



**Coherence, Cohesion and Schema Theory:
A Linguistic Approach
to Quranic Narratives**

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Abstract:

This study proposes a linguistic approach for improving the comprehension, memorization and recall processing of the Quranic narratives in the light of schema theory through building coherence and cohesion schemata in the minds of the learners. This can be done by first instructing the learners about the concepts of coherence and cohesion, and then analyzing a narrative text using these concepts. The study recommends that building linguistic coherence-cohesion schemata in the learners' minds might enhance their understanding, memorization and recall abilities. It is hoped that the suggested linguistic approach presented here might open the door into the topic of comprehension, memorization and recall for Quranic and non-Quranic narratives alike.

Keywords: Coherence, Cohesion, Recall, Schema theory, Narrative.

تماسك النص وترابطه، ونظرية المخطط الذهني: مدخل قائم على علم اللغة للقصص القرآني

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الملخص:

تتترح هذه الدراسة مدخلاً قائماً على علم اللغة لتحسين عملية فهم وحفظ وتذكر القصص القرآني في ضوء نظرية المخطط الذهني وذلك من خلال بناء مخطط ذهني لتماسك النص وترابطه لدى الدارسين. ويتم ذلك عن طريق شرح مفهومي تماسك النص وترابطه للدارسين ثم استخدام هذين المفهومين في تحليل نص قرآني. وتوصي الدراسة ببناء مخطط ذهني لتماسك النص وترابطه في عقول الدارسين والذي قد يساعدهم على تحسين قدرات الفهم والحفظ والاسترجاع لديهم. وتأمل هذه الدراسة أن يفتح هذا المدخل اللغوي المقترح الباب أمام موضوعات الفهم والحفظ والتذكر لكل من النصوص القرآنية وغير القرآنية.

مصطلحات أساسية: تماسك النص، ترابط النص، التذكر، نظرية المخطط الذهني، السرد.

Introduction

The traditional practice of memorizing the Holy Quran is that the teacher reads a chapter or passage of a chapter, and then the learners repeat after him several times for correct pronunciation. After that, learners are left with their responsibility of repeating the assignment. On the second day, they are requested to recite it to the teacher. Though this traditional method sometimes proves useful because “memory is simply a skill that can be improved with practice”¹, this almost exclusive emphasis on repetition and practice ignoring the reading process does not tell us what actually happens in the learners’ minds. Consequently, it is important to make use of modern linguistic theories, particularly in psycholinguistics research, to help the learners to understand, store and retrieve information.

Aim, procedures and text of the study

The main aim of the study is to introduce a linguistic approach that might improve learners’ understanding, memorization and recall of the Quranic narratives through building two types of schema in the minds of the learners: structural coherence schema and linguistic cohesion schema. With this aim in perspective, the study uses coherence and cohesion theories to analyze a narrative text in the Holy Quran.

The text under analysis is Chapter (71) *Nuuh*’ Noah’, which includes 28 verses. This Chapter has been chosen

for analysis because it has the elements of a narrative story; a plot, climax, anti-climax and characters. The Chapter tells the story of Noah. The spirit of the story teaches us an important lesson that we all are responsible to respect each other and to abide by the laws that secure our living in a peaceful and righteous society. Moreover, the Chapter teaches us about the devastating physical, spiritual, social, and legal repercussions of violating God’s moral laws.

Schema theory

The emergence of schema theory is attributed to Bartlett in his book *Remembering*, which included an account of his empirical studies. In this book, he proposes that our understanding and remembrance of events are formed by our prior knowledge, which is presented mentally in a sort of schemata². In 1960, schema theory had been influenced by psycholinguistics, particularly Goodman’s psycholinguistic model of reading. In this model, Goodman compared the reading process to a ‘psycholinguistic guessing game’ and proposed that human memory consists of levels of structures called schemata, each of which contains our knowledge about any event³. Then, Smith considered reading as an interactive process between the reader and the text⁴. Coady elaborated on this basic theory and suggested an extended model in which he proposed that comprehension is a product of the interaction between the background information of the reader and his conceptual abilities⁵.

The following are the main characteristics of schemata. First, schemata are organized structures. Bartlett considers the memory to consist of organized cognitive structures that are formed over time. These structures or schemata are the basis for encoding and decoding the recall of ideas⁶. That is schema “represents relationships among its component parts”⁷. As a result, schemata form network of knowledge as humans receive new information and organize it around their previously existing schemata, forming “networks of connected ideas”⁸. Second, schemata, as stated by Anderson and Pearson, exist in abstract forms; they are abstract representations of our experiences⁹.

The third aspect of schema is its dynamic structure. As a result of learning new information in our everyday life, our memory changes through constant interpretation and adaptation to new experiences. Rumelhart and Ortony consider schema as “a cognitive template against which new inputs can be matched and in terms of which can be comprehended”¹⁰. Psycholinguists used this concept of schemata to understand the factors affecting the comprehension and remembering processes. Furthermore, Anderson and Pearson maintain that “reader’s schemata, or knowledge already stored in memory, function in the process of interpreting new information and allowing it to enter and become a part of the knowledge store”¹¹. Thorndike and Hayes-Roth call this phenomenon

‘bottom-up’ and ‘top-down’ processing¹².

Bottom-up processing is used to realize new information contained in the text. Top-down processing, on the other hand, makes use of previous knowledge (schema) to analyze and interpret the new information. Adopting this concept, Rumelhart views comprehension process to be composed of input information that is mapped against some schemata that have already existed in our minds¹³. This bottom-up and top-down processing can help readers to improve reading comprehension by moving from top-down information to predict or interpret the bottom-up incoming meaning offered by the text^{14, 15}.

Building structural coherence schemata

In this part, the concept of coherence is first explained, and then followed by an analysis of the coherence in the concerned text.

The concept of coherence

Coherence is a semantic property of texts. It links the underlying ideas of the text, expresses its sense continuity, forms its logical organization and develops its thematic content. Moreover, coherence operates on the underlying meaning of the text and expresses its overall unity in which the meaning of two discourse segments goes beyond the meaning of each part¹⁶. The concept of coherence occupies an important place in psycholinguistics theories¹⁷. To these theories, coherence is a cognitive phenomenon¹⁸ and it expresses ‘conceptual relations’¹⁹.

Coherence is divided into global coherence (macrostructure) and local coherence (microstructure). Global coherence occurs between larger segments of a text and it functions as its overall organization. This global meaning or macrostructure is “a theoretical construction of intuitive notions such as ‘topic’ or ‘theme’ of a discourse”²⁰. The text is globally coherent if all propositions “can be subsumed under the same macroproposition or several macropropositions” and “if it has at least one macroproposition, denoting a macro-fact or a macro-event”²¹. This macroproposition is usually expressed in a text in the introductory paragraph²².

Local coherence, on the other hand, is the interrelatedness between adjacent discourse segments. This microstructure that contains the microproposition is the sequence of propositions relative to the macroproposition and to each other. This type of coherence can be expressed through two basic types of relation: Conditional and functional relations. Conditional relations are referential semantic relations in which micropropositions or a sequence of sentences are connected through *reasons, causes or consequences*²³. Functional relations, on the other hand, are also semantic relations in which micropropositions are related through *generalization, specification or explanation*²⁴.

Coherence in the text

Coherence is realized in the Chapter by both global and local coherence.

This conceptual mapping forms schema activators that might help learners to understand, retain and recall the verses.

Global coherence. This twenty-eight verse Chapter begins with an introductory verse that gives the topic (macroproposition) and background information. This “macrostructure allows readers to know and understand the topic of a discourse by reading only part of the text, namely the top-most macroproposition that cognitively controls lower level propositions and that serves a strategic control function”²⁵. This introductory verse will be called the ‘topic verse’, which is similar to the thesis statement or topic sentence and it is important in forming the overall unity of the text²⁶. Then the subsequent verses include the micropropositions that denote functional and conditional coherence relations related to the macroproposition.

The macroproposition is clear in verse (1), which introduces the main theme of the whole Chapter; Noah’s warning to his people and God’s punishment to them.

Verily, We sent Nuuḥ (Noah) to his people (saying): ‘Warn your people before there comes to them a painful torment (1) (Translation of the meaning of verses is taken from Al-Hilaalii and Khaan)²⁷.

Then the Chapter moves from the general to specific; there is a main claim (macroproposition) introduced in the introductory verse, as global coherence, and five supporting ideas (micropropositions) for that claim, that

will be presented in the local coherence.

Local coherence. Local coherence can be semantically indicated without any linguistic cues. For instance, sentence (B) is a specification of a previous sentence (A) and sentence (C) is a consequence of sentence (B). These are functionally coherent sentences. Thus, the local coherence between the sentences is not indicated by connectives, but by juxtaposition of sentences. However, conditional relations that participate in the coherence of a text can be indicated by connectives between micro relations²⁸. This type of coherence can be signaled by cues, such as *if* and *because* showing how events are related in an overall structure, e.g. time, location, causality, and sequencing of events²⁹.

Based on experiments, Bartlett found that it is easier to recall information related to the theme or the plot of a story than information unrelated to that theme³⁰. Moreover, since we aim at understanding the text, local coherence relations should be identified because, as Gernsbacher declares that text comprehension involves the construction of a coherent representation of a text's meaning³¹. Five micropropositions, related to main theme, have been found and classified. This macro-micro hierarchy of text meaning can be presented as follows:

Macroproposition: Noah's warning to his people and God's punishment to them (verse 1)

Micropropositions:

- 1- Noah's first calling to his people and their first reaction (verses 2-7)
- 2- Noah's second calling to his people and their second reaction (verses 8- 24)
- 3- The reaction of God (verse 25)
- 4- Noah's pre-conclusive reaction (verses 26-27)
- 5- Noah's conclusive reaction (verse 28)

The first microproposition is Noah's first calling to his people and their first reaction. Verse (3) is a specification of verse (2); it delimits the message of Noah in three orders:

He said: 'O my people! Verily, I am a plain warner to you,' (2)

'That you should worship Allah (Alone), fear (be dutiful to) Him, and obey me' (3)

Verse (4) is functionally related to verse (2) and (3) through consequence, they will obtain good results if they obey God. The following verse includes the first result.

'He (Allah) will forgive you of your sins and respite you to an appointed term. Verily, the term of Allah when it comes, cannot be delayed, if you know.' (4)

Verse (5) shows that Noah turns to God telling Him that he called his people all the time,

He said: 'O my Lord! Verily, I have called to my people night and day (i.e. secretly and openly to accept the doctrine

of Islamic Monotheism) (5)

However, there are two results in verses (6) and (7):

'But all my calling added nothing but to (their) flight (from the truth) (6)

The second result expresses a development in their character through four developmental results. The insertion of letters within the verses is mine, and only used for clarification. Thus, (7b-e) are the results of the event in (7a).

'And verily, every time I called to them that You might forgive them (a), they thrust their fingers into their ears (b), covered themselves up with their garments (c), and persisted (in their refusal) (d), and magnified themselves in pride' (e) (7)

The second microproposition is Noah's second calling to his people and their second reaction. Noah turns to his people for the second time and insists on calling to them to guide them to the right path.

'Then Verily, I called to them openly (aloud).' (8)

'Then Verily, I proclaimed to them in public, and I have appealed to them in private.' (9)

Verses (10-12) are specification of his call presented in verse (9):

'I said (to them) 'Ask forgiveness from your Lord, Verily, He is Oft-Forgiving (10)

'He will send rain to you in abundance, (11)

'And give you increase in wealth and children, and bestow on you gardens and bestow on you rivers.' (12)

Noah uses another strategy, namely questioning, in his call to his people. He reminds them of the blessings of God. He questions them in verse (13):

'What is the matter with you, that [you fear not Allah (His punishment), and] you hope not for reward (from Allah or you believe not in His Oneness)' (13)

Through the use of coherence semantic relation of explanation, this questioning is detailed to Noah's people in verses (14-20), which numerates the blessings of God:

'While He has created you in (different) stages [i.e. Nutfah, 'Alaqah and then Mudghah]' (14)

'See you not how Allah has created the seven heavens one above another?'' (15)

'And He has made the moon a light therein, and made the sun a lamp?' (16)

'And Allah has brought you forth from the (dust of) earth (17)

Afterwards He will return you into it (the earth), and bring you forth (again on the Day of Resurrection)' (18)

'And Allah has made for you the earth a wide expanse' (19)

'That may you go about therein in broad roads' (20)

Again, using the same coherence strategy of explanation, Noah turns to

God for the second time to complain and explain their behavior. Their behaviours explain a third development in their personality.

'Nuuḥ (Noah) said: My Lord! They have disobeyed me, and they followed one whose wealth and children give him no increase but loss' (21)

'And they have plotted a mighty plot' (22)

This disobedience in (20) is explained in (23) and (24). Moreover, (23b) is a specification of (23a). (23b) specifies particular idols they worship.

'And they have said: 'You shall not have your gods: (a) nor shall you leave Wadd, nor Suwaa⁹, nor Yaghuth, nor Ya⁹uq nor Nasr' (these are the names of the idols) (b)' (23)

'And indeed they have led many astray. And (O Allah): 'Grant no increase to the Zaalimuun (polytheists, wrong-doers, and disbelievers) except errors' (24)

God's reaction to the disobedience of Noah's people represents the third microproposition in the Chapter. The mentioning of torment presented in the macroproposition in the topic verse (1) is now clearly explained in the microproposition presented in verse (25).

Causal coherence is the most important type of coherence in storytelling. This causal relationship is sometimes indicated by the simple causal *because*. Because of their sins in (25a), three devastating consequences happened in (25b-d).

Psycholinguistically, Noordaman and Sanders, in their empirical study, maintain that the use of causal relations helps the readers to retain meaning³².

'Because of their sins (a) they were drowned (b), they were made to enter the Fire (c). And they found none to help them instead of Allah (d)' (25)

Noah's pre-conclusive reaction in (26) comes also as a result of their sins presented in (25a).

'And Nuuḥ (Noah) said: 'My Lord! Leave not one of the disbelievers.' (26)

Conditional coherence is also found in the text. Noah's pre-conclusive reaction to his people's disobedience expresses this conditional coherence indicated by the conditional *if*. Noah expects a fourth development towards disobedience in his people's personality. (27b-c) are two results of (27a).

'If You leave them (a) they will mislead Your slaves (b), and they will beget none but wicked believers (c)' (27)

This conditional link between personality and events is central to local conditional coherence because it expresses a developmental change in personality following an event³³.

The last microproposition, presented in the last verse, is the conclusion to the whole Chapter. In a coherent text, the conclusion sums up the whole ideas³⁴. At the end of the Chapter, Noah asks God forgiveness for himself, his parents and believers, and destruction for wrongdoers.

'My Lord! Forgive me, and my parents, and him who enters my home as a believer, and all the believing men and women. And to the Zalimun (polytheists, wrong-doers, and disbelievers) grant you no increase but destruction!' (28)

After explaining the coherence relation in the text to the learners to build coherence schemata in their minds, the next step is to explain cohesive ties in the text to them to build cohesion schemata in their minds.

Building linguistic cohesion schemata

After establishing structural coherence schemata, our suggested approach moves to building linguistic cohesion schemata. Building structural coherence schemata, through explanation and application by the researcher, is introduced first to the learners because mastering structural coherence enables learners to establish linguistic cohesion when producing narrative, as they will have more sources to devote to linguistic cohesion³⁵. The next step is that the learners are introduced the concept and types of different cohesive devices, and then these devices are used to analyze cohesive ties in the text ties in the text.

The concept of cohesion

The theory of cohesion used in this study to analyze cohesive ties in the text was introduced in 1975 by Halliday and Hasan³⁶. These devices can be used as discourse markers to link the events of a story, rather than story propositions³⁷. Cohesion, as the case of coherence,

is important for understanding the text because cohesive devices are used to signal relation between two events, thus facilitating comprehension (Gernsbacher1997)³⁸. Moreover, the more the learners use cohesive devices, the more coherent and understandable the text will be^{39,40}.

There are several researches in text and information mapping strategies and their application to improve comprehension. For example, Hughes mentioned some examples such as mapping techniques or spatially constructed diagrams that are composed of boxes and arrows or radial diagrams⁴¹. These techniques are effective in understanding cohesive relations in the text, improving reading comprehension, hence better recall^{42,43}. Furthermore, Crossley and McCNamara consider textual cohesion as a "critical aspect of successful language processing and comprehension and is premised on building connections between ideas in a text"⁴⁴.

Cohesion in the text

There are two types of cohesion; lexical cohesion and phonological cohesion.

Lexical cohesion. Lexical cohesion is generally defined as meaningful connections in texts that are realized through lexical items^{45,46}. Halliday and Hasan, in their theory of lexical cohesion, divided lexical cohesion into two main types: reiteration and collocation. Reiteration includes simple repetition, synonymy, antonymy and hyponymy.

Collocational cohesion results from the co-occurrence of lexical items associated with one another⁴⁷.

Simple repetition means repeating the exact word or phrase. Identifying the repeated lexical items in the whole Chapter might have a good effect on understanding and remembering the verses because “writers of any kind of text produce particular effects on readers if they keep repeating the same words”⁴⁸. Most importantly, this activity is important in building learners’ content schema because “the mind is stimulated by key words or phrases in the text or by the context that activates a knowledge schema”⁴⁹. The following repeated lexical items are identified in the text. The numbers of verses that include the lexical item are included between brackets followed by an explanation of the meaning of this lexical item.

- 1- *qaala* ‘said’ (2, 5, 21, 26). Noah called to his people several times to stop wrongdoing.
- 2- *qawm* ‘people’ (1 (repeated twice), 2, 5). Those people are his target.
- 3- *Nuuḥ* ‘Noah’ (1, 21, 26). Noah is a main character in the story.
- 4- *laataḍarunna* ‘you shall not leave’ (23 (repeated twice)). Noah’s people insist on disobedience.
- 5- *taḍar* ‘leave’ (26, 27). Noah’s emphasizes that his people should be destroyed.
- 6- *rabb* ‘my Lord’ (5, 21, 28). Noah

complains to God.

- 7- *?allaah* ‘God’ (3, 4, 17, 19), God is one of the participants in the story.
- 8- *tazid* ‘Grant You no increase’ (24, 28). Noah’s emphasizes that his people should be punished.
- 9- *?al?arD* ‘the earth’ (17, 19, 26). The earth can be a blessing or curse.
- 10- *ja9ala* ‘has made’ (16 (repeated twice), 19). God created the universe for the sake of man.
- 11- *?aZZaalimiina* ‘wrong-doers’ (24, 28). This is an emphasis that they are wrong-doers.

This repetition of the above eleven words, as same-lexical items, is important for the learners in many respects. First, the same-word repetition of lexical items connected to the participants, Allah, Noah and Noah’s people helps the learners to understand the main traits of these characters. Discussing the relationship between simple repetition and character portrayal in essays written by participants, Reynolds says that “at the semantic level, the repetition of key words makes clear whom the essay is about and what the most important attributes of person are”⁵⁰. Second, the repetition of content words “plays an important part in reinforcing the key content”⁵¹.

The second cohesive device of simple repetition is synonymy. De Beaugrand and Dressler (1981: 49) define synonymy as “repeating content by conveying it with different expressions”⁵². The following

synonymous relationships are identified in the text.

- 1- *ya?tiyahum* ‘comes to them’ (1), *jaa?a* (4) ‘it comes’. The repetition of these two synonymous verbs conveys the meaning that God does not break His promise if He intended to punish some people.
- 2- *?aZZaalmiina* ‘wrong-doers’ (24) are referred to throughout the text with different synonymous names: *?alkaafiriina* ‘disbelievers’ (26) *faajiran* ‘wicked’ (27) and *kaffaaraa* ‘disbeliever’ (27). The variation of naming the wrong doers by different names indicate their various bad qualities.
- 3- *jahaaraa* ‘openly’ (8) is expressed as *?a9lantu* ‘I proclaimed in public’ (9). These two synonyms explain the variation in Noah’s method of calling to his people.
- 4- *ḍunuubikum* ‘sins’ (4) is relexicalized as *xaTii?aatihim* ‘sins’ (25). These two synonymous words show the varieties in their sins.
- 5- *?aTwaaraa* ‘stages’ (14) is expressed as *Tibaaqaa* ‘one after another’ (15), which both show that the creation of both man and the universe comes in stages for perfection.
- 6- *nuuraa* ‘light’ (16) is repeated as the near-synonym *siraajaa* ‘lamp’ (16), which both give light that is necessary for the living of human beings.

Antonymy is the third division of

simple repetition of cohesive devices. Three types of antonyms are identified and explained. First, when two lexical items express only two possibilities, they are said to be in complementary relation. These antonyms are ungradable. That is “the presence of one sense component excludes another”⁵³, such as *open/shut*, *pass/fail*. The following complementary antonyms have found in the text.

- 1- *ya?tiyahum* ‘comes to them’ (1) and *jaa?a* ‘it comes’ (4) are repeated as the antonym *yu?axxar* ‘be delayed’ (4). This relationship intensifies the same idea expressed above by synonyms that God does not break his promise if He intends to punish wrong doers.
- 2- *jahaaraa* ‘openly’ (8) and *?a9lantu* ‘I proclaimed in public’ (9) are the antonyms of *?asrartu* and *?israara* ‘appealed in private’ (9), which also indicate the variation in Noah’s way of calling to his people.
- 3- *firaaraa* ‘flight’ (6) and its three antonyms *?ittaba9uu* ‘followed’ (21) *daxala* ‘enters’ (28) and *la tarjuuna* ‘fear not’ (13) show Noah’s people deviation from the right path, contrary to the believers.
- 4- *?aTii9uuni* ‘obey me’ (3) and *9aSawnii* ‘disobeyed me’ (21) are two ungradable antonyms that express two opposite poles; Noah’s people rejected his call as opposed to the believers who obeyed him.
- 5- *?istakbaru* ‘magnified themselves in pride’ (7) is the opposite of *waqaaraa*

‘fear Allah’ (13). The two opposites show the feeling of pride of Noah’s people, paying no respect to Allah.

- 6- *?aZZaalimiina* ‘wrong-doers’ (24), *?alkaafiriina* ‘disbelievers’ (26), *faajiran* ‘wicked’ (27) and *kaffaaraa* ‘disbeliever’ (27) are opposed to *mu?miniina* and *mu?minaati* ‘the believing men and woman’ (28). This complementarity of meaning expresses the idea that Noah’s people are of two parties either believers or disbelievers.

The second type of antonym is ‘converses’⁵⁴. It indicates a ‘reciprocal relationship’⁵⁵, such as *buy/sell*, *husband/wife*, *father/son*. This type includes also spatial positions, such as *above/below*, and kinship terms, such as *uncle/aunt*⁵⁶. The following example of converses has been found.

‘*mu?miniina* and *mu?minaati*’ (28) ‘believers of men and woman’ are two converses. This shows that those followed Noah are males and females.

In addition, two pairs of spatial converses are found in the text. The first pair is expressed by two lexical items, whereas the second is expressed by prepositions, as presented in verses (17) and (18), respectively.

yu9iidukum ‘He will return you’ (18)
yuxrijukum ‘He will bring you forth’ (18).

Min ‘from’ (17), *fi-haa* ‘into-it’ (18)

The two pairs express the idea that God will make people die, on the Day of

Resurrection, He will bring them forth.

Hyponymy is the fourth type of reiteration. Hyponymy means inclusion in which the ‘upper’ term is the ‘superordinate’ and the ‘lower’ term is the ‘hyponym’⁵⁷. Hyponyms are of three types; unordered-series hyponyms in which “x is a class of y”⁵⁸, ordered-series hyponyms in which there is an order among the lexical items (such as the names of months) and meronymy in which “x is a part of y”⁵⁹.

The semantic mapping or information mapping⁶⁰ are used to identify hyponyms in the text for two reasons. First, semantic mapping is more effective than other activities that teach words because it allows learners freedom to search the text for word association, as explained by Zimmerman⁶¹. Second, Palmer considers hyponymy as “the relation of a basic characteristic of the mind: the capacity to classify”⁶² and to “establish memory link”⁶³.

The first type of hyponymy is unordered series of hyponyms that includes the superordinate and subordinate terms. Consider the following example.

?aalihatikum ‘your gods’ (23) is the superordinate term, whereas its subordinates are the names of gods; *Wadd*, *Siwaa9*, *Ya9uuθ*, *Ya9uuq* and *Nasr* (23).

Ordered-series forms the second type of hyponymy. One example is found and it includes ‘parts of the day.’ These two hyponyms show Noah’s continuous

effort to call to his people.

layl ‘night’ and *nihaar* ‘day’ (5)

The last type of hyponymy is meronymy. Meronymy is a part-whole relationship. In our text, we have human body meronymy. Cruse says that “the division of human body into parts served as a prototype for all part-whole hierarchies”⁶⁴.

?aSaabi9ahum ‘their fingers’ (7) and *?aadaanibim* ‘their ears’ (7) are subordinates to the superordinate term ‘human body’. They used their body parts as tools for disobedience.

The second main division of reiteration of lexical items is collocation. To Bloor and Bloor “collocation covers two or more words which can be said to ‘go together’ in the sense of frequency of occurrence”⁶⁵. Two types of collocation are found in the text; two-word collocates and lexical sets. Ten two-word collocates are identified in the text.

- 1- *9aadaabun ?aliim* ‘a painful torment’ (1)
- 2- *nadiirun mubiin* ‘a plain warner’ (2)
- 3- *?ajalin mmusammaa* ‘an appointed term’ (4)
- 4- *samaawaatin Tibaaqaa* ‘seven heavens one above another’ (15)
- 5- *?alqamaranuuraa* ‘the moon a light’ (17)
- 6- *?aššamsa siraajaa* ‘the sun a lamp’ (17)
- 7- *?al?arDa bisaaTaa* ‘the earth a wide expanse’ (19)
- 8- *?amwaalin wa baniin* ‘wealth and

children, (20)

9- *maaluhu wa waladuhu* ‘whose wealth and children’ (21)

10- *faajiran kaffaaraa* ‘wicked disbelievers’ (27)

Lexical set is the second type of collocation. Items in a lexical set are grouped under one ‘node’⁶⁶. For example, *phonology – morphology – syntax – semantics* form a lexical set under the node ‘linguistics’⁶⁷.

Lexical set grouping is a visual representation of schematic associations and it is necessary for comprehending a story. In addition, such grouping helps recalling because it is a quality of human mind to organize words into groups⁶⁸. Three lexical sets have been identified and grouped under three nodes. In the following lexical sets, the lexical node is mentioned first, and then followed by the group of words that it underlies.

- 1- Demands of Allah: *?u9buduu* ‘worship’(3), *?ittaquuh* ‘be dutiful’ (3), *?aTii9uun* ‘obey me’ (3) and *?istağfiruu* ‘ask forgiveness’ (10)
- 2- Rewards from Allah: *yağfiru* ‘forgive’ (4), *yu?axxirkum ?ilaa ?ajalin musammaa* ‘respice you to an appointed term’(4), *yursilus-samaa?a 9alaykum midraaraa* ‘He will send you rain in abundance’ (11), *yumdidukum bi ?amwaalin wa baniin* ‘give you increase in wealth and children’ (12) and *yaj9al llakum jannaatin we yaj9al llakum ?anhaar* ‘bestow on you gardens and bestow

on you rivers' (12)

- 3- Noah's endeavors to guide his people: *da9awwtu qawmii* 'I called to my people' (5), *?a9lantu lahum* 'I proclaimed to them' (9), *?srarrtu lahum* 'I have appealed to them in private' (9) and *faqullu ?istağfiruu rabbakum* 'I said (to them): 'Ask forgiveness from your Lord' (10)

Phonological cohesion. A second type of cohesion can be achieved in a text by phonological devices. Traugott and Pratt state that "phonology alone can be a source of cohesion in a text, as with alliteration, assonance, and rhyme, all of which involve textual patterning created by repetition of same or similar sounds"⁶⁹. Most importantly, phonological patterns are meaning carriers in the text. In the Holy Quran "words have phonological characteristics that can convey and depict the meaning"⁷⁰. Generally, phonological cohesion in the Quran can be divided into two types; phonological cohesion within the verse itself and phonological cohesion between verses.

The first type of phonological cohesion that comes within verses includes alliteration and rhyme. Alliteration "means repetition of the initial sound of two or more words, as in *big bat in belfry*. In alliterative verse, sound-unity is provided in every line by alliteration"⁷¹. Alliterative words in the Quran impress the readers, hence affect their memory because "the Quran uses the sound effects to make the meaning more impressive"⁷². In the following examples, alliteration

inside verses is achieved by repeating the first sound at the beginning of words.

- 1- /q/: *qawmihi* 'his people', *qawmaka* 'your people' and *qabla* 'before' (1), *qaala* 'he said' and *qawmi* 'my people' (2)
- 2- /ʔ/: *?ajalin* 'term', *?ajala* 'term' (4) and *?in-naka ?in taðarhum* 'If You leave them' (27)
- 3- /j/: *yağfir* 'forgive', *yu?axxirkum* 'respite you', *yu?axxar* 'be delayed', *yumdidkum* 'give you', *yaj9al* 'bestow on you' and *yaj9al* 'bestow' (12)
- 4- /s/: *sab9a samaawaatin* 'seven heavens' (15)
- 5- /m/: *makaruu makran* 'they have plotted a plot' (22)

The second phonological device that achieves cohesion within verses is rhyme. Rhyme is "similarity or identity in sound; two words rhyme when the stressed vowel and succeeding sounds are identical, as in *grey-bay, breaking-shaking*"⁷³. The following eight examples exemplify the rhyming words within the same verse.

- 1- /uu/: *ja9aluu* 'they thrust', *?aSarruu* 'they persisted' and *?istakbaruu* 'magnified themselves' (7), *?uğriquu* 'they were drowned', *?udxiluu* 'they were made to enter' and *yajiduu* 'they found' (25)
- 2- /hu/: *yazidhu* 'give him increase', *maaluhu* 'whose wealth' and *waladuhu* 'whose children' (21)
- 3- /an/: *laylan* 'night', *nihaaran* 'day'

- (5), *waddan* ‘Wadd’ and *siwaa9an* ‘Suwaa’ (23)
- 4- /a/: *ya9uu0a* ‘Ya9uu0’ and *ya9uuqa* ‘Ya9uuq’ (23)
- 5- /aa/: *naaraa* ‘the Fire’ and *?anSaaraa* ‘helpers’ (25)
- 6- /yya/: *liwaalidayya* ‘my parents’ and *baytiyya* ‘my home’ (28)
- 7- /kum/: *lakum* ‘to you’, *0unuubakum* ‘your sins’ and *yu?axxirikum* ‘respice you’ (4) , *yumdidkum* ‘give you’, *lakum* ‘to you’ and *lakum* ‘to you’ (12)
- 8- /hum/: *da9awthum* ‘I called to them’, *lahum* ‘to them’, *?aSaabi9ahum* ‘their fingers’, *0iyaabahum* ‘their garments’ (7), *da9awtuhum* ‘I called to them’ and *lahum* ‘to them’ (8 (repeated twice))

As for rhyme, as phonological cohesion between verses, two patterns have been identified in the Chapter. Pattern one has the form /VVCVV/ and it is expressed as /aaraa/, with one consonant in the middle. This pattern expresses the meaning of abundance in everything, as shown in the following four examples.

- 1- Noah’s endless effort to guide his people: *nihaaraa* ‘day’ (5), *jihaaraa* ‘openly’ (8), *?israaraa* ‘in private’ (9) and *?aTwaaraa* ‘stages’ (14)
- 2- Noah’s people’s endless effort to disobey him: *kaffaaraa* ‘disbeliever’ (27), *firaaraa* ‘flight’ (6), *?istikbaaraa* ‘pride’ (7), *waqaaraa* ‘fear’ (13) and *kubbaaraa* ‘mighty’ (22).

- 3- God’s overflowing blessings if Noah’s people obey Him: *9affaaraa* ‘Oft-Forgiving’ (10), *midraaraa* ‘in abundance’ (11) and *?anhaaraa* ‘rivers’ (12)
- 4- God’s severe punishment of Noah’s people if they disobey Him: *xasaaraa* ‘loss’ (21), *?anSaaraa* ‘helpers’ (25), *dayyaaraa* ‘disbeliever’ (26) and *tabaaraa* ‘destruction’ (28)

The second pattern of rhyme has the form /VVCVV/ and it is expressed as four phonological forms in which the middle consonant varies as /q, j, t, T/. This pattern shows one important meaning, which is the easiness in creating things – an indication that God is All-Mighty.

- 1- /aaqaa/: *Tibaaqaa* ‘one above another’ (10)
- 2- /aajaa/: *siraajaa* ‘lamp’ (16), *?ixraajaa* ‘bring you forth’ (18) and *fijaaqaa* ‘broad’ (20)
- 3- /aataa/: *nabaataa* ‘from the dust of the earth’ (17)
- 4- /aaTaa/: *bisaaTaa* ‘a wide expanse’ (19)

To conclude, the rhyming words both within the same verse and between verses combined with meaning might leave an effect on the readers’ remembering and recall of a text because combining rhyme with meaning can have a very powerful effect on retention⁷⁴.

Recommendations of the study

The first recommendation concerns

the learners. The study touches on the active role of the learners of the Holy Quran. They should be instructed about the concept of coherence and cohesion, and analyze their relations in the text, and then they are left to read the narrative by themselves equipped with already built coherence-cohesion schemata. In this case, they exert an effort to relate what they are reading, which is a lower level, to their already built schemata, which is a higher level.

Another recommendation of the study concerns the teachers. Teachers can change their instructional method by building schemata in the learners' minds. The learners might become successful if they are previously instructed about the topic or text they are studying. Moreover, it is beneficial for the teachers of the Holy Quran to activate learners' schemata and create new ones for efficient understanding and recall.

Conclusion

This study has offered a linguistic approach based on the schema theory aiming at minimizing reading and recalling difficulties, and maximizing comprehension and memorization of Quranic narratives by providing learners with the necessary tool that might help

them building linguistic schemata in their minds to reach the optimum balance needed between the learners' background information and textual information.

Whereas traditional approaches to teaching the memorization of the Holy Quran have focused almost exclusively on the text, schema theory broadens the scope to include both the text and learners. Building structural coherence schema and linguistic cohesion schema in the learners' minds is necessary for comprehending, memorizing and recalling the Quranic narrative texts. This study has called attention to the importance of linguistic schemata in the comprehension and recall of the Quranic narratives. Thus, knowledge of schema theory is of particular importance to teachers who are responsible for understanding, memorization and recall of the Holy Quran.

To conclude, this paper has introduced some modern practices of learning, memorizing and recalling of the Quranic narratives. It is hoped that the suggested approach presented here will open the door for further possible research into the practices of comprehension, memorization and recall for Quranic and non-Quranic narratives alike.

Endnotes

- 1 - Donald Norman, *Memory and Attention: An Introduction to Human Information Processing*, 1.
- 2 - Fredrick Bartlett, *Remembering*.
- 3 - Kenneth Goodman, "Reading: A Psycholinguistic Guessing Game," 260.
- 4 - Frank Smith, *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read*.
- 5 - James Coady, "A psycholinguistic Model of the ESL Reader".
- 6 - Fredrick Bartlett, *op. cit.*
- 7 - Richard Anderson, and Peter Pearson, "A Schema-Theoretic View of Basic Processes in Reading Comprehension," 255-259.
- 8 - Robert Slavin, *Educational Psychology: Theory into Practice*, 155.
- 9 - Richard Anderson, and Peter Pearson, *op. cit.*
- 10 - David Rumelhart, and Alfred Ortony, "The representation of knowledge in memory," 131.
- 11 - Richard Anderson, and Peter Pearson, *op. cit.*, 255.
- 12 - Peter Thorndike, and Barbara Hayes-Roth, "The Use of Schemata in the Acquisition and Transfer of Knowledge".
- 13 - David Rumelhart, "Schemata: The Building Blocks of Cognition".
- 14 - Christine Nuttall, *Teaching Reading Skills in a Foreign Language*.
- 15 - Hesham Alyousef, "Teaching Reading Comprehension to ESL/EFL Learners".
- 16 - Ted Sanders, Wilbert Spooren, and Leo Noordaman, "Coherence Relations in a Cognitive Theory of Discourse Representation".
- 17 - Leo Noordaman, and Wietske Vonk, "The Different Functions of a Conjunction in Constructing a Representation of the Discourse".
- 18 - Jerry Hobbs, "Coherence and Coreference".
- 19 - Ted Sanders, Wilbert Spooren, and Leo Noordaman," *op. cit.*, 94.
- 20 - Teun van Dijk, "Semantic Discourse Analysis," 115.
- 21 - Esam Khalil, *Grounding in English and Arabic Media Discourse*, 43.
- 22 - Esam Khalil, "News Discourse: A Strategy of Recasting".
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- 25 - Esam Khalil, *Grounding in English and Arabic Media Discourse*, 46.
- 26 - Zahariah Pilus, "Coherence and Students' Errors: Weaving the Threads of Discourse".
- 27 - Muhammad Al-Hilaalii, and Muhammad Khaan, *Translation of the Meaning of the Noble Quran in the English Language*.
- 28 - Leo Noordaman, Ted Sanders, and Wilbert Spooren, "Towards a Taxonomy of Coherence Relations".

- 29- Morton Gernsbacher, "Coherence Cues Mapping During Comprehension".
- 30 - Fredrick Bartlett, *op. cit.*
- 31 - Morton Gernsbacher, *op. cit.*
- 32 - Leo Noordaman, and Ted Sanders, "The Role of Coherence Relations and their Linguistic Markers in Text Processing".
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- 35 - Lauren Shapiro, and Judith Hudson, "Tell a Make-Believe Story: Coherence and Cohesion in Young Children Picture-Elicited Narratives".
- 36 - Michel Halliday, and Ruqayia Hasan, *Cohesion in English*.
- 37 - Carol Peterson, and Allyssa McCabe (eds.), "Linking Children's Connective Use and Narrative Macrostructure".
- 38 - Morton Gernsbacher, "Coherence Cues Mapping During Comprehension".
- 39 - Scott Crossley, and Danielle McNamara, "Computational Assessment of Lexical Differences in L1 and L2 Writing".
- 40 - Danielle McNamara, Scott Crossley, and Philip McCarthy, "Linguistic Features of Writing Quality".
- 41- Roy Hughes, *Radial Outlining: An Instructional Tool for Teaching Information Processing*.
- 42 - Robert Ruddell, and Own Boyle, "A Study of Cognitive Mapping as a Means to Improve Summarization and Comprehension of Expository Text".
- 43 - John Anderson, and Thomas Anderson, "Mapping: Representing informative text graphically".
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- 48 - Ronald Carter, *Vocabulary: Applied Linguistic Perspective*, 8.
- 49 - Guy Cook, *Discourse in Language Teaching: A Scheme for Teacher Education*, 169.
- 50 - Dudley Reynolds, "Language in the Balance: Lexical Repetition as a Function of Topic, Cultural Background, and Writing Development," 439.
- 51- Thomas Bloor, and Meriel Bloor, *op. cit.*, 102.
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- 54 - John Lyons, *Semantics*, 467.
- 55 - Christopher Ball, "Lexis: The Vocabulary of English." In *The English Language*, 192.
- 56 - James Hurford, and Brendan Heasley, *Semantics: A Course Book*, 118.
- 57 - Frank Palmer, *Semantics*, 85.

- 58 - McCarthy, Michel. *Vocabulary*. Oxford: Oxford University Press, 20.
 59 - Ibid., 20.
 60 - Robert Ruddell, and Own Boyle, *op. cit.*
 61 - Chery Zimmerman, "Historical Trends in Second Language Vocabulary Instruction".
 62 - Frank Palmer, *Semantics*, 203.
 63 - Nick Ellis, "Vocabulary Acquisition: Word Structure, Collocation, Word-class, and Meaning," 215.
 64 - David Cruse, *Lexical Semantic*, 157.
 65 - Thomas Bloor, and Meriel Bloor, *op. cit.* 101.
 66 - John Sinclair, "Beginning the Study of Lexis," 415.
 67 - Michel Halliday, and Ruqayia Hasan, *op. cit.*
 68 - Fergus Craik, and Endel Tulving, "Depth of Processing and Retention of Word in Episodic Memory".
 69 - Elizabeth Traugott, and Mary Pratt, *Linguistics for Students of Literature*, 69.
 70 - Abd Al-Ghani Barakah, *uslub Al-Da'wah Al-Qur'aniyyah*, 331.
 71 - Elizabeth Traugott, and Mary Pratt, *op. cit.*, 400.
 72 - Abd Al-Ghani Barakah, *op. cit.*, 332.
 73 - Elizabeth Traugott, and Mary Pratt, *op. cit.*, 408.
 74 - Alan Baddeley, *Human Memory: Human and Practice*.

Appendix

List of phonemic symbols used to represent the Arabic data

1. Consonants

Manner	Place Voicing	Bilabial	Labiodental	Interdental	Dental Non- Emphatic	-Dento alveolar Em-phatic	Palatal	Velar	Uvular	Pharyngeal	Glottal
Stop	Voiceless Voiced	b			t d	T D		K	q		ʔ
Fricative	Voiceless Voiced		f	θ ð	s z	S Z		x gɣ	ʕ	ħ ʁ	h
Affricate	Voiced						j				
Flap	Voiced				r						
Lateral	Voiced				l						
Nasal	Voiced	m			n						
Glide	Voiced	w					y				

2. Vowels

	Short			Long		
	Front	Central	Back	Front	Central	Back
High	i		u	ii		uu
Mid						
Low		a			aa	

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