.

Arent (1998) examined in their research (nominalization in Discourse A genre analysis perspective). He explains the importance of contribution of the proposed analyses to Arabic discourse and genre analysis in general is assessed. And the data used quantitative analysis of the various functions of nominalization with illustrations from the genre under consideration. Moreover, these data used from Morocco and Jordan. Significantly, legal discourse manipulates nominalizations in order to achieve " a high degree of conciseness for the formulation of comprehensive legal rules" Fakhri (2009). He compares the introductions section of research articles from the fields of the law and Humanities. The comparison with other area of Arabic linguistics, legged was a bite by the study of Arabic discourse. Eid(1990) has wrote : " In the area of discourse analysis, I have not found anything on spoken ; on written discourse or texts some work is now emerging especially that of Johnstone and Al-Batal". Najjar(1990) and Fakhri(2004), they investigated the nominalization in introduction of RAs in Arabic using model by

Swales (1990). Furthermore, they raised the analysis that concerns variation resulting from the choice between nominalization and equivalent finite clauses. In the next section, the researcher sheds light on the process of forming a verbal noun in Arabic.

4.4 How to form the Arabic verbal noun

Out of the samples studied, lots of scholars focus on the formation of the Arabic verbal noun. The first major way of forming a verbal noun is through the three - tier verb, i.e. a verb which consists of three letters Al- Samarra'i(2007). In Arabic, there are patterns for the three – tier verb. All the patterns have the form / fi'l / (فعل) (verb) but with different pronunciations due to different vowels added to this form. For example, the pattern / fa'ala / (فعل) which can be transitive as in

(ضَرَبَ زَيْدٌ خَالِدًا)

/Daraba zaidun xalidan /

(Zaid hit Khalid)

Some three-tier verbs which refer to an occupation have their verbal noun in the form /fi'aalah/. For example, the verb / tajara/ (make trade) has its verbal noun as /tijaarah/ (trade). Some verbs denote a change or disturbance; such verbs have their verbal nouns as /fa'alaan/. For example, the verb /ġala / (boil) becomes / ġalayaan / (boiling). In addition, there are verbs that show an illness, which have their verbal nouns in the form of / fu'aal/ as in /sa'ala/ which becomes /su'aal/. In this regard, viz. three-tier verbs, some denote a sound where their verbal noun has the form of /fa'eel / and / fu'aal/. For instance, the verb /šahala / (neigh) becomes / šaheel / (neighing) and the verb /šaraxa/ (scream) becomes /šuraax / (screaming). There are three – tier verbs that denote a deficit and have their verbal nouns as / fa'al / such as / 'arija / (limp) which becomes /'raj / (limping). Those verbs denoting colour have their verbal nouns as /fu'lah/ such as the verb /hamira / (became red) whose verbal noun is /humrah/ (redness). There are transitive verbs having the forms of /fa'ala / and /fa'ilah /: these verbs have their verbal nouns as /f'l / . For example, the verb /'axaḏa / (took) becomes /'xḏ/ (taking). Another example is the verb /ta'iba/ (became tired) whose verbal noun is /ta'b / (tiredness).

There are other patterns concerning the formation of verbal nouns out of three – tier verbs. For instance, three – tier verbs in the form of / fa'ala / can have their verbal nouns as /fu'ool/ such as /qa'ada/ (sat) which becomes / qu'ood/ (sitting). Sometimes, such verbs have their middle sound a vowel one; in such a case the verbal noun becomes in the form of / fi'aal / as in the verb /šaama / (fasted) whose verbal noun is / šiyaam / (fasting). Intransitive three – tier verbs of the form /fa'ula / generally have their verbal nouns in the patterns / fa'aala / and / fu'oola /. For example, the intransitive verb / šaju'a / (man up) has its verbal noun as / šujaa'a / (bravery). Another example having the second pattern is the verb /sahula / (became easy) has its verbal noun as / suhoola/ (easiness).

All Arabic verbs that are not trilateral are regular, unlike the three – tier verbs which can have irregular verbs. Quadrilateral verbs in the form / fa'lala / have their verbal nouns as / fa'llala / such as the verb / dahraja/ (roll) whose verbal noun is / dahraja / (rolling). Another pattern is when the middle sound is geminated as in the verb /zalzala / (shook) whose verbal noun is / zalzalah / (lit. earthquake) or / zilzaal /. Some three-tier verbs are introduced by the letter / alif / or Hamza. These verbs have their verbal nouns in the form of /'if'aal /. An example is the verb /axraja / (send out) becomes as a verbal noun as /'ixraaj/ (sending out). There are other rules regarding three-tier verbs that have their middle letter geminated. Such verbs have the form / fa'al/ and their verbal nouns have the form /taf'eel/. An example is the verb /qaddas/ (made sacred) and the verbal noun is /taqdees/ (sacredness). If such verbs end in a vowel, their verbal noun has the form /taf'ila / as in /rabba/ (raise up) whose verbal noun is /tarbiyyah/ (raising up).

These are the basic rules concerning the most recurrent patterns of the Arabic verbs. There are verbs that consist of five and six letters. These also have their own rules for the formation of their verbal nouns. In Arabic, a verbal noun functions on behalf of its deleted verb, a case where the verbal noun assumes the role of its deleted verb. For example, if one says the following:

(صبرا يا اخي)

(Sabran yaa 'xi)

(Be patient my brother)

In this example, the verbal noun / Sabran/ (Being patient) functions just like its verb, which is here interpreted as an imperative verb (Be patient). Syntactically, this verbal

noun can be parsed as a Cognate object taking into consideration its deleted verb (Be patient).

There is a test in Arabic through which one can know whether a verbal noun can function instead of its verb or not. This test is through using the infinitival particle /'an / which precedes the present simple verb. Let's take the following illustrative example:

(يسرّني فهمك الدرس)

/ yasurrani fahmuka l-darsa/

(Your understanding of the lesson pleases me)

The verbal noun in this example is / fahmuk / (your understanding), which can be replaced by the particle /'an/ and the present simple verb. Thus, one can get the following:

(يسرّني أن تفهم الدرس)

/ yasarrunai 'anka tafham l-darsa/

(I am pleased that you understand the lesson)

In the version containing the verbal noun, the noun /l-dars/ (the lesson) is syntactically considered as the object of the verbal noun, which is a kind of nominalization in Arabic. One can recognize that Arabic nominalization instances have a verbal force: in this case it assumes the role of a transitive verb that requires an object. However, there are constraints that hinder this function in Arabic verbal nouns. For instance, if the singularity (-t) is annexed to the verbal noun, such a verbal noun cannot function as its verb. Take the following example:

(سرّتني سفرتك الرياض)

/ sarratni safratuka l-riyaD /

(Your travel for Riyadh pleased me)

The singularity morpheme (-t) is annexed to verbal noun / safar / (travel), a case which prohibits its functioning instead of its verb.

Another case in which a verbal noun loses its verbal force is when it is modified by an adjective. An illustrative example is the following:

(سَرَّني إِكرامك العَظيمُ خالداً)

/ sarrani 'ikraamuka l-'aDeemu xaalidan /

(Your great rewarding for Khalid pleased me)

Here, the verbal noun does not work, but if the adjective is retained after the object (Khalid), in this case it reassumes its verbal function.

One of the most recurrent cases in which the Arabic verbal noun works is when the verbal noun goes in a Construct relationship with its subject. Consider the following example:

(سَرَّني فِهمُ زَهيرِ الدرسِ)

/ sarrani fihm zuhair l-darsa/

(Zuhair's understanding of the lesson pleased me)

Here, the verbal noun / fihm/ (understanding) is in a Construct relationship with its subject (Zuhair). On the surface structure of this sentence, the subject (Zuhair) is in the genitive case because it is the second part of the Construct: it is added to the verbal noun / fihm / preceding it. On the deep level, this subject is nominative to assume the role of the subject.

Arabic is a language that has two basic word orders. It has two sentence types; verbal and nominal. One of the characteristics of a verbal noun in Arabic is that even in nominal clauses it has a function to do. In the following example:

(إِطاءُ فقيرًا كساءً صدقةً)

/ 'eTaa'u faqeeran kisaa'an sadaqatun /

(Giving a poor man a garment is a charity)

the verbal noun / 'etaa' / is the Theme, i.e. the initial NP. Here, it takes two objects: / faqeer / (poor) and / kisaat / (garment). So, even in nominal clauses a verbal noun in Arabic can have a verbal force.

4.5 Arabic nominalization forms

Arabic is a rich morphological language. Lots of its grammatical processes are done morphologically. Nominalization is no exception. There are different patterns of Arabic nominalization depending on the number of letters in the Arabic verbs. These verbal nouns include the following:

1. Trilateral verbs: these consist of three letters especially of three consonants. This pattern includes a large group of Arabic verb forms (See Al-Ghalayini, 2004, p. 121). However, the basic trilateral verbal forms encapsulate the following:
 - a. (فَعَلَ) /faʔl/ as in (نصر) /nasr/ (victory)
 - b. (فَعَلَ) /faʔal / as in (جهل) /jahal / (ignorance)
 - c. (فُعُول) /fuʔuul/ as in (جفول) /jufuul/ (wincing)
 - d. (فِعال) /fiʔaal / as in (قتال) /qitaal/ (fighting)
 - e. (فَعْلان) /faʔlaan / as in (كسلان) /kaslaan / (being lazy)
 - f. (فُعَال) /fuʔaal / as in (سعال) /suʔaal / (coughing)
 - g. (فَعِيل) /faʔeel / as in (صهيل) /Saheel/ (neighing)
 - h. (فُعُولَة) /faʔuula/ as in (حمولة) /Hamuula/ (cargo)
 - i. (فِعالَة) /fiʔaala/ as in (دراية) /daraaya/ (awareness)
 - j. (فِعالَة) /fiʔaala / as in (خيانة) /xiyaana / (treachery)
 - k. (فَعْلان) /faʔalaan / as in (دوران) /dawaraan / (circularity)
 - l. (تَفْعَال) /tifʔaal/ as in (تكرار) /tikraar/ (repetition)
 - m. (إِفْعَال) /ifʔaal/ as in (إقبال) /iqbaal/ (turnout or visiting or good demand, the meaning is decided by context) and there other forms taken from derived forms.

As for verbs having more than three letters, they have their nominalization as one form. For example, if the verb has four letters, its nominal construction is in the form of (إفعال) /ifʔaal/ as in (إكرام) (rewarding). This applies to the verbs having five or six letters as in (إنطلاق) (moving or starting). In addition, there are verbs that start with the letter (ta-) where their nominal construction is in the form of (تفاعل) /tafaaʔul / such as (تساقط) /tasaaquT/ (falling). There are verbs having their second letter geminated. These have their nominalization constructions in the form of (تفعيل) /tafʔeel / such as (تقبيل) /taqbeel / (kissing) or they take the form (تفعلة) /tafʔilah/ such as (تجربة) (experiment or experience). On the other hand, if the verb ends in a vowel, its nominal construction is in the form of (تفعلة) /tafʔilah/ as in (توصية) (recommendation) (Al-Ghalayini, 2004, p. 121). Furthermore, there are Arabic verbs having the form (فعلل) /faʔlal/ whose nominal construction is in the form of (فعللة) as in (سيطرة) (controlling).

There are verbal nouns which are called (مصدر التأكيد) /masdar al-ta'keed/ (Emphatic verbal nouns) whose function is to emphasize the verb in a given clause. An illustrative example is the following:

(ضربتُ اللصَّ ضرباً)

/Daribtu il-lisa Darban/

(I beat the thief beating) (lit. translation)

(I did beat the thief)

One can see that the verbal noun (ضرباً) /Darban/ (beating) is derived from the form of the verb (ضرب) /Daraba/ (beat). Moreover, there is another type of Arabic verbal nouns called (مصدر المرة أو العدد) /masdar el-marrah Aw el-ʔadad/ (number verbal noun) (. That is, it shows the number of doing something or how many times something happens. An example is the following:

(وقفاً وقفتين)

/waqaftu waqfatayn/

(I stood two standings)

(I stood twice)

Thus, such verbal nouns give the number of times by which the action of the verb is done. In this example, it shows the number of the action of standing (Al-Ghalayini, 2004, p. 127). On the same level, there is a verbal noun called (مصدر النوع) /masdar el-naw?/ (a verbal noun of quality). It describes the quality or the manner of the verb. An example is:

(مات ميتة سيئة)

/maata meetatan say;tan/

(He died bad death)

Another important type of Arabic verbal nouns is called (المصدر الميمي) /al-masdar al-meemi/ (a verbal noun starting with the prefix / m- /) added to verbs of three letters whether they are basic or derived verbs. This prefix /m-/ is one of the important morphological tools in the Semitic languages where Arabic is one of them (Al-Maliki, 2019, p. 133). It is employed to formulate verbal nouns. This type of masdar is derivational, where the majority of such verbal nouns refer to a place or a given time. It has various forms including the following:

- a. The form (مَفْعَل) /maf?al/ is taken from three-tier verbs whether they are transitive or intransitive such as (مَذْهَب) /mathhab/ (doctrine), (مَقَام) /maqaam/ (situation), (مَوْعِد) /maw?ad / (appointment), etc. The semantic implication of this masdar can be obtained from the context in which it occurs. It has a meaning which shows the termination of a given action such as the masdar (مَسَاق) /masaaq/ (procession). For example, the meaning of this masdar in Imam Ali's saying:
(الاجلُ مساقُ النفس) / al-'ajalu masaqul- nafs/ (One's last moment is the destination of the soul). It means that any human soul ends when its last moment is decided by God.
- b. The form (مَفْعِل) /maf?il/ includes items such as (مَوْرِد) /mawrid/ (resource), (مَسِير) /maseer/ (walking) , (مَصِير) /maSeer/ (destination), (مَحِيص) /maheeS/ (escape), etc.
- c. The form (مِفْعَال) includes verbal nouns such as (مِيرَاث) /miraath/ (heritage), (مِيقَات) /miqaat/ (timing), (مِيعَاد) /mi?aad/ (date or appointment), (مِيزَان) /mizaan/ (scale), etc.

- d. The form (مفعلة) /maf?alah/ include items such as (المعذرة) /al-ma?tharah/ (apology), (المعتبة) /al-ma?tabah/ (blaming), (ميسرة) /maysarah/ (easiness), etc.
- e. The form (مَفْعَلَة) /maf?ilah/ include items such as (المعصية) /al-ma?Siyah/ (sin), (المغفرة) /al-maghfirah/ (forgiveness), (معجزة) /ma?djizah/ (miracle), etc.
- f. The form (مَفْعُلَة) /maf?ulah/ include items such as (مَثُوبَة) /al-mathoobah/ (reward).

As one can see that all the above forms end in the morpheme feminine /-t/. These forms are highly recurrent. Another frequent Arabic verbal noun is called (المصدر الصناعي) /al-masdar al-Sinaa'i/ which is literally translated into English as the manufactured verbal noun because it is made from another noun by adding a bound morpheme which is (ية) /-yat/ to the end of that noun. Examples of this type include (الوهية) /iloohiyyah/ (deity) and (رَبُوبِيَّة) /ruboobiyyah/ (deism). The semantic implication of suffixing this morpheme (ية) is to add emphasis, hyperbole, and another semantic dimension (Al-Maliki, 2019, p. 149). Al-Maliki provided for us examples of this type and their semantic implications. For instance, if we use the noun (إنسان) /insaan/ (Man), it refers to the original meaning of this word, which refers to any human being. On the other hand, if we suffix the bound morpheme (-ية), we get a verbal noun which is (الانسانية) /al-insaaniyyah/ (humanity), which means the quality of being humane which includes all the traits of human beings. In the following section, the analysis of the Arabic articles will be done in terms of nominalization instances and patterns. However, before the researcher goes through the analyses, the percentages of the Arabic nominalization instances will be presented in the following table 12:

Number of Articles	Word count of each article	Total word count of introduction	Nominalization	percentage word count of introduction %
1	16640	308	95	0.308
2	16938	221	66	0.298
3	3172	231	109	0.471
4	7666	60	31	0.516
5	8084	72	31	0.430
6	3191	410	179	0.436
7	3304	336	174	0.517

8	6866	286	100	0.349
9	5676	144	43	0.298
10	4853	324	144	0.444
11	9479	784	281	0.358
12	4749	714	300	0.420
13	6401	200	118	0.59
14	3590	144	60	0.416
15	8161	221	95	0.429
16	7445	276	149	0.539
17	7610	390	105	0.269
18	3912	574	157	0.273
19	4840	432	109	0.252
20	10299	330	155	0.469
21	22821	602	241	0.400
22	5992	465	212	0.455
23	9730	420	181	0.430
24	8641	200	77	0.385
25	7811	462	207	0.448
26	6380	338	108	0.319
27	7912	495	132	0.266
28	5841	397	94	0.236
29	7449	240	67	0.279
30	18900	250	52	0.208
31	13010	454	120	0.264
32	6866	397	150	0.377
33	6511	295	60	0.203
34	4961	495	78	0.157
35	5901	336	55	0.163
36	7400	180	55	0.305
37	4570	175	63	0.36
38	8711	312	76	0.243
39	5980	432	105	0.243
40	4900	448	120	0.267

41	8454	224	133	0.593
42	5647	497	77	0.154
43	6641	216	91	0.421
44	8245	491	132	0.268
45	8191	389	95	0.244
46	6469	512	154	0.300
47	4911	411	109	0.265
48	5941	417	100	0.239
49	5911	392	161	0.410
50	8455	229	95	0.414

As shown in the percentages, the dominant expressions in the introduction sections are the nominalized ones. This gives the indication that Arabic makes heavy use of such expressions. There are other implications which are going to be revealed in the conclusion chapter. Moreover, there are other idiosyncratic features that will be highlighted in the following section which explores the analysis of the Arabic academic articles. To sum up, the prevailing clauses in the introduction sections of the Arabic research articles are the nominal clauses following the Arabic basic word order which is SVO, where the verb is not necessary in such clauses.

4.6 Data Analysis

The data of the Arabic articles include 50 ones, taken from the fields of Arabic linguistics, literature and sociology. In the first place, the procedure of analysis will commence by stating the nominalization frequencies and percentages in these articles, and then there will be a detailed analysis of 10 papers. By so doing, there will be a comparison between nominalization patterns in the English and Arabic research articles in light of the above analyses.

1. Al-Ka'bi (2018) "Louis Masnion in Edward Said's Studies and the modern orientalists"

In this article, there is heavy use of verbal nouns. The most recurrent ones include the following:

1. الاوساط الشعبية الفرنسية اما الاكاديمية الشعبية

/ al-awsaat al-shaabia al-faransia ama al-akadimiya al-shaabia /

(French popular circles either the Popular Academy)

In this version, we have four nominalized instances ending in the morpheme (-ية) that is used to form the manufactured verbal nouns in Arabic. All of these nominalized constructions function as adjectives modifying the head noun which is (الاوراط) / al-awsaat/ (circles) which is also a nominalized expression in the form of (افعال). In this article, there are many instances of this type of nominalization that ends in the morpheme (-ية), which is called \al-sinali\ (manufactured)

2. المعرفة النصية

/ al-marfa al-nasia / (textual knowledge)

In this example, the head noun and its modifying adjective are of the form of the manufactured verbal nouns. That is, they are ending in (-ية) /-yah/. This is also true of the next example in which we have the same occurrence of this type of Arabic verbal noun. It is a productive one. The nominalization \al-marfa\ (knowledge) is a verbal noun starting with the morpheme \ma-. It is considered as an irregular instance (Al-Maliki, 2020, p. 145)

3. دوافع شخصية فضولية

/ doafaa faduliyyah shachsiya /

(personal curiosity motives)

As mentioned above, the same type of a verbal noun is employed here. Here, the two nominal expressions (شخصية) / shachsiya/ (personal) and (فضولية) / faduliyyah/ (curious) are in a modifying position for the head nominal construction (دوافع) /dawafi'/ (motives).

4. رؤية وقراءة المستشرق

/ ruaya wa aira'a al-mustshraq /

(orientalist's vision and reading)

In (4), we have a noun phrase in which there are three nominal constructions that are related to each other via a Construct relationship. The first nominal construction (رؤية) /ru'yah/ (vision) is taken from a trilateral verb (رأى) /ra'aa) (see); the second one is taken from the verb (قرأ) / qara'a/ (read) while the third one, (المستشرق) /al-mustashraq/ is taken from the derived verb (إستشرق) /istashraqa/ (to explore). The verbal noun (قراءة) is in the pattern \fi'ala\ which is used in professions and conducting or doing something. Here, it refers to the action of (reading) .

5. التجارب الواقعية

/ al tajarub al-waqiyyah/ (real-life experiences)

In this example, we have a simple noun phrase in which we have two nominal constructions: one of them modifies the other one. Again, the nominal construction (الواقعية) / al-waqiyyah/ (real) modifies the head noun (التجارب) / / al tajarub/ (experiences). Both of these nominal expressions are taken from verbs.

6. شكّل لويس ماسنيون ظاهرة متفردة ... و أسّس شبكة معرفية

/shakala luwis mansion dhahirah mutafaridah .. wa 'assasa shabakah ma'rifiyyah/

(Louis Manison represents a unique phenomenon and founded epistemological web)

The nominal expressions (ظاهرة) /dhahira / (phenomenon) and (منفردة) /munfaridah/ (unique) are also in a modifying relationship. The first one is taken from the verb (ظهر) /dhahara/ (to appear). Another part in this example is (و أسّس شبكة معرفية) wa 'assasa shabakah ma'rifiyah/ (and founded epistemological web), which also has the same modifying relationship.

In (1,2,3,4,5,6), the instance of the manufactured verbal noun have their own functions. These functions include intensification, hyperbole and extension in the form of the verbal noun. In genral, such instance of nominalization refer to abstract meanings manifest certain characteristics (Al-Maliki, 2020, p. 149).

7. حوّل الايمان الروحي المثالي المجرد الى تطبيق عملي مادي

/ Hawwala al-iman al-rouHi al-mithali al-mujjarad ila taDbeeq ?amali madi /

(He turned the abstract ideal spiritual faith into a material practical practice)

In this instance, there is the same nominal occurrences with the same functions. Here we have the nominal expression (تطبيق) /taDbeeq/ (practice) being modified by two adjectival expressions. This expression is also preceded by nominal expressions entering in the same relationship.

8. من أجل تعزيز و نشر حقوق الانسان و ممارسة الضغط الاجتماعي

/ min ajil ta?zeez wa nashir Huqooq il ='insaan wa mumaarasat aDagaT al –'ijtimaa'i /

(For the sake of consolidating and spreading human rights and exerting social pressure)

Two nominal expressions are juxtaposed here. These are (تعزيز) / ta?zeez/ (consolidating) and (نشر) / nashir/ (spreading). Both are in a Construct relationship with the nominal construction (حقوق الانسان) /Huqooq il-insaan/ (human rights). In this instance, these nominalization expressions (تعزيز) / ta?zeez/ (consolidating) and (نشر) / nashir/ (spreading) have a finiteness function in the sense that they take an object. This is something idiosyncratic in Arabic. In the same example, there is another instance which has the same function, which is (ممارسة الضغط الاجتماعي) / mumaarasat aDagaT al – 'ijtimaa'i/ (exerting social pressure). This gives us the indication that Arabic nominalized

expressions have a verbal force that requires making an object subjunctive or a subject nominative.

The nominalization instance (نشر) \nashir\ (spreading) and (ضغط) \ digat\ (pressure) are within the pattern \fa'l\ which conveys certain semantic functions including reference to a disease whether psychological or physiological , a deficit, delight or sorrow, horror or fear, being full or empty, a movement and what not. (Al-Maliki, 2020, pp. 25-31). In terms of these functions, the instance of (نشر) \nasher\ (spreading) refers to a type of movement or activity, whereas (ضغط) \ digat\ (pressure) refers to a negative psychological state.

In (8) , there is also the nominalization instance(تعزير) \ ta'azeez\ (consolidating) which has the pattern \tafa' eel\. This pattern gives certain semantic functions such as showing multiplicity, making, attributing, creating and a sound. In this example, it refers to the function of multiplicity.

2. Data - mining and the re-engineering data bases by Abdul-Sattar Shakir Salman (2019)

After reviewing the introduction section of this article, the most recurrent Arabic verbal nouns include the following:

- a. (اخذ هذا العنصر في الوقت الحالي الترتيب الثاني في العالم المتقدم) /akhatha haatha al-?unSur fil waqt al-Haali al-tarteeb al-thaani fil-?aalam al-mutaqdim/ (This element is currently ranked second in the developed world)

In (a), there is a simple noun phrase consisting of a nominalized expression (الترتيب) / al-tarteeb/ (order) which is modified by the ordinal expression (الثاني) / al-thaani/ (second). Thus, there is a modification relationship.

- b. (دخل مجال المنافسة مع السلع الاخرى ... ان ياخذ الصدارة) /dakhala majaal al-munaafasah ma?a al-sila? al-ukhraa ... 'an ya'khuth makaan al-Sadaarah/ (it entered the field of competition with other goods ... to take the lead).

The nominalized expression (المنافسة) / al-munaafasah/ (competition), which is taken from the verb (تنافس) /tanafasa/ (compete), is in a Construct relationship with the head noun (مجال) /majaal/ (field). In the same example, there is another nominalized expression which is (الصدارة) / al-Sadaarah/ (being in the top). It is taken from the verb (تصدّر) /taSSadara/ (being first). It functions as an object of the verb (يأخذ) /ya?khuth/ (take).

- c. (لضعف الخطط و الدراسات و التنظيم المطلوب) / lidhuf al-khatta wa al-dirassat wa al-tanzhim matloub/ (Because of the weak plans, studies and regulation required)

In this example, there are three nominalized expressions coordinated. These are (الخطط و الدراسات و التنظيم) / al-khatta wa al-dirassat wa al-tanzhim/ (plans, studies and regulation). All of these three items are modified by another nominalized expression which is (المطلوب) /al-matloob/ (required). All of these items are in a Construct relationship with another nominalized expression which is (ضعف) / lidhu'f/ (weakness). The congruent verbal construction of this nominalization instances would be:

(There are weak plans, studies and regulation which are required)

In addition, there is the nominalization (تنظيم) \tanzim\ (order).(see the functions of this pattern in (8) in the previous article).

- d. (الى أقرب محرقة قممات ام الى محازن الارشيف) / alle akrab mahraqqa qumamat em alle makhazin alarsheev/ to the nearest garbage incinerator or to the archives)

A noun phrase containing a comparative adjectival item (أقرب) /"qrab/ (nearer), which is taken from the verb (قرب) /qaruba/ (become near). This adjectival expression is in a Construct relationship with a nominalized expression which is (محرقة) /maHraqah/ (incinerator). Another nominalization instance is (محازن الارشيف) / makhazin alarsheev/ (the archives).

- e. (تنخر به الافات البشرية و الفيزيائية و البيولوجية و الكيميائية) / tankher beh al-afat al-bashriya wa vesiaiaia wa albiologia wa al-kimiya/ (It's full of human, physical, biological and chemical pests)

All the nominalization instances (البشرية) \al-bashryai\ (the huamanity)(الفيزيائية) \al feiza'aia\ (the physics) (البيولوجية) \albiologia\ (the biological) (الكيميائية) \al kimai a'a\ (the chemistry) are mounfactured verbal nouns (see their functions in articles).

Here, there are also nominalization instances where four nominalized items that modify a head noun which is (الافات) / al-'afat/(pests).

- f. (لاعادة هندسة او هيكله قواعد البيانات) / li'aadat hindsa ou hecla qwaa'id al-bayanat / (To re-engineer or restructure databases)

Again, there is a Construct relationship represented by the use of nominalization expressions.

- g. (تستخدم بعدها اساليب التنقيب ... و اكتشاف المعرفة) / tustakhdem baadha asalip tenkib ... wa ekchav al-marfa/ (Then use the methods of exploration ... And discovering knowledge)

On the same level, there is a Construct relationship represented by the use of nominalization expressions. The nominalization (تنقيب) \tenkib\ (exploration) is in the pattern \tafa'aeel\ .

- h. (دورة حياة البيانات مع اعطاء نبذة عن واقع قواعد البيانات) / dawrat Hayat al-bayanat ma i'taa nubthah an waqi' qawa'id al-bayanat/ (Data lifecycle with a profile of the reality of databases)

Here, again there is a Construct relationship in (اعطاء نبذة) / i'taa nubthah/ (giving a summary).

3. Tomarisk tree in light of cuneiform references by Saad Salman Fahad (2021)

After reviewing the introduction section of this article, the most recurrent and the basic Arabic verbal nouns include the following:

- a. (التعرف على جانب من جوانب حضارة وادي الرافدين الا و هو استعمال بعض الاشجار ... للاغراض) / al-taraf ola janeb minn joanp hedara wadi al-rafdin al-a wa ho estamal baad al-ashjar ... laghrad al-deiniye wal Tibiyyah/ (identifying one aspect of the civilization of the Mesopotamian Valley, which is the use of some trees ... for religious and medical purposes)

In (a), the nominalized expression (التعرف) /al-ta'arruf/ (knowing or identifying) is taken from the verb (عرف) / 'arafa/ (know). In this context, this nominalized expression is followed by a prepositional phrase which is also followed by another prepositional

phrase which governs a noun phrase in a Construct. The form (تعرف) \ta'arruf\ is set in the pattern \tafeel\. One of the semantic functions of this pattern is "becoming" or "being". In this instance, it means that readers will become knowledgeable

In the same example, there are two nominalized expressions which are in a Construct relationship, too. It is (للاغراض الدينية) (for religious purposes), where there is a preposition preceding them.

- b. (من المهم تسليط الضوء عليها) / minal moham teslit daoua aliha/ (It's important to highlight it)

In this example, there are three nominalized expressions: the adjective (مهم) /muhim/ (important) which is taken from the verb (يهم) /yahum/ (to concern), the nominal (تسليط) /tasleeT) (shedding) which is taken from the verb (سَلَطَ) /sallaTa/ (to shed), and the nominal (الضوء) /al-Daw'/ (light) which is taken from the verb (أضاء) /'aDaa'a/ (to light). The last two nominal are in a Construct relationship which is preceded by the first part of a prepositional phrase which equals a cleft sentence in English. This instance of (تسليط) \teslit\ is in form of (تفعيل) \tafa'aeel\.

- c. (من خلال الاستقراء الاول للمعلومات) / min khilal alistaqra al-awal lamalomat/ (Through the first extrapolation of information)

In (c), the nominal (الاستقراء) /alistaqra/ (induction) is preceded by a prepositional phrase and followed by an adjective which modifies it. This nominal is taken from the verb (استقرأ) (to induce). The nominal expression (معلومات) /ma?lumaat/ (information) is taken from the verb (علم) /?alima/ (to know). Here it is governed by a preposition. The instance of (الاستقراء) (induction) is in the pattern (استفعال) \istifa'al\ which has one of its functions as summarizing a whole issue. (Al-Maliki, 2020. P.183)

4. British economic relations during the conservative party government 1951-1964 by Raghad Faisal Abdul Wahab (2021)

The most frequent and basic verbal nouns that dominate this article encapsulate the following ones:

a. شهدت بريطانيا عقب الحرب العالمية الثانية تغييرات سياسية و اقتصادية جسام احدثت تحولات مهمة في (قرارات الحكومة البريطانية الداخلية)

/ shahdat britanya aqb al-harab al-alamia al-thania teghirat siyasiyah wa eqtasadia jassam ahdetht tahoulat mohamma fe qararat al-hakkuma al-britania al-dakhliyya /

(After World War II, Britain underwent dramatic political and economic changes that brought about significant shifts in the British government's domestic decisions)

b. نتج عنه بالتالي هو شدة التنافس و الصراع بين الاحزاب ... من اجل تحقيق الهدف المنشود في بناء دولة (متماسكة)

/ natj anna baltali ho chadda al-tanafis wa al-siraa bayn al-ahzab ... minn agel tahqiq al-hadf al-manshoud fe banaa doula mutamasikah/

(the result is the intensity of the competition and conflict between the parties In order to achieve the goal of building a cohesive state)

c. حتى يكون على يقين بتحليل تلك الظروف ... في الوقت ذاته سرعان ما يعتري الباحث جملة من المشاكل ()

/ hetta yakon ola yekin bathalil telk al-Darouf ... fe al-waqt thati siran ma yaatari al-bahith jamala minn al-mushakil/

(So be sure to analyze those circumstances ... At the same time, the researcher soon has a number of problems)

d. (نحو تدقيق و تحقيق المعلومات للوصول الى الاهداف) / nahwa tedqiq wa tahqiq maaloumat laloussal alle alahdaf/ (Towards auditing and investigating information to reach the goals)

e. (الاشارة الى بداية الاهتمام الدولي بثروات ايران) / al-ashara alle bedaya hatim al-douli pethroat iran/ (Referring to the beginning of international interest in Iran's wealth)

f. (ان تحصل على اول امتياز للتعدين و التنقيب عن النفط عام ١٨٨٩) / an tahsal ola ol imtiaz latadin wa tenkib an naft am/ (To get the first concession for mining and oil exploration in 1889)

g. (في حين سلط الضوء في المحور الثاني موقف الحكومة البريطانية) / fi hayne salt daoua fe al-mahour al-thani mogef al-hakkuma al-britania/ (While the position of the British government was highlighted in the second axis)

- h. (في سبيل ترميم الاقتصاد البريطاني) / fe sebil turmeym alaqtasad al-britani/ (In order to restore the British economy)

Because there are recurrent nominalization instances and to avoid repetition, the researcher will be selective to represent the most influential ones. In (a), the three nominal constructions (الحرب العالمية الثانية) / al-harab al-alamia al-thania/ (second world war) are related to each other in an adverbial phrase. Another nominal group is (تغيرات سياسية و اقتصادية) / teghirat siasiyah wa eqtasadia/ (political and economic changes) which functions as the object here. In this example, let us consider the following complex group:

(احدثت تحولات مهمة في قرارات الحكومة البريطانية الداخلية)

/ tahoulat mohamma fe qararat al-hakkuma al-britania al-dakhliyya/

(underwent dramatic political and economic changes that brought about significant shifts in the British government's domestic decisions)

This is a complete verbal clause in which the first nominalization group (تحولات مهمة) / tahoulat mohamma/ (dramatic changes) is the object. The instance (تحولات) the plural of (تحول) which is in the pattern (تفعل) mentioned previously. It gives the function of "becoming" or "being" the second nominalization group (قرارات الحكومة البريطانية الداخلية) / qararat al-hakkuma al-britania al-dakhliyya/ (the British government's domestic decisions) is the complement of a preposition. In fact, such occurrences are recurrent in the introduction sections of the Arabic research articles. The first nominal instance (قرارات) is the plural of (قرار) \qarar\ (decision). In Arabic, this is set in the pattern (فعال) \fa'al\. One of its functions, which applies here, that it is used to show on action or movement. Here, it measure the action of taking a decision. (Al-Maliki,2020,p41).

This example represents one of the recurrent patterns of Arabic nominalization:

(Nominalization + nominalization (modifier) + preposition + nominalization + nominalization + (nominalization))

In (b), the prevailing nominalization instances are of a Construct relationship and modification. A new instance of modification here is represented by (الصراع بين الاحزاب) / al-siraa bayn al-ahzab/ (conflict between the parties). Here, there is a post-modifying

phrase (بين الاحزاب) /bayn al—ahzab/ (between the parties) which modifies the nominalized expression preceding it (الصراع) / al-siraa/ (a conflict).

In (d), there are a variety of nominalized expressions. To begin with, the two coordinated nominalization instances (تدقيق و تحقيق) /tadqiq wa taHqiq/ (auditing and investigating) are preceded by the particle (نحو) to create an adverbial phrase. Both of these two nominalization instances are in a Construct relationship with the nominal expression (معلومات) /ma?loomat/ (information). Then, these instances are related to another nominalization instance which is another adverbial group (للاوصول الى الاهداف) / laloussal alle alahdaf/ (to reach the goals). One of the interesting functions of the pattern (فعلول) \fua'aool\, where (الوصول) is one example, is that it refers to reaching a goal or the top of something. Here, it means reaching goals. (Al-Maliki,2020,p.67). Out of this and other prevalent instances, the researcher is in a position to state the following pattern for Arabic nominalization:

(Nominalization + coordination + nominalization + preposition + nominalization)

5. Speech strategies in the debates of Saied Ibn Al-Hasan Ibn Essa Al- Rabae, the linguist: A pragmatic approach by Khalid Naeem Al-Shanawi (2020)

In this paper, nominal constructions also dominate the introduction section. The most frequent ones include:

- a. ان العملية التواصلية بين الذوات العاقلة تقتضي العقلانية في تداولية الخطاب و الركون الى مبادئ و (معايير ... في اطار الكتابة التواصلية و التداولية)

/ an al-amalia al-touasiliya pen al-thawat al-aqla taqtadi al-aqlaniyeh fe tadaoulia khattab wa al-rakon alle mbadia wa maaier ... fe attar al-kataba al-touasiliya wa al-taddaoulia /

(The communication process between rational selves requires rationality in the pragmatic discourse and relying on principles and standards ... in the framework of communicative and pragmatic writing)

- b. (المعايير التي تتصف بخصائص منطقية و وظيفية) / maaier alti tetsef bakhsais montakia wa wazifia/ (Standards with logical and functional characteristics)

- c. (في اطار الكتابة التداولية و التواصلية للخطاب) / fe attar al-kataba al-taddaoulia wa al-touasiliya likhtab/ (In the context of pragmatic and communicative writing of the speech)
- d. (نتج عن اجتماع طرفين من اهل العلم و المعرفة و الدراية) / natj an ejtmaa tarfin minn ahil alam wa al-marfa wa al-duraya/ (Out of the meeting of two parties of the people of science, knowledge and know-how)
- e. (خطابا استدلاليا يقوم على المقابلة و المفاعلة الموجهة) / khataban estedlalian yiqom ola al-maqabla wa mafaala al-mojha/ (An inferential discourse based comparison and the guided interaction)
- f. (عملاً اجرائياً يمكن الافادة منه في تحليل خطاب المناظرة ... و تفكيكه) / amlan ajraian yumken fafada minneh fe tahlel khatab al-manazira ... wa tefkikiyah/ (A procedural action that can be used to analyze the debate discourse ... and dismantling it)
- g. (اذ تقوم على مساءلة اهل التهمة و الادعاء) / edh tugom ola masaela ahil al-tahma wa aladaa/ (It's based on holding the people of the charge and the prosecution accountable)
- h. (تسعى الى الاطاحة بالمخاطب ... الاسلوب القائم على تبادل السؤال و الجواب) / tisa alle tahilin balmkhateb ... al-sloub al-qaim ola tabadl al-sual wa al-jawab/ (Seeking to overthrow the addressee ... the method based on the exchange of questions and answers)

In this article, all the nominalization instances are similar to what has been analyzed previously, so the researcher will highlight two of the instances that are significant in this article. The first two instances (a & b) are highly significant. In (a), there are nominalization instances that enter into structural relationships that are idiosyncratic in Arabic. For example, in (ان العملية التواصلية بين الذوات العاقلة تقتضي العقلانية في تداولية الخطاب) / inna al-amaliya al-tawasiliyya bayna al-thawat al-'aqilah taqtadi al-aqlaniyeh fi tadawiliyat khatab/ (The communication process between rational selves requires rationality in the pragmatic discourse), what is significant is that all the nominalization instances occurring are within the two parts of an Arabic nominal clause whose constituents are Theme and Rheme. The theme of this clause is:

(العملية التواصلية بين الذوات العاقلة)

/ al-amaliya al-tawasiliyya bayna al-thawat al-'aqilah/

(The communication process between rational selves)

The head noun here is (العملية) / al-amaliya/ (a process) which is taken from the verb (عمل) /'amala/ (to do). This noun is modified attributively by another verbal noun which is (التواصلية) / al-tawasiliyya/ (communication), and it is also modified predicatively by the adverbial phrase (بين الذات العاقلة) / bayna al-thawat al-'aqilah/ (between rational selves), which also contains a verbal noun (العاقلة) /al-'aqilah/ (rational) which is taken from the Arabic verb (يعقل) /ya'qul/ (to believe). This is set from the pattern (فاعل) \fa'ai\ which is the active participle form in Arabic. There are also verbal nouns set in this pattern. In many instances, the feminine (-t) is suffixed to it such as (العاقلة) in this example. The basic function of such instances is to reveal the doer of the action (Al-Maliki,2020,p.103). And in the second part, which is the Rheme in this clause, there are the following nominalization instances:

(تقتضي العقلانية في تداولية الخطاب)

/ taqtadi al-aqlaniyeh fi tadawiliyat al-khitab/

(requires rationality in the pragmatic discourse)

Here, the Rheme is a verbal clause because it starts with the verb (تقتضي) /taqtadi/ (to require), but it constitutes the Rheme of this nominal clause. This verb takes the verbal noun (العقلانية) / al-aqlaniyeh/ (rationality) which is derived from the verb (يعقل) /ya'qul/ (to believe). This verbal noun is modified predicatively by a prepositional phrase (في تداولية الخطاب) / fi tadawiliyat al-khitab/ (in the pragmatic discourse) wherein there are two nominalization instances: (تداولية) /tadawiliyah/ (pragmatism) and (الخطاب) /al-khitab/. These two are derived from the verbs (تداول) /tadawala/ (to communicate) and (خاطب) /khataba/ (to address) respectively. The instance of (خطاب) \khitab\ (discourse) is in the pattern of (فعال) \fia'aal\ . It gives functions such as ending something, separation, movement, stopping something. Here, it refers to the action of communication. (Al-Maliki,2020,p.75). Because this study attempts to contrast Arabic and English in terms of nominalization instances and patterns, in English there is no such pattern as used here. This pattern can be stated as:

(Particle + nominalization + nominalization (modifier) + particle + noun + nominalization)

This pattern is recurrent in Arabic due to the rich nature of the Arabic morphological system. Now, let us examine the second version of the nominalization instances in this article, viz. (b). Here there is a head verbal noun being modified by a relative clause. Thus, we can get the following pattern:

(Nominalization + relative clause)

The structure of the relative clause starts with a relative pronoun which is followed by a verbal clause. Within this relativized clause there are also nominalized instances. These are (خصائص) / khasa'is/ (characteristics), (منطقية) / mentiqiyyah/ (logical) and (وظيفية) / wazifiyah/ (functional) which derived from the verbs (خصَّ) /khassa/ (to concern), (نطق) /nataqa/ (to utter) and (وظَّف) /wazzafa/ (to function) respectively. As for (خصائص) \khasa'aes\ (characteristic), it is in the nominal pattern (فاعئل) \fa'a'il\.

6. Forms of standard hyperbole in the Holy Quran between the morphological function and the Quranic context by Nadhim Ali Al-Ebaadi (2020)

As usual the dominant discourse here is the use of nominal constructions. The researcher has selected the most frequent ones including:

- a. هذا البحث يدرس قضية صرفية و دلالية ... و ما يترتب عليها من دلالات صرفية و ايحائية على وفق (hudha al-bahth yedros kodia sarfiya wa delaliyeh ... wa maytertp aliha minn delalat sarfiya wa ayhaea ola wafak ruaya 'ulamma al-lughah/ (This research examines a pure and semantic issue... and the resulting pure and suggestive connotations according to the linguists' views)
- b. (بل تتعدها لتكسب معاني و دلالات) / bel tetadaha latkasp maani wa delalat/ (It goes beyond it to gain meanings and connotations)
- c. (تهدف هذه الدراسة الى بيان التحولات التي تكسب هذه الصيغ معاني المبالغة من عدمها) / tahdaf hathihi al-derassa alle bian al-tahoulat alti texeb huthe essig maani al-mubalga minn adamha/ (This study aims to show the transformations that these formulas gain the meanings of exaggeration or not)
- d. (بزيادة او نقصان على الاصل بغض النظر عن الاصل الخلافي عند العلماء) / baziyada ou niqsan ola al-assal baghed al-nadhar an al-assal al-khalafi and al-alma/ (Increasing or decreasing the original regardless of the controversial origin of the scholars)

- e. (تكون هذه المفردات المشتقة عرضة للتغيير في بنيتها الصرفية) / tekon hathihi al-mufradat mechtaqa arada letgier fe pneetha sarfiyah/ (These derived vocabulary items are subject to change in its pure structure).
- f. (يستدعي تغييراً في دلالتها عند دخولها في سياق ما) / yestedai teghiera fe delaltha and dzholha fe siyaq ma/ (it calls for a change in significance when entering a context)
- g. (ان يخضع الى هذه المعادلة لدى علماء العرب) / an yekhda alle huthe maadela lada alma al-arab/ (to be subject to this equation among Arab scholars)
- h. عند قراءة كتب اللغة و التفسير هناك خلطاً و تبيانياً في الرؤية بين علماء اللغة و المفسرين أما بالخضوع) / and karaa katab legha wa al-tafsir hanak khalta wa tabiana fe ar-rawiya pen alma legha wa al-mafsarin ama balkhadoua alle goade legha oa al-ansaya alle ma tafardah huthe al-qawaaad minn ahkam/ (When reading language books and interpretation, there is confusion and visibility between linguists and interpreters, either by complying with the rules of the language or complying with the rules imposed by these rules)
- i. (ضرورة دراسة هذه الصيغ ببحث مستقل) / dharoura durasa huthe essig bebhath mustakel/ (These forms should be studied independently)
- j. (التعارض بين النظرتين الدينية و اللغوية) / al-taaredh pen al-nazartin al-deiniye wa laghouia/ (Conflict between religious and linguistic views)
- k. (اذ حاول اللغويون تأويل هذه الايات لكي تستقيم تفسيراتهم) / eth hawel leghouion tawil huthe al-ayat lekki zteгим tevsiratham/ (If linguists try to interpret these verses so that their interpretations can be corrected)
- l. (ضرورة البناء فهو يأتي لتأدية أكثر من وظيفة) / dharoura al-banna fahwa yati latadia akther minn wazifa/ (The need to inflection for it comes to perform more than one function)
- m. (الاكثر ورودا في الاستعمال) / alakther waruda fe alastamal/ (The most commonly used)

Again, the researcher will examine the most significant and recurrent examples in this article, i.e. the ones that can be taken as recurrent patterns. To begin with, the clauses in (a) contain the following nominalization instances:

(قضية صرفية دلالية) / qaziyyah sarfiyyah wa dalaliyyah/ (a morphological and semantic issue)

In Arabic, all of these instances are nominalized. That is, they are derived from verbs: (قضى) /qaza/ (to judge), (صرّف) /sarrafa/ (to inflect) and (دلّ) /dalla/ (to mean). In this part, these represent a recurrent pattern in Arabic where there are two or three or four nominalization instances that stand in a modifying position to a head noun which is also a nominalization instance. Thus, this is a recurrent pattern, having:

(Nominalization (Head) + nominalization (modifier) + nominalization (modifier) + nominalization)

In the same example, there is a series of nominalization expressions which enter in modifying relationships. These nominalization instances are preceded by a preposition, constituting a prepositional phrase. This prepositional phrase is also followed by another prepositional phrase. It goes as such:

(من دلالات صرفية و ايحائية على وفق رؤية علماء اللغة)

/ min delalat sarfiyyah wa iyha'yyah 'ala wifq ru'ayah 'ulamma al-lughah/

(and the resulting morphological and suggestive connotations according to the linguists' views)

This leads to a recurrent pattern:

(Nominalization (Head) + nominalization (modifier) + conjunction + nominalization (modifier) + preposition + nominalization + Construct)

Another recurrent pattern regarding Arabic nominalization patterns is exemplified in (m) above which is: (الاكثر ورودا في الاستعمال) / alakther warudan fil ilisti?mal/ (The most commonly used). This pattern is:

(Nominalization (comparative) + nominalization + preposition + nominalization)

In this one, there is a nominal instance modified by the comparative item (الاكثر) (the most) following a prepositional phrase.

7. Communicative and digital communication approach to cultural diversity and domination by Sundus Sarhan Ahmed (2019)

In this paper, the most recurrent nominalization expressions include the following:

- a. لا شك بأن النمو المتزايد للثورة التكنولوجية الرقمية التي شهدها العالم ... أدى الى خلق منافسات و تحديات (كبيرة خاصة في مجال الاعلام و الاتصال)

/ la sheka baan al-namu almetzaid lathoura al-takanlughia rukmiyya alti shahdha alalem ... ada alle khalaq manafsat wa tahdiat kabira khassa fe majal laalam wa alatsal /

(There is no doubt that the growing digital technological revolution that the world has witnessed ... Led to the creation of great competitions and challenges, especially in the field of media and communication)

- b. (أدت هذه الثورة المعلوماتية الى تغيير الكثير من عادات و سلوكيات الافراد و اسلوب معيشتهم)

/ adat huthe al-thawrah maaloumatia alle teggier al-kathir minn adat wa slokiat al-afrad wa asloub maishtham/

(This information revolution has changed many of the habits and behaviors of individuals and their way of life)

- c. بدأ يفرض نفسه على الساحة الاعلامية و الصحفية و ذلك بفضل الشبكة العنكبوتية العالمية ... من الخدمة (الصحفية و الاعلامية بقوالب الكترونية)

/ badaa yefred nafsa ola sahaha al-alamiye wa sahfia wa delk bafdal shabakah ankabutiyya al-alamia ... minn al-khudma sahfia wa al-alamiye bakhoualeb chatronia /

(He started to impose himself on the media and journalistic scene thanks to the world wide web... from the press and media service with electronic templates)

- d. ان الاتصال الرقمي و استخداماته في التدفق الهائل للمعلومات يفتح أفقاً واسعة للتعرف على استخدامات (جديدة له)

/ an alatsal al-raqmi wa estekhedamate fe al-tadfaq al-haeel lamalomat yefteh afaka wasia leltarv ola estekhedamat godida leh/

(Digital communication and its uses in the massive flow of information open up a wide horizon to learn about new uses for it)

- e. (و قد أدى ذلك الى حدوث تحوّل في التوجه نحو قنوات الوسائط المطبوعة)

/ wa qud ada delk alle hadouth thol fe al-touja naho kanavat lousait motaboua/

(This has led to a shift in the trend towards print media channels)

f. (... في تفاعل الافراد مع محيطهم و تعزيز ثقافتهم و بناء شخصيتهم)

/ fe tefaal al-afraad ma muhaytahm wa taaziz saqaftaham wa banaa shechesithem/

(In the interaction of individuals with their surroundings and strengthening their culture and building their personality

In this article, the above selected instances have patterns that are referred to in the previous analyzed instances. In (f), the nominal construction (ثقافتهم) has its head as (ثقافة) \thaqafeh\ (culture) which is set in the pattern of (فعالة) \fa'aalah\. Generally, it reflects spiritual features (Al-Maliki,2020,p. 11). As for (بناء), it is in the pattern (فعال) \fia'al\. It refers to the construction of something whether it is spiritual or material. However, there is one pattern which is not referred to above. It is:

(demonstrative + nominalization (Head) + nominalization (modifier) + preposition+ nominalization + Nominalization Group (object)+ Construct)

This pattern is exemplified in (b) above.

8. Dialectic of desire and aggressiveness of Umru Al-Qays 's Mu'allaqa Poetry by Mu'ayyad Mohammad Al-Yuzbaki (2009)

After going through the introduction section of this paper, there are recurrent instances of nominalized expressions including the following:

a. يتناول هذا البحث ... من خلال منهج تحليلي نفسي معاصر، و توليفة ضرورية من امكانات منهجية (متعددة)

/yatnaul hudha al-bahth ... minn khallal munahij tahleli nafsi moasir, wa tolefa dururia minn emkanat monhjia metedda/

(This paper deals with ... via a modern psychological analytical model, a necessary combination of multiple methodological possibilities)

b. رصد البحث ... تطور مفهوم الرغبة من مستوى اللذة و الاشباع البيولوجي الى المستوى الوجودي (الانساني)

/ rassad al-bahth ... tetour mafhoum al-raghba minn mastoua al-ladha wa al-ashbaa al-bailuji alle el-mestawi al-wagudi al-ansani/

(This research explores ... the concept of desire which has evolved from the level of pleasure and biological satisfaction to the human existential level)

c. يبقى النص الشعري القديم مشروعا خصبا للتأويل ... في ضوء ما يتوفر لها من كشوفات في حقول (المعرفة ... و يستمد هذا النص خصوبته من عناصر بنيته التكوينية)

/ yibki al-nas al-shaari al-qudim mishroua khasba latauil ... fe doua ma yetover laha minn koshovat fe hagol al-marfa ... wa yestmed hudha al-nas khasubateh minn anasser benite al-taquina /

(The old poetic text remains a fertile project of interpretation... In light of the disclosures available to them in the fields of knowledge ... This text derives its fertility from elements of its formative structure)

d. وهو فضاء لا يمكن استكناه محموله من الرؤى و التصورات دون حدس عميق للبؤرة المولدة للنص و (دون الاحاطة ... بمرجعية النص الخارجية التي يقتضيها تفسير بعض غوامضه)

/ waho fadaa la yamken estecnah mahmula minn al-rua wa al-tasurat donne hadas omaik laboura al-molda lalans wa donne allahata ... bamarjaia al-nas al-kharijiya alti yaktadiha tafsir baad goamdeh/

(It is a space that cannot be based on visions and perceptions without a deep intuition of the focus generating the text without being surrounded... With the external reference of the text required by the interpretation of some of its vague features)

e. (التي يجترح فيها وجودا شعريا يستمد مكوناته من مرجعية تجربته الحياتية الواقعية)

/ alti yegtre feha wojoda sharia yestmed mukonatihi minn marjaia tegarbatah al-hayyatia al-waqia/

(In which he is a poetic presence that derives its components from the reference of his real-life experience)

f. (لا يساور المتأمل في تفاصيل هذا الوجود الشعري الشك ...)

/ la yessaur al-mutamil fe tafasil hudha al-wajud al-shaari shak/

(The meditator has no doubt about the details of this poetic existence.)

g. (ما تحتمله صورته او لوحاته من توتر و انفعالات حادة)

/ ma thatmeleh sore ou lohate minn totter wa anfaalat hadda/

(The tension and intense emotions that are implicated in his pictures or paintings)

h. (الا حالة مستمرة من الاحباط استلبت من الشاعر ثقته بقدرته على صياغة فلسفة خاصة)

/ al-a hala mostamra minn al-ahbat ustlebt minn shaer sekateh bekderta ola seyaga falasfa khasa/

(But a constant state of frustration has inspired the poet to trust his ability to formulate a special philosophy)

What is significant in this article is the nominalization occurrences in (b) above. It reads as follows:

a. رصد البحث ... تطور مفهوم الرغبة من مستوى اللذة و الاشباع البيولوجي الى المستوى الوجودي (الانساني)

/ rassad al-bahth ... taDawwur mafhoum al-raghba min mustawa al-ladha wa al-ashbaa al-bailuji alle el-mestawi al-wagudi al-ansani/

(This research explores ... the concept of desire which has evolved from the level of pleasure and biological satisfaction to the human existential level)

The nominalization instances start from the head nominal expression (تطور) /taDawwur/ (development) up to the end where the nominal expression (الانساني) /al-insani/ (human).

The nominal (تطور) \tadwwur\ (development) is set in the pattern (تفعل) where the penultimate is geminated. It gives the functions of transformation becoming, endurance and so on. Here, it refers to a change from the state of pleasure into the state of human existence (Al-Maliki,2020, p.176). This pattern can be stated as follows:

(nominalization + Construct + preposition + Construct + conjunction + Construct + preposition + Construct)

9. Justice and tolerance in the Quranic discourse: Yunus's da'wah as an example by Ma'alim Salim Yunus (2019)

In this paper, the researcher also made heavy use of nominal constructions. The most recurrent ones include the following:

a. (معنى الخطاب الدعوي و معنى العدل و التسامح في الخطاب الدعوي القراني)

/ moana khattab al-dawi wa moana al-adl wa al-tasameh fe khattab al-dawi karani/

(The meaning of the da'wa speech and the meaning of justice and tolerance in the Qur'anic da'wa speech)

b. (كان لزاما علينا معرفة ماهية الخطاب الدعوي ... استعدادا لحمل لواء الدعوة)

/ kana lizaman alina maarafa mahia khattab al-dawi ... astadada lahmal lawaa al-dawa/

(We had to know what the Da'wa discourse was... in preparation for the advocacy campaign)

c. (و احتوى على مطالب هي العدل في اللغة و التسامح)

/ wa ehtawa ola mutaleb he al-adl fe legha wa al-tasameh/

(And it contained demands which are justice in language and tolerance)

d. (فكان في دعوة يونس انموذجا)

/ fakan fe dawa jons anmozjan/

(it was Younis's da'wa as a model)

e. (و من هذا المنطلق و رغبة في خدمة هذه الدعوة المباركة)

/ wa minn hadha montaliq wa raghba fe khadma huthe al-dawa al-mabarka/

(And from this point of view and a desire to serve this blessed da'wa...)

f. (كانت الدعوة الى الله من اجل انقاذ البشرية من ظلمات الكفر و الضلال)

/ kant al-dawa alle alleh minn agel ingad al-bashriya minn zalmat al-kafar wa al-dhallal/

(It was the call to God to save humanity from the darkness of disbelief and astray)

g. (اتباع الانبياء القائمين بمهامهم بعد انقضاء عهد الدعوة)

/ atbaa al-anbaya gaemin bamhamham baad angada ahed al-dawa/

(the vassals of the prophets who are in charge of their duties after the end of the covenant of da'wa)

h. (القران الكريم هو اعظم هبة وهبها الله لهذه الامة)

/ al-qaran al-karim ho azam heba ohebha alleh lahadhe alama/

(The Holy Quran is the greatest gift God has given to this nation)

The same iterating nominalization instances are employed in this article. What is new here is the following recurrent pattern, which is exemplified in the following:

a. (معنى الخطاب الدعوي و معنى العدل و التسامح في الخطاب الدعوي القراني)

/ moana khattab al-dawi wa moana al-adl wa al-tasameh fe khattab al-dawi karani/

(The meaning of the da'wa speech and the meaning of justice and tolerance in the Qur'anic da'wa speech) Arabic is a language which deploys nominal clauses extensively where it attempts to reflect facts and frequent actions. In (a) above, the pattern to be stated reads as follows:

(nominalization + Construct + conjunction + Construct + conjunction nominalization + prepositional phrase)

Table 13.

The basic nominalization occurrences in this example are shown in the following table:

Nominal	Pattern	Function
معنى (meaning)	فعلى \fia'aah\	To convey
خطاب (discourse)	فعال \fia'aal\	To communicate
الدعوة (Invitation)	فعلة \fa'lah\	To invite or advocate
عدل	فعل	To be just

(justice)	\fa'il\	
تسامح	تفاعل	To interact with
(forgiveness)	\tafa'ul\	

In this example, we have two nominal constructs coordinated. These are:

(معنى العدل والتسامح) + (معنى الخطاب الدعوي)

(The meaning of justice and forgiveness)+(The meaning of advocacy discourse)

In the first construct, the head noun (معنى) (meaning) is in a construct relationship with (الخطاب) (discourse), which is modified by the nominal item (الدعوى). This modifying item is taken from the verbal noun (الدعوة) (advocacy or invitation) where verb is (دعا) (to advocate or to invite). In the second construct, the head noun (معنى) (meaning) is in a construct relationship with two nominalized items (العدل) (justice) and (التسامح) (forgiveness). Interestingly, these two construct relationships are post modified by the prepositional phrase:

(in the Quranic advocacy discourse) (في الخطاب الدعوي القراني) where the head noun (الخطاب) (discourse) is modified by the nominal (الدعوي) (advocative) and (القراني) (Quranic).

10. Key words in the Iraqi university dissertations in the field of information and libraries and their roles in retrieving information by Huda Salman Sabbar (2021)

The introduction section of this paper includes a variety of nominal constructions.

The following are the most significant ones:

- a. باعتبارها الركيزة الاساسية للبحث العلمي مما يتطلب دراسة و تحليل محتوياتها الموضوعية و التعبير (عنها بمصطلحات او كلمات مفتاحية تساعد المستفيدين في التعرف عليها و استثمارها بشكل يحقق الهدف من إعدادها)

/ bi?tbaraha al-rakiza al-asasiya labahath alami memma wittlep durasa wa tahlel mehtoyaha al-modhouaia wa al-tabir anha bemstalat ou kelmata meftahiye tsaad al-mestvidin fe al-taraf aliha wa istithmarha bishkel yuhakiqu al-hadf minn iadadha /

(As the main pillar of scientific research, it requires studying and analyzing its objective content and expressing it in terms or key words that help the beneficiaries to identify them and invest it in a way that achieves the goal of preparing them)

b. (التعرف على نسبة استخدام الرسائل الجامعية مقارنة بمصادر المعلومات الاخرى)

/ al-taraf ola nasba estekhdam al-rasael al-jamaia mekarne bamsadir maaloumat al-akhra/

(Identify the percentage of use of university messages compared to other sources of information

c. (التعرف على مدى توفر الكلمات المفتاحية في مجال المعلومات و المكتبات)

/ al-taraf ola meda tover kilmat al-miftahia fe majal maaloumat wa al-maktabat/

(we will learn about the availability of keywords in information and libraries)

In this article, there are nominalization instances to be highlighted, out of which patterns can be stated. For example, in (a), there is the following nominalization group:

(باعتبارها الركيزة الاساسية للبحث العلمي) / bi?tbaraha al-rakiza al-asasiya lilbahath ?alami/
(As the main pillar of scientific research)

Here, the first nominalization instance has a finiteness implication in the sense that this nominalization (باعتبارها) / bi?tbaraha/ (as) governs an object which is the nominal group (الركيزة الاساسية) / al-rakiza al-asasiya/ (the main pillar). That is, this nominalization has the same force of finiteness as its verb (يعتبر) /yu?tabar) (to regard). The pattern can be stated as:

(preposition + nominalization + Construct (object nominalization) + prepositional phrase)

This nominalization instance starts with a prepositional phrase (باعتبارها) where the nominal item (اعتبار) \\'atia\'bar\ (consideration) is set in the nominal pattern (افتعال) \\'aftia\'aal\. It is derived from verbs of the form (افتعل) \\'aftaa\'ala\ and here (اعتبر) \\'atabarar\ (to consider). Such pattern can display certain semantic functions including requesting and hard working, participation, exaggeration and intensification, and familiarization and taking things into consideration. In this example, the nominal instance of (اعتبار) (to consider) goes within the latter function, i.e. to take into consideration (Al-Maliki,2020,p.173). The second nominal instance here is (الركيزة) \\'alrakiza\ (basis) which is in the pattern (فعيله) \\'fa\'ailah\. The functions that can be displayed by this pattern include intimacy, flexibility, accompaniment and following (Al-Maliki,2020,p,101). The most related one in this example is the function of "accompaniment". Being the basis of something means there are other things related to this basis. The nominal item (الاساسية) \\'al\'asassiyah\ (the basic) is verbal noun which ends in (ية) whose function is modification of the preceding nominal (الركيزة). The nominal group (البحث العلمي) is set within a prepositional (اللام). The nominal (البحث) (research) is in the pattern (فعل) \\'fa\'al\. Such patterns include certain functions such as a pain, a disease (both spiritual or material, defect, joyfulness or sadness, awe, emptiness and fullness, behavior, amovement or activity, and what not. Out of the above analyses, one can show that Arabic has a variety of nominalization patterns that are not available in English. In addition to that, it can be proved that nominalization can have a finiteness effect.

Chapter Five

Conclusions

5.1 Conclusions

All Arabic grammar books assert that Arabic has a certain type of discourse which is the use of the Topic-Comment word order (e.g. Abu Chacra & Abu Chacra 2007, p.32). This is employed instead of the subject-predicate relationship. This adds to the characterization of Arabic rhetoric, which reflects the writer's comment in relation to the nominalized clause. This is highly expected in Arabic because one of its basic word order types is SVO, which is manifested in nominal clauses. Thus, in Arabic, writers tend to express their thoughts and feelings via nominal clauses, a case which has its own semantic and cognitive terms. This choice is partially evoked by the grammatical constraints. The semantic consequences, however, are more grave than meets the eye. According to Langacker (1987:90), it has been shown that nominalizing a verb necessarily lavishes conceptual properties characteristic of nouns (1987:90). Changing a clause into a nominal construction requires that the event being described is viewed as a “thing” or a “fact,” rather than an event. In a nominal clause, the event is seen as an active event anymore, but it is treated as a “state.” It means that in a nominalized clause, there is some kind of objectification on the part of the event being nominalized as suggested by Brown and Levinson (1987 [1978]). It was Whorf (1956) who highlighted the notion of “fashions of speaking” to represent systematic grammatical distinctions. The nominal predicate clause in Arabic can define and reinforce some conventional ways of thinking. The high frequency of nominalization in Arabic with its resultant “rhetoric of commentation” to express different rhetorical messages to varying arrangements of significance and intensity.

As far as the research questions in this study are concerned, out of the analyses done, it has been found out that there is a big difference between English and Arabic in terms of the introduction sections in their RAs in the sense that academic Arabic writers tend to make heavy use of nominalization instances. This is basically because Arabic is a language which has nominal sentences as one of the basic word order types. Facts and repeated actions that do not undergo changes in Arabic are manifested via deploying nominal constructions. Thus, Arabic uses nominalization instances much more than English.

In relation to the second research questions which concerns the nominalization patterns. In English, the researcher could not arrive at more than the six nominalization patterns that are used in analyzing nominalization expressions in the previous studies. However, in Arabic, there appears new patterns that are not available in the English ones. For instance, there are patterns like the following:

1. (nominalization + Construct + conjunction + Construct + conjunction nominalization + prepositional phrase)
2. (nominalization + Construct + preposition + Construct + conjunction + Construct + preposition + Construct)
3. (preposition + nominalization + Construct (object nominalization) + prepositional phrase)
4. (demonstrative + nominalization (Head) + nominalization (modifier) + preposition+ nominalization + Nominalization Group (object)+ Construct)
5. (Nominalization (Head) + nominalization (modifier) + conjunction + nominalization (modifier) + preposition + nominalization + Construct)
6. (Nominalization (comparative) + nominalization + preposition + nominalization)

One can see that Arabic employs more nominalization instances and patterns than English.

As for the last research question, it is related to claims of knowledge adopted in the use of nominalization in the introduction section in both languages. In the introduction section, researchers tend to provide sound backgrounds for their studies. Thus, it is important to claim knowledge bases in these sections. As for Arabic, the use of nominalization instances reflect sound backgrounds as such instances can show truthful things and facts that do not undergo changes. It is highly expected for Arabic writers to adopt nominal instances to provide sound bases in their studies. In addition, stating the specific objectives is also deployed in the introduction section. Thus, using nominalization expressions can be used to reflect such objectives.

5.2 Limitations of the study

This study addresses the patterns, use and functions of nominalization in English and Arabic as manifested in the introduction sections of English and Arabic research articles. As for the English side, the researcher has not detailed the notion of nominalization since it is adequately dealt with by other researchers. What is highlighted here is the patterns arrived at from previous literature and adding the ones that are not discovered. This is also done for the sake of comparing them with the Arabic ones. In dealing with nominalization in Arabic it has been found out that there are patterns that are not available in English, a case which needs to be attended to.

5.3 Implications of the study

The findings of this study are highly important in enriching the field of discourse analysis in general and the notion of nominalization in particular. Building on the findings of Arabic nominalization processes and instances, it has been proved that finiteness is not a characteristic of finite verbs only, a case which should be focused upon. Thus, these findings should be reviewed in subsequent research to prove the validity of this finding so that it can be applied in the practice and theory of general linguistics and pragmatics.

1.4 Suggestions for further research

Drawing upon the results and conclusions of this study, further studies can be conducted in the analysis of English and Arabic texts whether literary or political ones as well as other text types. The findings of this study represent a good repertoire of conducting a study in the field of translation across the two languages English and Arabic. Another possibility for further research in this regard is conducting a study in the area of transitivity system across the two languages to see how English and Arabic are similar or different in this regard, Finally and significantly, revisiting the notion of finiteness and nominalization is a must indeed.

References

- Abney, S. (1987). *The English noun phrase and its sentential aspect*. Ph.D. dissertation, MIT.
- Aceto, M. (2003). *Contact English of the eastern Caribbean*. John Benjamin publishing company
- Abu-Chacra, F., & Abu-Chacra, F. (2007). *Arabic: An essential grammar*. Routledge.
<https://doi.org/10.4324/9780203088814>
- Al-Ghalayini , M. (2004). *Jami' al-duroos al-'arabiyyah (Collection of Arabic lessons)*. Al-Quds publishing Company.
- Al- Samarra'i, F.S. (2007). *Ma'aani al-NaHw (meanings of grammar)*. Dar IHyaa' Al-Turath Al- Arabi.
- Al- Samarra'i, I. (1997). *Al-lighayat al-tarkhi*. Dar Al-Andalwus.
- Alexiadou, A. (1990). Nominalizations: A probe into the architecture of grammar, Part 1: The nominalization puzzle. *Language and Linguistics Compass*, 4, 496–511.
- Al-Maliki, W. J. (2019). *AL-masdar fi nahj aL-balaqhah*. Dar AL-wala'a
- Al-Mishkini, A. A, (1992). *Istilahat al-usoul (Standerd terms)*. AL-Hadi publications.
- Al-Rajihi, A. (2003). *Al-tatbeeq al- sarfi (The morphological practice)*. Al-Maseerah Publishing.
- Al-Saqi, F. (1977). *Aqsam al-aalam al-'arabia min hayth alshakal wal wadhifah (Parts of speech in terms of forms and function)*. Al-Khanji Library.
- Amin, A. (2000). *Al- 'Ishtiqaq (Derivation)*. Al-Khanji Library.
- Anis, A. (2007). *Al-aswat al-lighawiyat (Linguistic sounds)*. A-Anglo Library.
- Arent, R. (1998). *The pragmatics of cross - cultural bargaining in an Amman suq: An exploration of language choice, discourse structure and pragmatic failure in discourse involving Arab and non - Arab participants*. A doctoral dissertation, University of Minnesota.
- Bahar, M. A. (2014). Lisansüstü eğitimde akademik yazma eğilimi. *International Journal of Language Academy*, 2 (4), 209-233.

- Banks, D., (2003). The evolution of grammatical metaphor in scientific writing. In Baratta, A. (2010). Nominalization development across an undergraduate academic degree program. *Journal of Pragmatics*, 42(4), 1017–1036.
- Bayat, N. (2014). The effect of the process writing approach on writing success and anxiety. *Educational Sciences: Theory and Practice*, 14 (3), 1133 - 1141.
- Bhatia, V. K. (1993). *Analysis genre: Language use in professional setting*. Longman.
- Biber, D. (1986). Spoken and written textual dimensions in English: Resolving the contradictory findings. *Language*, 62(2): 384-414.
- Biber, D. (2006). *University language: A corpus-based study of spoken and written registers*. John Benjamins.
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge University Press.
- Bloor, T., & Bloor, M. (2004). *The functional analysis of English: A Hallidayan approaches*. London Arnold.
- Briones, S. Fortunes, Sastre, L.& Pocovi, M. (2003). Grammatical metaphor in scientific English. *The Specialist*, 24, 131-142.
- Brown, P, & Levinson, S.C. (1987). *Politeness: some universals in language usage*. Cambridge University Press.
- Bussman, H. (2001). *Routledge dictionary of language and linguistics*. Cambridge University Press.
- Carolyn, G. H. (2004). What should we teach about the paradoxes of English nominalization? In A. F. Joseph (Ed.), *Language, education and discourse: functional approaches pp. 174-190*. MPG Books Ltd.
- Chafe, W. L. (1982). Integration and involvement in speaking, writing, and oral literature. In D. Tannen (Ed.). *Spoken and written language: Exploring*.
- Chamoreau, C. & Estrada- Fernandez, Z. (2016). *Fineness and nominalization*. John Benjamins Publishing Company.
- Chomsky, N. (1970). Remarks on nominalization. In R.A. Jacobs and P. S. Rosenbaum (Eds.) *Readings in English Transformational Grammar*. Waltham,
- Christie, F. & Derewianka, B. (2008). *School discourse learning to write across the years of schooling*. Continuum.
- Comrie, B.& Thompson S. (1985) *Lexical nominalizations*:
<https://www.researchgate.net/publication/286628461>

- Day, R. A. (2005). *Bilimselmakalenası yazılır, nasılyayımlanır?* (Çev. G. Aşkar Altay) (10. Basım). TÜBİTAK Yay.
- Diana, L.(2000). *Techniques and principle of language teaching*. Oxford University Press.
- Dekange, E. & Geo, E. (2020). Three ways of unifying participles and nominalizations: *the case of Udmurt*, *10* (1093), 196-202.
- Eggins, S. (1994). *An Introduction to Systemic Functional Linguistics*. Printer Publishers.
- Eid, M. (1990). *Arabic linguistics: The current scene in perspective on Arabic linguistics*. Amsterdam John Benjamin.
- Fakhri, A. (2012). *Nominalization in Arabic discourse: A genre analysis perspective*. *Arabic language and linguistics*. Georgetown University press.
- Feng, Z. (2014). The logical nature of systemic-functional grammar and grammatical logic, *Journal of World Languages*, *1* (3), 232-241, DOI: 10.1080/21698252.2014.989942
- Flowerdew, L. (1998). Corpus linguistics techniques applied to text linguistics. *System*, *26* (4), 541-552.
- Gillet, A., Hammond, A. & Martal, M. (2004). *Inside track to successful academic writing*. Longman.
- Givon, T. (2004). *Syntax: A functional typological introduction*. Vol (1). Amsterdam: John Benjamin.
- Grimshaw, J. B. (1990). *Argument structure*. The MIT Press.
- Guillen Glave, L. (1998). Nominalization occurring in written medical English. Elsevier. B.V. *The Journal of Pragmatics*. (30), 363-385
- Hadidi, Y. (2012). A comparative study of ideational grammatical metaphor in business and political texts: *Article in international journal of linguistics*, *10*.52-96
- Halliday, M, A, K, (2000). An introduction to functional grammar. *Foreign Language Teaching and Research press*.
- Halliday, M. A. K & Matthiessen, C. (1999). *Construing experience through meaning: A language-based approach to cognition*. Cassell.
- Halliday, M. A. K & Matthiessen, C. (2004). *An introduction to functional grammar* (3rd Ed). Edward Arnold.

- Halliday, M. A. K. (1985). *An introduction to functional grammar* (1st Ed.). Edward Arnold.
- Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd Ed.). Edward Arnold.
- Halliday, M. A.K. (1978). *Language as social semiotic*. Edward Arnold.
- Halliday, M. A.K. (1993). Toward a language – based theory of learning. *Linguistics and Education*, 5, 93-116.
- Halliday, M. A.K.& Martin, J.R (2005). *Writing science: Literacy and discursive power*. University of Pittsburgh press.
- Hamp- Lyons, L. & Heasley, B. (2006). *Study writing: A course in written English for academic purposes* (2nd Ed.). Cambridge University press.
- Heyvaert, L. (2003). Nominalization as grammatical metaphor. On the need for a radically systemic and metafictional approach. In S, Vandenberg, M, Tavernier's, & J. Ravelli, (Eds.), *Grammatical metaphor: Views from systemic functional linguistics* (pp. 65-99). Retrieved June, 18, 2013 from the World Wide Web: <http://www.books.google.com>.
- Holtz, M. (2009). *Nominalization in scientific discourse: A corpus-based of abstracts and research articles*, ucrel.lancs.ac.uk/publications/cl2009/341
- Hood, S. (2004). *Appraising research: Taking a stance in academic writing*. University of Technology Press.
- Horsella, M. & Perez, F. (1997) Evolution of the language of science: study of nominalizations and nominal groups. In *ESP in Latin America*. Proceedings of the V Latin American ESP Colloquium, Universidad de los Andes Press.
- Howell, K., Zamaraeva. (2018). Nominalized clauses in the grammar matrix. *Proceedings of the 25th International Conference on Head-Driven Phrase Structure Grammar*. University of Tokyo. <http://csli-publications.stanford.edu/HPSG/2018>
- Hu, Z. (1989). *Introduction to systemic functional grammar*. Hunan Education Press.
- Hyland, K. (2007). Applying a gloss: Exemplifying and reformulating in academic discourse. *Applied Linguistics*, 28 (2), 266–285.
- Hyland, K. (2009). *Academic discourse: English in a global context*. London: Continuum.

- Jalilifar, A. R. Elhambakhsh, E. & White, P. (2018). Nominalization in applied linguistics and medicine: The case of textbook introductions and book reviews. *Research in language*, 16 (3) 313-327.
- Jalilifar, A. R., Saleh, E. & Don, A., (2017). Exploring nominalization in the introduction and method sections of applied linguistics research articles. *The Journal of Research in Applied Linguistics*, 5(1), 24-43.
- Jalilifar, A.R. , Alipour, M. & Parsa, S. (2014). Comparative study of nominalization in applied linguistics and biology book. *Journal of Research in Applied Linguistics*, 5(1), 24-43.
- Janigova, S. (2008). *Syntax of -ing forms in legal English*. Berlin: Peter Lang Publication. <https://books.google.com/books?isbn=3631574703>
- Kaidan, Z., Jalilifar, A. & Don, A. (2021). On significance of disciplinary variation in research articles: Perspectives from nominalization. *Cogent Education* 8(1), 189-872.
- Kazemian, B. & Hashemi, S. (2014). Critical discourse analysis of Barack Obama's 2012 speeches: view from systemic functional linguistics and rhetoric. *Theory and Practice in Language Studies* 4(6), 1178-1187.
- Lakoff, G. & Mark, J. (1980). *Metaphor we live by*. University of Chicago Press.
- Langacker, W. (1987). *Foundation of Cognitive Grammar. Theoretical Prerequisites Vol (1)*. Stanford: Stanford University Press.
- Leech, G. (2006). *A glossary of English grammar*. Edinburgh: University Press.
- Levin, B. (1993). *English verb classes and alternations: A preliminary investigation*. University of Chicago Press.
- Levin, B. & Rappaport Hovav, M. (1999). Two structures for compositionally derived events, in T. Matthews & D. Strolovitch (eds.), *The Proceedings of SALT IX*. CLC Publications, 199-223.
- Liardét, C. L. (2013). An exploration of Chinese EFL learner's deployment of grammatical metaphor: Learning to make academically valued meanings *Journal of Second Language Writing*, 22, 161–178.
- Lim, J. M. H. (2006). Method sections of management research articles: A pedagogically motivated qualitative study. *English for Specific Purposes*, 5(3), 82-309.

- Liu, Y. Fang, A. & Wei, N. (2014). A corpus –based quantitative study of nominalization across Chinese and British Media English. *Information and Computation*. (pp. 101–10).
- Livnat, Z. (2010). *Impersonality and grammatical metaphor in scientific discourse*. University Grenoble press, 1146-64 <http://journals.openedition.org/lidil/3015>.
- Lock, G. (1996). *Functional English grammar: An introduction for second language*.
- Marantz, A. (1997). No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics 4*, 201–225.
- Maria, L. (2002). *The disambiguation of nominalizations*. The MIT Press.
- Martin, J. A. (1993). Nominalization in science and humanities: Distilling knowledge and scaffolding text. In E. Ventola (Ed.), *Functional and systematic linguistics* (pp.307-337). Mouton de Gruyter. Massachusetts: Ginn, (pp. 184-221.)
- McCarthy, J & Prince, A. (1993b). Generalized alignment. In Geert Booij & Jaap van Marle (eds.), *Yearbook of Morphology 1993* (pp. 79-153). Dordrecht: Kluwer.
- Monippally, M. M. & Pawar, B. S. (2010). *Academic writing: A guide for management students and researchers*. Response Books - Sage.
- Murray R.& Moore, S. (2006). *The handbook of academic writing: A fresh approach*. McGraw-Hill.
- Mwinlaaru, I, N. & Xuan, W. (2016). *A survey of studies in systemic functional language description and typology*. The Hong Kong Polytechnic University Press.
- Najjar. H. (1990). Arabic as research language: The case of agricultural sciences. *Morality and Literacy*. Norwood, N. J.: Ablex, (pp. 35-54)
- Paltridge, B., (2007). *Discourse analysis: An introduction*. MPG Books Ltd.
- Paul, I. (2014). *Across linguistics investigation of nominalization patterns*. The American National Standard for Information Sciences – Permanence Paper for Printed Library Materials
- Rappaport, H. (1999). *Two types of compositionally derived events*. Bar ILan University Press.
- Ravelli, L. (1988). *Grammatical metaphor: An initial analysis*. New Jersey Press.
- Richards, J., & Rodgers, S. (2001). *Approaches and methods in language teaching*.
- Roe, S. C. & De Ouden, P. H. (2018). *Academic writing* (3rd Ed.). Canadian Scholar.

- Sarnackaite, V. (2011). *Nominalization as cohesive device in political discourse*. University of Siauliai Press.
- Schlepppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Lawrence Erlbaum Press.
- Shahin, A. (1987). *Athar al-qira'at fil – aswaat wal nahw al-'arabi (Reading effects on sounds and arabic grammar)*. Al- Maktab al-'assriyya.
- Simon-Vandenberg, A. (2004). *Grammatical metaphor: Views from systemic functional linguistics*. John Benjamin's, Springer.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Swales, J. M. (2004). *Research genre: Exploration and application*. Cambridge University Press.
- Taher, I. (2015). The problematic forms of nominalization: Gerund, verbal noun, and deverbal noun. *English Linguistics Research*, 4(1) 30-40.
- Taverniers, M. (2004). Grammatical metaphors in English. *Modern sprak*, 98(1), 17–26.
- Tayalati, F. & Vandeveld, D. (2014). Event nominalization in French and modern standard Arabic: A parallel. *bril's annual of A froasiatic languages and linguistics teachers*, 119-155 .
- Thibault, P. J., (1991). Grammar, Technocracy, and the Noun: Technocratic Values and Cognitive Linguistics. In Ventola, E. (ed.). *Functional and Systematic Linguistics: Approaches and Uses*. Mouton de Gruyter Press.
- To, V., Le, T., & Le, Q. (2013). A comparative study of nominalization in IELTS writing test papers. *International Journal of Innovative Interdisciplinary Research*, 1(4), 15-21.
- Trask, R. L., 1992. *A dictionary of grammatical terms in linguistics*. Routledge.
- Ukasha, M, (2005). *Al-tahleel al-lighuwai fi daw' 'ilm al-dalalah (The linguistic analysis in light of semantics)*. Dar al-nashr fil-jaami'at.
- Upton, T. & Connor, U. (2001). Using computerized corpus analysis to investigate the text discourse moves of a genre. *English for Specific Purposes*, 20, (4), 313-329.
- Van Dijk, T, A. (2006). Discourse, context and cognition. *Discourse Studies* 8, (1), 159-77.

- Ventola, E. (1997) La escritura académica: análisis textolingüístico. In *Estudios de linguistics aplicada*, 15, 26, 33-39.
- Warnock, J. P. (2003). *Effective writing*. Parlor Press
- Whorf, B.L. (1956). *Language, thought, and reality: selected writings*. Technology Press of Massachusetts Institute of Technology.
- Yusufi, A. (n.d.) . *Al-I'jaz Al-Sarfī fil Qura'n Al-Kareem (Morphological Miracle in the Quran)*. Dar Al-tarbiyyah.
- Ziff, P., (1984). *Epistemic Analysis: A coherence theory of language*. Holland Press.

Appendix I (A Survey of the English Research Articles)

Ser.	Journal name	Paper title	Author	Year
1	Adab A-basrah journal	Pragmatic Aspects as Tools for Translators	Asst. Prof. Hashim Gatea Lazim Muntaha Ali Abed	2017
2	Adab A-basrah journal	An Account Of The Negativeness Of The Constructions Far /baʔɪdun ʔan/ In English And Arabic	Lecturer Haleem H. Falih	2012
3	Adab A-basrah journal	Assessing the Simultaneous Interpreting Outputs of Trainee Interpreters in Iraqi Departments of Translation	Research. Zakariya Yaseen Musa Assistant Professor Jasim Khalifah Sultan Al- Maryani	2021
4	Adab A-basrah journal	The Role of Morphology in Translation: Arabic Semi – Active Participle Adjectives as an Example	Assistant Professor Dr. Jawad Kadhim Jabir	2021
5	Adab A-basrah journal	Homonymous Verbs in the Holy Quran: An Analysis of Three Translations of Some Quranic Texts in terms of Ray Jackendoff's Conceptual Structures	Adel A. Al- Thamery (PhD) Resercher Ali F. Al- Salihi	2017
6	Journal of	Investigation Teachers' Attitudes towards	Asst. Prof.	2019

	Basra Research for Human Sciences	using code-switching as an instructional strategy to Enhance the students English foreign language competence at Basra University	Dr. Jameel Qasim Hameed M.A. Student: Sameera Selman Abdulrasoul	
7	Adab A-basrah journal	The Impact of Ideological and Non-Ideological Factors on the Quality and Quantity of Error in the Simultaneous Interpreting of Contemporary American Political Discourse	Ali Ahmed Shehab Assistant Professor Jasim Al- Maryani (Ph.D.)	2019
8	Adab A-basrah journal	The Use and Abuse of Power: A Critical Discourse Analysis of Arthur Miller's "The Crucible"	Lecturer Ayad Abdul Razzaq Abood	2015
9	Adab A-basrah journal	Metaphor Comprehension by the Congenitally Blind Children	Assist Prof. Dr. Alia B. Abdullah Dhaifullah Zamil Harbi	2017
10	Adab A-basrah journal	The Translation of English Conditional Clauses into Arabic: A Pedagogical Perspective	Lecturer Jasim Khalifah Sultan	2011
11	Adab A-basrah	Proper Names as Indicators of Social Identity	Assist.Prof.	2009

	journal	in Shakespeare's Richard II: A Typological Critique	Assist. Lecturer Ridha Thanoon Ali Samir Talib Dawood	
12	Adab A-basrah journal	Pronominal Choices in Mandela's Speech at The International Day of Solidarity with the Palestinian People: A Critical Discourse Analysis	(PhD.) Nazar Abdulhafid h Ubeid Ali Qassim Ali	2015
13	Adab A-basrah journal	The Translators' Misconception of Time in Five Selected Translation of 1984 by George Orwell	M.A.Nadia Odah Sultan	2020
14	Adab A-basrah journal	Playing Games with Time: Temporal shifts and Changes in Thomas Hardy's Far From the Madding Crowd: a Narrative, Stylistic Investigation	Assist. Professor Jinan F. Al-Hajaj	2012
15	Adab A-basrah journal	Gender Variation Elicited in the Intonational Patterns of Compliments in Everyday Spoken Iraqi Arabic: An Auditory Study Assist. Prof. Alaa A. Ar-riyahi University of Basra/ College of Education for Women	Prof. Dr. Mohammad A. Abdul-Sattar	2019
16	Adab A-basrah journal	Extensions of Co-Event Conflation: A Cognitive Semantico- Syntactic Study of Space and Motion in Standard English and Standard Arabic1	Dr.Thamer Ali Mohammed Hussein	2016
17	Adab A-basrah	The Identification of Writing-Related	Hakeem	2020

	journal	Grammar Needs of the EFL Iraqi Learners at the University Level	Falih Yasir Assist. Prof. Ali Qassim Ali (PhD)	
18	Adab A-basrah journal	Code-switching and Code-mixing : A Case Study of Child Bilingualism in Iraq	Assist. Lecturer Juliana D. Yousif	2012
19	The journal of Arab Gulf	Metaphors related to Iraqi Women: Metaphormorphism as cross domain-mapping	Dr. Dhahir Jafar	2021
20	Adab A-basrah journal	The Effect of EFL Learners' Mother Tongue on their Writings in English : An Error Analysis Study	Assis. Lecturer Nada Salih A. Ridha	2012
21	Adab A-basrah journal	St. Jerome's Approach to Word-for-Word and Sense-for-Sense Translation1	Prof. Kadhim Khalaf Al- Ali Researcher Lamya Rasheed Majid	2015
22	Adab A-basrah journal	Sarah Woodruff Mystique in John Fowles's The French Lieutenant's Woman Mai Hasan	Prof. Nayef al-Yasin	2020
23	Adab A-basrah journal	August Strindberg's "The Stronger " as Monodramatic Situational –Plot Structure : ___ A Stylistic Study	Assist . Lecturer Fatima H . Aziz	2010
24	Adab A-basrah	Reading for Translation: The Cognitive	Nada	2020

	journal	Comprehension Strategies Employed in the Translation Process Nada Dehyaa Lazim(MA Candidate in Translation Studies)	Dehyaa Lazim) Prof. Falih	
25	Adab A-basrah journal	Analysis Of Errors Made By Iraqi First-Year University Students In Using The English Cardinal Numbers	Ass.prof Haleem H. Falih	2010
26	Adab A-basrah journal	(De)legitimization in the Discourse of Obama and Trump on the Syrian Crisis	Ali Abdulhameed Faris	2018
27	Adab A-basrah journal	An Analytical Study of Schleiermacher's Essay "On the Different Methods of Translating"	Prof. adhim Khalaf Mohamme	2018
28	Journal of Basra Research for Human Sciences	The use of language functions to promote the foreign language learners' motivation and fluency at the advanced level	Dr. Jameel Qasim Hameed	2018
29	Journal of Applied Language Studies	Dual function of first position nominal groups in research article titles: Describing methods and structuring summary	Alex Rath	2010
30	Journal of Applied Language Studies	Which is which and who is who: Roger Waters up against Media	Behzad Ghaderi Sohi & Mohammad Hayati	2010
31	Journal of	Why Figurative Language: Perceived	Mahmood	2010

	Applied Language Studies	Discourse Goals for Metaphors read disc Can and Similes by L2 Learners	Hashemian & Mehdi Iravani	
32	Journal of Applied Language Studies	Traces of Greek Mythology in Samuel Beckett's Waiting for Godot	Ali Ravari E-	2010
33	Journal of Applied Language Studies	Contrastive Analysis of Sports Headlines in Two English Newspapers	Ali Roohani & Maryam Esmacili	2010
34	Journal of Applied Language Studies	Relative Importance in English and Persian: Thematization or Tonic Prominence?	Kamran Mehrgan & Mohammad Alipour	2010
35	Journal of Applied Language Studies	A Comparative Study of Introduction and Discussion sections of Sub-disciplines of Applied Linguistics Research Articles	Reza Khany & Khalil Tazik	2010
36	Journal of Applied Language Studies	Being: A Study of Camus' The Stranger in the Light Study of Camus' The Stranger in the Light of Heidegger's Philosophy	Ali Shafiabadi	2010
37	Journal of Applied Language Studies	Role of Teacher-Constructed Strategies in EFL Learners' Reading Comprehension and Autonomy	Ahmad Allbabaee, Zahra Mehranfar, & Golam Reza Zarei	2014
38	Journal of	Comparative Study of Nominalization in	Alireza	2014

	Applied Language Studies	Applied Linguistics and Biology Books	Jalilifar, Mohammad Alipour, & Sara Parsa	
39	Journal of Applied Language Studies	Language Learning Strategy Use and Prediction of Foreign Language Proficiency Among Iranian EFL Learners .	Aliakbar Jafarpour Boroujeni, Ali oohani, & ohammad Sharifi	2014
40	Journal of Applied Language Studies	EFL Teachers' Understanding of the Teaching Portions of INSET Programs	Mahmood Hashemian & Ghasemali Azadi	2014
41	Journal of Applied Language Studies	On the Substantive and Predictive Validity Facets of the University Entrance Exam for English Majors.	Kioumars Razavipur	2014
42	Journal of Applied Language Studies	Iranian Wedding Invitations in the Shifting Sands of Time.	Elham Sadri	2014
43	Journal of Applied Language Studies	Impact of Differentiated Instruction Instruction on the Reading Comprehension of Iranian EFL Students	Mohammad Aliakbari & Jaber Khales Haghighi	2014
44	Journal of	Effect of Self-Directed Learning the	Maryam	2013

	Applied Language Studies	Components of Reading Comprehension.	Meshkat & Ali Hassanzade	
45	Journal of Applied Language Studies	Individual and Collaborative Output Tasks: Effects on the Acquisition of English Inversion Structures.	Zia Tajeddin & Shadab Jabbarpoor	2013
46	Journal of Applied Language Studies	Disciplinary Acculturation: A Comparative Study of Intradiscourse Cycles of English and Persian Introductory Textbooks of Sociology and Linguistics.	Nasser Rashidi & Sara Shahab	2013
47	Journal of Applied Language Studies	Evaluating Four Corners Textbooks in Terms of Cognitive Processes Using Bloom's Revised Taxonomy.	Ali Roohani, Farzaneh Taheri, & Marziyeh Poorzangeneh	2013
48	Journal of Applied Language Studies	Distribution of Prodrop Syntactic Properties in L2 English of Persian Speakers.	Ahmad Alibabae & Manijeh Youhanaee	2013
49	Journal of Applied Language Studies	Construction and Validation of Self-Assessment Inventory for English for Academic Purposes: A Case of Iranian Tertiary Students	Goudarz Alibakhshi	2013
50	Journal of Applied Language Studies	Current Trends in Research on Mobile Phones in Language Learning.	Alireza Jalilifar & Amir Mashhadi	2013

Appendix 2 (A Survey of the Arabic Research Articles)

Ser .	Journal name	Paper title	Author	Year
1	Journal of Islamic science college	Justice and Tolerance in The Qur'anic discourse -Yunus's da'wa (peace be upon him) is an example	Dr. Maalem Salem	2019
2	Journal of Islamic science college	Types of effective readings of the Holy Quran	Dr. Ibrahim Mahmood Ibrahim Al najaar	2014
3	IRAQI Journal for information	Use of Koha system in the Sudanese university libraries	Abdelbagi younis Ismail	2019
4	Adab AL-Kufa	Direct speech acts in AL - Bahaee fundamental researches	Professor Dr. Suaed Kareem Khushaif	2020
5	Adab AL-Kufa	The open space in the novel, Return to Lagash, by Rasmia Mahibes	Master's student Ali Jawad Kadhim Al-Aqili, Master's student Ali Jawad Kadhim Al-Aqili, Ph.D. Khaled Huwair Al-Shams	2020
6	Adab AL-Kufa	Quranic grammar in contemporary linguistic discourse: reading and guidance	Professor Dr. Ali Farhan Jawad, Researcher Hanan Fadel Jabir Muhammad	2020

7	Adab AL-Kufa	Paganism and its effect on Judaism Common search	Prof. Dr Khaled Musa Abdul Husseini, Assistant teacher Salam Gnawey Abbas	2020
8	Adab AL-Kufa	A speech of identity between similar and altruistic : book "Europe and Islam" by Hisham Jaiit : Study and criticism " Every question about the other hide the obsession with this other : Hisham Jaiit	Associate Professor Dr. Karima Muhammad Karbia	2020
9	Adab AL-Kufa	The Mawali and their pioneering role in the prosperity and development of Abbasid poetry	Doctorate student Jasem Oghba, Assistant Professor Dr. Yaber Delphi, Associate Professor Dr. Abdol Reza Attash	2020

10	Adab AL-Kufa	The Symbolism of Mysticism in the poems of SohrabSepehri and Adeeb Kamal al-Din	DR,Naeem Amouri, Phd Afifeh mohedian attar	2020
11	Adab AL-Kufa	Features of contemporary hypocrites in the Holy Quran	PhD student Abdulhojah Halwaei Lengeh, Dr.Masoumeh dehghan	2020
12	Adab AL-Kufa	Gadamer's Conception of the Phronesis or Practical Wisdom as a Basis for Action Research Method	Ph.D Student Mohammad Jaberi Nar, Associate Proffessor Parvane Valavi, Professor Masoud Safaei Moghaddam, Assistant Professor Ali Reza Haji Yakhchali	2020
13	Adab AL-Kufa	Women's clothes and their historical importance In light of archaeological statues In the Arab before Islam	Assist. Prof. D. Hameed Mustafa Naji Al-Yasiri	2020

14	Adab AL-Kufa	Money laundering criminalization in view of jurisprudential rules	PHD student Abdolbary Javanmard zadeh, Dr. Rahim Sayyah, Dr. Seyyd Mohammad Hasan Malekeh Poor Shooshtari	2020
15	Adab AL-Kufa	Consider the structures of the best of hadith	PHD student Tahereh.nobahar, Dr Sayed.akbar.ghazanfari	2020
16	Adab AL-Kufa	A study of the style and linguistics of Ibn Ashour in his interpretation Tahir va Al-tanvir (Surat Al-kahf as an example	doctor Abdollah foroozanfar, Researcher Mazyar Haghghi	2020
17	Adab AL-Kufa	The linkage between the East and the illumination in the thought of Mikhail noaima	Mohammad layeghian Javan., Thesis advisor: Mohammad shayegan mehr(Ph.d)	2020

18	Iraqi Journal for information	Communication and Digital communication an approach to cultural diversity and domination	Dr. sundus.sarhan, zeinababadi	2019
19	Adab AL-Basrah	Forms of standard exaggeration in Holly Quran Between the Morphological Function and the Quranic Context	Asst. Prof. Nadhim Ali Ebadi (PhD)	2020
20	Adab AL-Basrah	The Speech Strategies in the Debates of Saiad Ibn Al-Hasan Ibn Essa Al-rabae linguistic Deceased in (417 AH)"approach Deliberative"	Prof.Dr.Khalid Naeim Shinawa	2020
21	Adab AL-Basrah	British Economic Relations during the Conservative Party government (1951-1964)	Assistant Dr. Raghad Faisal Abdel Wahab	2021

22	Athar AL-Rafedain	Tamarisk Tree in Light of Cuneiform References	Assit.Prof.Dr. Fatimaa Abbas Salman ,Prof.Dr. Saad Salman Fahed,	2021
23	Adab AL-Basrah	Louis Massignon in Edward Said and Contemporary Orientalists Studies	Assistant Professor Dr. Majid Abdul Hamid Al Kaabi	2021
24	Adab Adab Rafedain	The Stance Of ABI-Attaieb IEB ALmutanabi from his envious Rivals	Prof. Dr.Hashim Salih Manna	2013
25	Adab Adab Rafedain	The Didactic Approach in: Al-FaDa Al-MuDii'a Fi Sharih Al-Shadhra Al-dhahabiya	<i>Asst. Prof. Dr. Nawfal Al-Rawi</i>	2013
26	Adab Adab Rafedain	The Stylistic Innovation in the Ibn Abd-Rabba Andalusia's Poetic Discourse q	Dr. Ghaidaa Ahmed Sa'doun Dr. Mazin Muaffa	2018
27	Adab Adab Rafedain	Aesthetics of Antonymic Patterns in the Poetry of Ibn Muqbil.	Prof. Dr. Ann Tahseen Al-Chalabi	2018
28	Adab Adab Rafedain	AL-Mutamid Ibn Abbad A Lexicographic Study	Lect.Dr.Fawaaz Ahmad Mohammad	2018

29	Adab Adab Rafedain	Al.Shamrdel Al.yarbo'ee Poetry - Rhythmic	Asst.Prof.Dr. Nuha Muhammed Omar, Noor Mukhlif Saleh	2018
30	Adab Adab Rafedain	The Qur'anic Triads : A Rhetorical Study : Baqra Sura as a Sample	Dr Qasim Fathi Suleiman	2018
31	Adab Adab Rafedain	Oral communication aesthetical in honored prophetic tradition Sahih AL-Bukhari as a model	Prof. Dr. Mohammad thannon younis alfath	2018
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