

## Discourse Connectors: An Overview of the History, Definition and Classification of the Term

<sup>1</sup>Seyed Ali Rezvani Kalajahi, <sup>2</sup>Ain Nadzimah Abdullah,  
<sup>3</sup>Jayakaran Mukundan and <sup>4</sup>Dan J. Tannacito

<sup>1</sup>Department of Language and Humanities Education,  
Faculty of Educational Studies Universiti Putra Malaysia Serdang, Selangor, Malaysia

<sup>2</sup>Department of English, Faculty of Modern Languages and Communication,  
Universiti Putra Malaysia, Malaysia

<sup>3</sup>Department of Language and Humanities Education,  
Faculty of Educational Studies, Universiti Putra Malaysia, Malaysia

<sup>4</sup>Indiana University of Pennsylvania, USA

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**Abstract:** Many studies have investigated discourse connectors. However, researchers are still grappling with the term in terms of its definition and classification in particular. Many researchers use the term discourse markers (DMs) while others have used terms like linking words, connectives, discourse operators and discourse connectors to refer to the same idea. This paper attempts to better define the term and propose a classification of DCs in written discourse. As is evident from the literature, researchers are unable to agree on the best definition for the term connectors or what is generally known as discourse markers. Researchers in the field have put forward a few different definitions and descriptions of what connectors are and their function in language and some researchers have also developed their own taxonomy and classification for connectors. After reviewing research conducted on connectors, we decided for purposes of this paper to use the term ‘discourse connectors’ mainly because we believe these connectors function to link one portion of information to another one in a text and that while the term discourse marker is a suitable term for spoken discourse, its definition and classification may vary for written discourse. We define DCs as words and expressions that can be accommodated within the text to join one sentence with another sentence or one paragraph to another paragraph or even one idea to another. Finally, we attempt to offer a comprehensive definition and classification of discourse connectors with the aim to provide a better understanding of what DCs are and how they function, with variation from previous reviews of the term.

**Key words:** Discourse connectors • Discourse markers • Definitions of discourse connectors • Classification of discourse connectors

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### INTRODUCTION

A number of studies have investigated discourse connectors [1-3], yet researchers are still unable to clearly define and classify discourse connectors. Some researchers prefer to use the terms discourse markers (DMs) to describe discourse connectors. Some others use words linking words, connectives and discourse operators. Cowan [1] believes that “discourse markers are

words that are used to perform certain functions in a conversation, for example, repairing an utterance, shifting to a different topic, or pausing to consider what to say next whereas discourse connectors are words and phrases that, typically, connect information in one sentence to information in previous sentences” (p.615). In fact, Cowan explains why these terms cannot be used interchangeably. Cowan claims that DMs are words that are not an integral part of a sentence and that used in spoken English for a

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**Corresponding Author:** Seyed Ali Rezvani Kalajahi, Department of Language and Humanities Education,  
Faculty of Educational Studies Universiti Putra Malaysia Serdang, Selangor, Malaysia.

range of functions while DCs link information in the sentence in which they occur to information in the preceding sentences. They differ from DMs not only in their ability to link a sentence to a large piece of discourse, but also because they are less restricted in terms of where they may occur in a sentence. It is from this idea that the researchers in the present study believe that the term discourse connectors is the 'better' word to use.

Discourse connectors (DC's) play a significant role in written discourse. DCs (words like however, although, nevertheless, but, so, furthermore) are more commonly referred to as 'linking words' and 'linking phrases', or 'sentence connectors'. They may be described as the 'glue' that binds together a piece of writing, making the different parts of the text 'stick together' [4]. Without sufficient connectors in a piece of writing, a text would not seem logically constructed and the connections between the different sentences and paragraphs would not be obvious. Horn, Laurence and Ward [5] use the term DM and clarify that the term is generally used to refer to a syntactically heterogeneous class of expressions which are distinguished by their function in discourse and the kind of meaning they encode. It is acknowledged that DCs are not the only expressions that operate as indicators coherence and organizational plan at the level of discourse. The most important message to writers is that extreme care must be taken into account, however, to avoid over-use of discourse markers. Using too many of them, or using them unnecessarily, can make a piece of writing sound too heavy and 'artificial'. They are important, but must only be utilized when required. For example, if a writer aims to claim a contrastive idea, then s/he can opt for connectors that are in contrastive category.

**Previous Approaches to Defining Dcs:** There are three main trends in studies of DMs or DCs (as they are referred to in this paper), namely discourse coherence, pragmatics and systemic functional linguistics [3, 6]. These trends are slightly different from each other in terms of emphasis in the definition because of the varying ways of describing and the understanding of the concept of DMs and analytical methods used to categorize them [6].

The coherence model developed by Schiffrin [7], distinguishes four planes and these planes are classified according to different levels of coherence functions that DMs play, namely exchange structure, (including adjacency-pair like question and answer), action structure (where speech acts are situated),

ideational structure (which is viewed from semantics as idea exchange) and participation framework, (the interaction and relation between the speaker and listener) [3, 7]. The focus of studies based on this model, however, put more emphasis on textual coherence rather than local context.

The second approach proposed by Fraser [3] is from a solely "grammatical pragmatic perspective" (p. 936). He believed that DMs do not merely function as textual coherence but also signal the speakers' intention to the next turn in the preceding utterance. Compared to the coherence model, Fraser seems to have contributed to a more complete, general and pragmatic view of the different discourse markers in a wider context rather than structural organization. In the Chinese classroom environment, Liu [8] conducted a pragmatic analysis on a Chinese literature class and concluded that DMs used in teacher talk have five major textual functions: *connect*, *transfer*, *generalize*, *explain* and *repair*. In the process of constructing the classroom context, he argued that DMs contribute to the functions of discussion, emotion control and adjustment of social relationships [8]. This conclusion has been criticized because of the weak data support and that it may be an over simplified description as it relates little to the classroom context. Similar to Fraser, Blakemore (1992, cited in Fraser, [3]) adopted the Relevance Theory from pragmatics and claimed that Dms only have "procedural meaning" (p. 936) and are limited to specific contexts. Referring to DMs as discourse connectives, Blakemore focused more on DMs' presentation in discourse processing and segments' interrelation [9].

Another recent approach to the understanding of the functions of DMs is through systemic functional grammar (SFG) founded by Halliday and Hasan [10]. Though Halliday and Hasan did not bring up the issue of DMs directly in the analysis of textual function, they investigated words like *and*, *but*, *I mean*, *to sum up etc.* as sentence connectives that perform an important part in semantic cohesion. DMs are regarded as effective cohesive devices with various meanings and functions in segment organization. Their study is based primarily on written texts but it still sheds some light on the importance of DMs in function and meaning construction.

It seems that the above approaches mostly aimed to show that the role of DCs is mainly to minimize the listener's or readers processing effort by limiting the range of interpretive hypotheses he or she has to consider; thus, DCs contribute to efficiency in communication [11].

This being the case, it would be reasonable to assume that the inappropriate use of DCs in a second language (L2) could, to a certain degree, hinder successful communication, leading to a misunderstanding between message sender and receiver. Hence, for successful communicative competence, L2 learners must acquire the appropriate use of DCs in their target language (TL). It is reasonable to assume that L2 learners who are competent in the use of DCs in the target language will be more successful in both verbal and non-verbal interaction than those who are not [12].

### Review of Previous Research

**Terms Variation:** Fraser [3] states that the study of DMs has turned into a growth industry in linguistics, with many articles discussing DM appearing annually. The term DMs though, has different meanings for different groups of researchers. From a review of the literature, the many terms have been used to describe DMs. The terms that have been used are discourse connectors [1], connectives [2], discourse Markers [3], connectors [13], conjunctive adverbials [14], pragmatic particles [15], pragmatic operators [16], cue phrases [17], pragmatic expressions [18], discourse operators [19, 20], phatic connectives [21], pragmatic markers [7, 22, 23], discourse marker [7], pragmatic formatives [24], discourse connectives [25, 26], discourse particles [27], semantic conjuncts [28], discourse signaling devices [29], pragmatic connectives [30] and sentence connectives [10].

Quirk *et al.* [28], Halliday and Hasan [10] and Biber *et al.* [13] used the term discourse markers, but it would be better to take it as non-controversial that, for the most part, the lexical items they discuss may fairly be described as discourse markers. Quirk *et al.* and Halliday and Hasan were concerned with how DMs function as sentence connectors and they investigated how markers operate on the propositional, rhetorical and sequential structure of the discourse as a whole [31]. Further, Tablebinejad and Namdar [32] highlighted that Halliday and Hasan viewed conjunctions or connective elements as discourse markers.

Jucker [33] points out that research has not yielded a definitive list of DMs in English or any other language. Schourup [34] observes that the use of the term by some writers [25, 26, 35] is not intended to reflect a commitment to the existence of a class of DMs at all. Given this lack of agreement, it is not always possible to say that the range of alternative terms which have appeared in the growing

literature in this area - for example, PRAGMATIC MARKER, DISCOURSE PARTICLE, DISCOURSE CONNECTIVE, DISCOURSE OPERATOR, CUE MARKER - are really labels for the same phenomenon. At this stage, then, it is only possible to give examples of expressions which have been treated as DMs in a number of different languages.

Yang [36] states that although the different terminology and labels used to define DMs may vary, it is important to recognize the specific characteristics that most of the labels share. It is generally agreed that DMs have the characteristic of being oral and multifunctional in nature [37, 38]. Archakis [39] and Fung and Carter [9] have generalized four common characteristics of DMs. They say that first of all, syntactically, DMs are flexible in any position of an utterance. DMs can be placed at any position that fits into the utterance. In most cases, however, it is common to find DMs in turn-initial position to signal upcoming information. DMs, to some extent, function to organize the utterance at the structural level [40]. Semantically speaking, removing DMs has no effect on listeners' understanding of the whole meaning of the utterance. DMs can be identified by prosody as a 'separate tone unit' [9]. In other words, they are independent linguistic entities both syntactically and semantically. Lexically, DMs are drawn from lexical phrases like verbs, prepositions, modal words etc. Last but not least, the multi functionality feature differ DMs from other linguistic items. DMs can function at various levels in an interaction [9, 41].

As the discussion of DMs has revealed "discourse marker' is a fuzzy concept" [42]. Nevertheless, some basic characteristics and features shared by discourse markers have been identified. Several of these characteristics and features, which were first compiled by Brinton [43] and later rearranged according to different levels of linguistic description by Jucker and Ziv [42], are listed below.

### Phonological and Lexical Features:

- They are short and phonologically reduced.
- They form a separate tone group.
- They are marginal forms and hence difficult to place within a traditional word class.

### Syntactic Features:

- They are restricted to sentence-initial position
- They occur outside the syntactic structure or they are only loosely attached to it.
- They are optional.

**Semantic Feature:**

- They have little or no propositional meaning.

**Functional Feature:**

- They are multifunctional, operating on several linguistic levels simultaneously.

**Sociolinguistic and Stylistic Features:**

- They are a feature of oral rather than written discourse and are associated with informality.
- They appear with high frequency.
- They are stylistically stigmatised.
- They are gender specific and more typical of women's speech

While this list comprises features that various studies found to be characteristic of discourse markers, it is in no way complete and comprehensive. One may distinguish between prototypical and more peripheral members of the class of discourse markers, "[p] rototypical discourse markers will show most or all of these characteristics; less prototypical markers will have fewer features or exhibit them to a limited extent only" [44]. In order to account for both – more and less prototypical – types of members, it was suggested that we view the class of discourse markers as being on a scale [42, 44].

**Various Definitions and Classifications:** In this section of the paper, we introduce five definitions of DMs that were put forward by different researchers together with the classifications of DMs that were proposed by the researchers. The reason why we have chosen to highlight these five there is because they have been referred to in the literature extensively. It must also be noted that there are other classifications as well that have been developed by other researchers. First and foremost, Fraser [3] prefers the term DMs and he defines DMs as follows:

Discourse markers are a class of lexical expressions drawn primarily from the syntactic classes of conjunctions, adverbs and prepositional phrases. With certain exceptions, they signal a relationship between the interpretation of the segment they introduce, sentence 2 and the prior segment, sentence 1. They have a core meaning, which is procedural, not conceptual and their more specific interpretation is 'negotiated' by the context, both linguistic and conceptual. (p.931)

Dms according to Fraser's classification have procedural meaning and their linguistic and conceptual interpretation is 'negotiated' by the context. Fraser [3] introduces two kinds of DMs. The first group relates to some aspects of S2 to S1 explicitly and the second group relates the topic of S1 to S2. According to Fraser, these are important in understanding function and use of DMs. DMs relate some aspects of the message in S2 and S1. The first class of DMs in Fraser's category is Contrastive Markers. These kinds of DMs show that interpretation of S2 contrasts with an interpretation of S1. Consider the sentence below that contains Dms:

- John weighs 150 pounds. In comparison, Jim weighs 155.

In this sentence, *in comparison* indicates that S2 is in contrast with S1. According to its meaning, this subclass can be divided as:

- a. But
- b. However, (al) though
- c. In contrast (with/ to this/ that), whereas
- d. In comparison (with/ to this/ that)
- e. On the contrary; contrary to this/ that
- f. Conversely
- g. Instead (of (doing) this/ that, in spite of (doing) this/ that, nevertheless, nonetheless, still) [3].

The second subclass is called Elaborative Markers. DMs relate messages in S2 to S1. In these cases, the DM signals a quasi-parallel relationship between S2 and S1:

- You should be always polite. Above all, you shouldn't belch at the table.
- They didn't want to upset the meeting by too much talking. Similarly, we didn't want to upset the meeting by too much drinking.

Finer distinctions include:

- a. And
- b. Above all, also, besides, better yet, for another thing, furthermore, in addition, moreover, more to the point, on top of it all, too, to cap it all off, what is more
- c. I mean, in particular, namely, parenthetically, that is (to say)
- d. Analogously, by the same token, correspondingly, equally, likewise, similarly
- e. Be that as it may, or, otherwise, that said, well [3].

The third class of DMs in Fraser's is called Inferential Markers. These group of DMs shows that S2 is seen as conclusion for S1:

- The bank has been closed all day. Thus, we couldn't make a withdrawal.
- It's raining. Under those conditions, we should ride our bikes.

It can also be said that S1 is viewed as a reason for S2. Thus, it indicates that content of S2 is the conclusion of S1.

Inferential markers can be placed in these subclasses:

- a. So
- b. Of course
- c. Accordingly, as a consequence, as a logical conclusion, as a result, because of this/that, consequently, for this/that reason, hence, it can be concluded that, therefore, thus
- d. In this/ that case, under these/those conditions, then
- e. All this things considered

As mentioned previously, the first main class of DMs relates to some aspect of S1 and S2 and they are called Contrastive Markers, Elaborative Markers and Inferential Markers. The second main class of DMs in Fraser's category is Topic Change Markers.

For example:

- The dinner looks delicious. Incidentally where do you shop?
- I am glad that it is finished. To return to my point, I'd like to discuss your paper.

In the first example, *incidentally* shows that S2 is a digression from the topic of S1, whereas in the other example, *to return to my point* indicates that the speaker intends to reintroduce the previous topic. They are:

*back to my original point, I forget, by the way, incidentally, just to update you, on a different note, speaking of X, that reminds me, to change to topic, to return to my point, while I think of it, with regards to.*

Schiffrin [7] also uses the term DMs rather than DCs and characterizes DMs as deictic and suggests that they have indexical functions. What DMs or pragmatic markers generally do is to point to or index features of the context.

The context to which markers index utterances can be referred to as belonging to different discourse planes: the ideational structure (ideas and propositions), action structure (the way in which speech acts relate to preceding and following or intended actions), exchange structure (turns), information state (management of knowledge and meta knowledge) and participant framework (the speaker-hearer relationship).

When a writer is planning to write a well-organized text, cohesion and coherence are important considerations that the writer must pay attention to. The organization of sentences of a text or a written discourse is not like putting up bricks one upon the other. There exists some relations between those sentences (Feng). Halliday and Hasan [10] have defined a text as "not just a string of sentences. It is not simply a long grammatical unit, something of the same kind as a sentence, but differing from it in size ... a sort of super sentence, a semantic unit" (p. 291).

Discourse relations are believed to transcend grammatical structure. In *Cohesion in English* [10] Halliday and Hasan identify five main cohesive devices in English discourse: reference, substitution, ellipsis, lexical cohesion and conjunction. The conjunction or connective element involves the use of formal markers to relate sentences, clauses and paragraphs to each other. Unlike reference, substitution and ellipsis, the use of a conjunction does not instruct the reader to supply missing information either by looking for it elsewhere in the text or by filling structural slots. Instead, a conjunction signals the way the writer wants the reader to relate what is about to be said to what was said before.

Halliday and Hasan's classification of conjunctions (connective elements) are summarized as follows:

- Additive: and, or also, in addition, furthermore, besides, similarly, likewise, by contrast, for instance;
- Adversative: but, yet, however, instead, on the other hand, nevertheless at any rate, as a matter of fact;
- Causal: so, consequently, it follows, for, because, under the circumstances, for this reason;
- Continuatives: now, of course, well, anyway, surely, after all; etc.

Apparently, conjunctions are related to the entire environment of a text. The conjunctive elements (discourse markers) "presuppose the presence of other components in the discourse" [10]. Not only do they provide cohesion to a text, they also help two sentences to cohere with each other.

Celce-Murcia and Larsen-Freeman [14] used a simplified version of Halliday and Hassan's [10] classifications of conjunctions and offered their own which included

- Additive (emphatic, appositional, comparative)
- Adversative (proper adversative, contrastive, correction, dismissal)
- Causal ( general causal, causal conditional)
- Sequential (then, next, ...)

**They Specified Usage of the Conjunctions as Follows:**

Coordinating conjunctions (a) conjoin syntactically equivalent constituents and (b) lead the listener/reader to certain interpretations of the way that clauses relate to each other meaningfully. Adverbial subordinators and conjunctive adverbials are often called logical connectors. Like some coordinating conjunctions, logical connectors are typically said to be types of cohesive devices, lexical expressions that may add little or no prepositional content by themselves but that serve to specify the relationships among sentences in oral or written discourse, thereby leading the listener/reader to the feeling that the sentences “hang together” or make sense (p. 519).

Thus far, the definitions or usage explanation of English conjunctions are confined to the intra or inter sentential level. Grammar for English Language Teachers [45] adds a dimension of discursal functions of conjunctions into the definition of conjunctions. Conjunctions are divided into three categories: coordinating conjunctions, subordinating conjunctions and discourse markers. Coordinating conjunctions include only three words: and, but and or. They can serve to (a)

link together parts of constituents and are therefore contained within the constituent and (b) to form a link between clauses (p. 262). Subordinating conjunctions serve to link two clauses of unequal importance. They consist of (a) one word, such as after, although and if, (b) two or more words: as if, as soon as and as long as (p.335). And, those connective elements between sentences indicating logical relationships and sequence are called Dms.

Bibber *et al.* [13] are another group of researchers who worked on DCs and called them linking adverbials. They consider the primary function of linking adverbials to explicitly signal the connections between passages of text and to state the writer’s perception of the relationship between two units of discourse [13]. Table 1 lists the classification of linking adverbials as suggested by Biber *et al.*

It is a somewhat different version of the classification offered by Quirk *et al.*, [28]. This classification is considered to have a flaw both in its classification of the different categories and how linking adverbials are defined and described. In fact, this seems to be similar to what has been introduced in many language course books and which have often found to be ineffective and resulted in no efficient output benefitting the language learner.

The final classification that has been used extensively is that proposed by Quirk *et al.*, [28]. Quirk’s [28] study of conjunctions includes both within and beyond sentential levels. This definition is different from the one proposed by Halliday and Hasan [10], who insist that only those conjunctions functioning as cohesive devices above sentence level can be considered as true conjunctions. Quirk [28] classified conjunctions into seven categories based on their semantic use (Table 2).

Table 1: Classification of linking adverbials [13]

Category	Subcategory	Linking adverbials
Enumeration/addition	Enumeration	first, second, third, fourth, firstly, secondly, thirdly, fourthly, in the first/second/third/fourth place, first of all, for one thing, for another thing, to begin with, to start with, next, lastly
	Addition	in addition, further, similarly, also, by the same token, furthermore, likewise, moreover, at the same time, what is more as well too
Summation		in sum, to conclude, all in all, in conclusion, overall, to summarize, in a nutshell
Apposition	Restatement	which is to say, in other words, that is, i.e., namely, specifically
	Example	for instance for example e.g.
Result/interference		therefore, thus, consequently, as a result hence in consequence so
Contrast/concession	Contrast	on the one hand, on the other hand, in contrast, alternatively, conversely, instead, on the contrary, in contrast, by comparison
	Concession	though, anyway, however, yet, anyhow besides, nevertheless, still, in any case, at any rate, in spite of that, after all
Transition		by the way, incidentally, by the way

Table 2: Quirk *et al's* (1985) framework of conjunctions

Listing	Enumerative	e.g. for a star, finally	
	additive	equative	e.g. in the same way, likewise
		reinforcing	e.g. moreover, further
Summative	e.g. in sum, altogether		
Appositive	e.g. for example, namely		
Resultive	e.g. as a result, consequently		
Inferential	e.g. therefore, in that case, otherwise		
Contrastive	reformulatory	e.g. more precisely, rather	
	replacive	e.g. better, again	
	antithetic	e.g. by contrast, instead	
	concessive	e.g. in any case, however	
Transitional	discoursal	e.g. by the way, incidentally	
	temporal	e.g. in the meantime, meanwhile	

Even though Quirk *et al's* [28] framework of conjunctions is widely used in the literature, work from other such as those from Granger and Tyson [46] and Altenberg and Tapper [47] should also be added and this additional category can be named the corroborative category in order to further make the model proposed by Quirk *et al.* more complete. It is evident that all these models and classification of DCs have been used extensively in numerous research, yet many researchers have failed to understand them thoroughly and apply them in their own research [47, 48] and many aspects of DCs use are still poorly understood. In fact, many prefer to adopt and develop their own taxonomy of DCs and use different terms to describe DCs. Further, Celce-Murcia and Larsen-Freeman [14] list three problems that cause errors for learners when they want to choose the correct DCs. The first problem is that “the expressions within a category are often not interchangeable”. The second problem is that “certain expressions may find acceptable paraphrases in more than one conjunction” (p. 531). The last one is that “functional labels such as ‘adversatives’ are not always accurate”. William [49] criticizes the notional idea of some labels that have been assigned which at best he says gives vague meanings to DCs under the same category. In William’s view, “an additional element is required in order to come to adequate definitions” (p. 535).

It is clear that previous work on DCs have resulted in many definitions, classifications for the term. However, it seems that there is still a huge gap in the literature that is able to give exclusivity to the term, definition and eventually offer a complete classification for DCs. This paper attempts to propose a better definition for the term through an in-depth and complete classification of Dcs.

### The Current Review

**Term and Definition Clarification:** Attempts to define Dcs reflect different attitudes on the question of the uniformity or fuzziness of the class of DCs. It seems that linguists are still hesitant to give one universal definition for the term for these linguistic units. From our point of view, “discourse connectors” is the best choice for the term as it also has been used and well justified by Prommas and Sinwongswat [11], Cowan [1] and Biber [50]. In fact, Biber [50] puts forward that.

Discourse connectors are devices used to bridge between turns and sentences, indicating the logical relations among the parts of a discourse and providing an interpretive framework for the listener/reader. There are two major classes of discourse connectors: discourse markers and linking adverbials. DMs — forms like *ok, Well and now* — are restricted primarily to spoken discourse. These forms have distinct discourse functions, but it is difficult to identify the specific meaning of the word itself. In contrast, linking adverbials — forms like *however, thus, therefore, for example (e.g.) and that is (i.e.)* — are found in both spoken and written registers and they have greater inherent meaning than discourse markers (Biber, 2006).

Cowan [1] continues and justifies that

Discourse markers (well, I mean, you know, oh, okay, right, like) are words that are not an integral part of a sentence or its grammar but are interested by a speaker for various reasons, including to indicate a

pause before continuing, to signal a new phase in the conversation, to repair or wrap up what has been said, or (o express disagreement with what the other speaker has said. As this definition indicates by and large, discourse markers are restricted to spoken English. They occur most frequently in sentence initial position but can also appear sentence internally (p. 615).

Cowan maintains that DCs are able to connect a sentence to a greater piece of discourse and they are also less restricted in terms of where they may happen in a sentence.

Biber and Cowan [1, 50] seem to have provided some explanation to take away some of the ambiguity of the difference between DMs and other terms that have been used. It does seem that their definition is clear. The rational why the term DCs should be the best choice is therefore clear. It also does seem that other terms are going out of fashion and the term ‘discourse connectors’ is becoming popular in the field as the recent literature on this issue shows the trend.

Dcs have been defined as words and expressions that can be accommodated within the text in order to join one sentence to another sentence or one paragraph to another paragraph. By using the appropriate DCs, a reader is able to follow easily the direction of the text and understand a writer’s point of views, arguments, examples, etc. Cohesion is important for good writing and DCs is an example of a cohesive device. Halliday and Hasan [10] state that DCs help the text or piece of writing to be coherent.

**DCs Classification:** Having taken into account all classifications and taxonomies of DCs, the literature has shown that different terms and classifications have been proposed by many researchers. However, the authors of this paper tend to believe that these were not comprehensive enough and were often not useful to material developers, teachers, learners and even non-native writers of the English language.

Hence it is hoped that the following taxonomy (Table 3) could mitigate the problem of understanding DCs and their applications.

Table 3: Comprehensive list of discourse connectors

1. Sequential DCs	a. Ordering	first, firstly, second, secondly, third, thirdly a, b, c one, two, three in the first place, in the second place first of all, second of all for one thing, for another thing to begin with, to start with
	b. Timing	in the end, in the same time, in the meantime, meanwhile, meantime, simultaneously, initially, before, earlier, previously, formerly, recently, not long ago, at present, presently, currently, now, by now, until, today, immediately, at the same time, during, all the while, in the future yesterday, tomorrow, henceforth, after, after a short time, after a while, soon, later, later on, following, the following week, suddenly, all at once, instantly, immediately, quickly, directly, soon, as soon as, just then, when, sometimes, some of the time, occasionally, rarely, seldom, infrequently, temporarily, periodically, gradually, eventually, little by little, slowly, while, always, all of the time, without exception, at the same time, repeatedly, often, frequently, generally, usually, as long as, never, not at all, last, lastly, last of all, to conclude, as a final point, finally, at this point, from now on, henceforward, here, hitherto, up to now
	c. Transitionals	by the by, by the way, incidentally, now, eventually, meanwhile, originally, subsequently
2. Additive DCs	a. Equative	correspondingly, equally, likewise, similarly, in the same way, by the same token, too, in (just) this way
	b. reinforcing	again, also, further, furthermore, more, moreover, in particular, then, too, what is more, in addition, above all, on top of it all, to top it off, to cap it, on top of that, to crown it all, additionally, alternatively and and also, besides, neither, nor, not...either, or, or else, as well
3. Summation DCs		altogether, overall, then, therefore, thus, (all) in all, in conclusion, in sum, to conclude, to sum up, to summarize, finally, in summary, anyway, briefly, in short, to get back to the point, to resume, in a word
4. Apposition DCs		Namely (viz), thus, in other words, for example, as an example, for instance, that is (i.e.), that is to say, specifically, more precisely, what is to say, for one thing, to put it another way, to put it bluntly/mildly, what I am saying is, what I mean is, which is to say, in this case, to illustrate, such as, to demonstrate, as revealed by, to show, suppose that, specifically, to be exact, as illustrated by, indeed

Table 3: Continued

5. Resultive DCs		accordingly, arising out of as a consequence, as a result, beside from this, because, consequently, due to, for, for this purpose, hence, for this reason, in consequence, in that case, in this respect, in such an event, on account of, on this basis, or(otherwise), otherwise, so, then, therefore, thus, under the circumstances, with regard to, with this in mind, with this intention, somehow, of course, to this end, arising out of this, lest
6. Contrastive DCs	a. Antithetic	contrariwise, conversely, instead, oppositely, then, on the contrary, in contrast, by contrast, by way if contrast, in comparison, by comparison, by way of comparison, on the one hand & on the other hand, although, albeit, notwithstanding
	b. Concessive	anyhow, anyway, anyways, besides, else, however, nevertheless, nonetheless (none the less), notwithstanding, only, still, though, yet, in any case, in any event, at any rate, at all event, for all that, in spite of that, in spite of it all, after all, at the same time, all the same, admittedly, still and all, that said, despite that, then again, whereas, while, whilst, in fact, actually, as a matter of fact,
	c. Reformulatory	better, more accurately, more precisely, alias, alternatively, in another words
	d. Replacive	again, alternatively, rather better, worse, on other hand, I mean, at least
7. Comparison DCs		as...as, more...than, less...than, as (like), as if, as though, unlike, in the same way, similarly, as well as, in much the same way, resembling, parallel to, same as, identically, of little difference, equally, matching, also, exactly, in relation to
8. Conditional DCs		Whether...or not, if, only if, unless, even if, whether, provided (that), in case, in the event(that)
9. Generalization DCs		On the whole, in general, generally, as a rule, in most cases, broadly speaking, to some extent, mostly, above all, chiefly, largely, primly, usually, essentially
10. Emphasizing DCs		above all, after all, indeed, as a matter of fact, the main issue is, chiefly, especially, actually, the most significant, the chief characteristic, the major point, the most necessary, extremely, to emphasize, to highlight, to stress, by all means, undoubtedly, more importantly, most important of all, most of all, moreover, furthermore, significantly, without a doubt, certainly, to be sure, surely, absolutely, obviously, more and more, of major interest, to culminate, in truth, the climax of, to add to that, without question, unquestionably, as a result, probability, basically
11. Corroborative DCs		actually, as a matter of fact, in fact, as it happens, at any rate, in actual fact, in actual fact, in any case, in either case, in reality, to tell the truth, that is to say, of course, apparently, well, surely, frankly, honestly, I assume, I suppose, no doubt, I am afraid, to tell the truth, in my opinion, I believe, to be truthful, unfortunately

As is illustrated in table, some common DCs are listed based on their role classes and subclasses. In the following section of this paper, the definition and explanation of the terms and categories are provided.

**Sequential Dcs:** Sequential DCs are also called enumeration or listing in which they are signaling the sequence of main points that writer intend to make and indicate a sequence of steps in a process. Three types of Sequential DCs are as follows;

**1.a Ordering:** Ordering DCs show that how details are listed based on chronological order.

*First, I researched the topic. Then, I created the presentation.*

**1.b Timing:** Timing DCs can help give more energy to sentences when to describe things in a sequence.

*After compelling our siblings to give us all of the chocolate they'd collected, my sisters and I ran into my room. Immediately, we dug our unabashed hands into our bag of scrumptious loot!*

**1.c Transitionals:** Transitionals DCs are also known as “topic shift” that are marking an abrupt move from one topic to another, which is most often peripherally connected to the topic described in the preceding sentences.

*I am going to College Park next week to give a short talk on our research. By the way, have you finished the analysis of the native speaker data yet? I could use that in my talk.*

**Additive Dcs:** Additive DCs are adding information to what comes before and indicating information as parallel to preceding information. There are two kinds of additive DCs in which are as follows;

**2.a Equative:** Equative DCs indicate that a sentence or information has a similar force to a preceding sentences or information.

*She has high responsibilities and, **equally**, a high salary.*

**2.b Reinforcing:** Reinforcing DCs usually assesses an item as adding greater weight to preceding sentence or information [28].

*He is old and unpopular. **Furthermore**, he has at best only two years of political life ahead of him.*

**Summation Dcs:** Summation Dcs or summary connectors are showing that a unit of discourse is intended to conclude or sum up the information in the preceding discourse.

***In conclusion**, I want to thank all the people who have volunteered their time to our organization.*

**Apposition Dcs:** Apposition DCs are named “Exemplification and Restatement Connectors” in which they are signaling information in form of examples or expansion or explanation of what preceded.

*It's extremely expensive to live in New York. **For example**, I pay \$1250 for a one-bedroom apartment.*

**Resultive Dcs:** Resultive DCs are indicating cause and result of previous information. In fact, they are introducing information that is a result or consequence of preceding information.

*A. She's in a bad mood **because** her father won't let her go to the party tonight.*

***B. Because** of the increase in street crime, many old people are afraid to leave their homes.*

**Contrastive Dcs:** Contrastive DCs introduce information that is to some extent surprising or unanticipated in light of previous information; linking information that is viewed as straight contrast that does involve surprise. There are three types of contrastive DCs that are as follow that were adopted from Qurik *et al.* [28].

**6. a Antithetic:** An item may be contrasted with a preceding one by introducing a direct antithesis; this is effected by means of Antithetic connectors.

*You promise to help me; **then** you let me down.*

**6. b Concessive** Concessive connectors are used where one unit is seen as unexpected in the light of others.

*She did not get the award after all. **Still**, her results were very good.*

**6. C Reformulatory:** Reformulatory connectors are contrastive words that are frequently preceded by *or* and *rather*

*He invited several friends, **or better**, several people that he thought were friends (i.e. 'it would be better if I were to say').*

**6. D Replacive:** With replacive connectors, contrastive matter may again be prefaced by *or*. The speaker withdraws an item, not to express it better but to replace by a more important one.

*He was opposed by his mother **or, rather**, by BOTH his parents.*

*Please suit yourself. You can move in at once; (**or again**, you may prefer to do so next week.*

**Comparison Dcs:** Comparison DCs point out or imply resemblances, between objects regarded as essentially of different order; mainly to point out differences, between objects regarded as essentially of the same order. They are used when the writer will show how the previous idea is SIMILAR to what follows.

***Like** a virus in the human body, a computer virus can do a lot of damage.*

**Conditional Dcs:** Conditional DCs show a condition in order to carry out an action.

*I don't know **whether** they will agree on that subject.*

**Generalization Dcs:** Generalization DCs signal a statement which says that something is true in most situations or for most people.

***Generally**, 24-bit color boards include extra memory and processors to speed up the display performance.*

**Emphasizing Dcs:** Emphasizing DCs are mainly used when the writer wants to put more EMPHASIS on what is already mentioned.

*Drawing programs produce pictures drawn in PostScript directly. PostScript has support for sound, video and other formats: you can mix scanned images, specify half-tone screens and introduce any number of effects. In fact, the only barrier is your imagination*

**Corroborative Dcs:** Corroborative DCs bear certain attitudinal disjuncts which have clear cohesive links which seem to add a new point that strengthens the arguments or give a new turn to the argument.

*The hypothesis that age limits the acquisition of a second language is now being questioned. In fact, one new study seriously challenges this hypothesis.*

From the past researches and grammar book, we understood that DCs may have a various roles in a piece of text. In fact, DCs are multifunctional; i.e. they can take different roles in a discourse. They include **coordinating conjunctions** (for [reason] and [addition], nor [negative addition], but [contrast and concession], or [choice], yet [concession-unexpected result], so [result and consequence]), **connectors** (e.g. first[ly], because, however, still), **subordinating conjunctions** (e.g. even if, while, before) and **phrase linkers** (e.g. in contrast to, in spite of, during). This classification is adopted from Bauer-Ramazani [51] in which she used the term 'discourse markers' instead of DCs. The detailed explanation and instruction is provided in appendix A.

**The role of Dcs:** Cohesive writing is writing which holds together well. It is easy to follow because it uses language effectively to guide the reader. In English, cohesion is achieved in a number of ways (logical relationships, reference and lexical cohesion). Here we explain only the first one. The logical relationships between ideas are stated so that the reader can easily understand the relationship between the parts of a text. The logical relationships between clauses, between sentences and between paragraphs can be expressed by DCs (and, or, because, so, after that, in contrast, thus, alternatively etc.).

A writer should write a coherent composition from word to sentence and from sentence to paragraph [52]. DCs connect sentences and Dulger mentions that a coherent text often has a smooth flow in which sentences follow each other logically. He added that readers make use of syntactic and structural relations to understand the meaning of the text. In written discourse and at the above sentence level, besides punctuation and layout, DCs help writers to connect sentences to form a paragraph and

paragraphs to form a coherent text. Proper use of DCs is required for both EFL/ESL students and language users, particularly writers in academic English. In addition to being important in spoken discourse, DCs can establish semantic relationships between one sentence and another. By establishing these relationships DCs can contribute to cohesion- that is, they assist the ideas in the discourse to stick together and clarify how they hang together [1].

## CONCLUSION

In conclusion, numerous research studies have investigated DCs. However, researchers have somewhat failed to explicitly define for language users a complete definition and classification of the term. From the literature, it can be said that some researchers preferred to use the term DMs while others have given different names and used words such as linking words, connectives, discourse operators, DCs and so forth as a possible way to define the term. This paper attempted to better illuminate the picture concerning definition and classification of the term particularly in written discourse. As was evident from the literature, many researchers have failed to reach a unanimous agreement on whether to use the term discourse connectors or discourse markers. Different researchers have provided different definitions for discourse connectors and some also came up with their own taxonomy and classification of connectors. Hence, after reviewing past research studies, we decided to use the term 'discourse connectors' mainly because we believe the term better describes the function of DCs which is to link one portion of information to another one in a text. The term DM on the other hand, is a suitable term for spoken discourse and its definition and classification should vary from written discourse. We defined DCs are words and expressions that can be accommodated to within the text in order to join one sentence to another sentence or one paragraph to another paragraph. Finally, in this paper, we also offered a comprehensive classification of discourse connectors. The intention of this review paper is to contribute to a better understanding of what DCs are and how they function in a text. Our definition and classification varies from previous reviews in terms of how DCs are defined and classified.

## REFERENCES

1. Cowan, R., 2008. The teacher's grammar of English. Cambridge: Cambridge University Press.

2. Huddleston, R. and G.K. Pullum, 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
3. Fraser, B., 1999. What are discourse markers? *Journal of Pragmatics*, 31: 931-952.
4. Sharpling, G., 2010. Discourse markers. Retrieved May 11, 2012, from Warwick university, Learning English Online at Warwick Web site: [http://www2.warwick.ac.uk/fac/soc/al/learning\\_english/leap/grammar/discourse](http://www2.warwick.ac.uk/fac/soc/al/learning_english/leap/grammar/discourse).
5. Horn Laurence, R. and G. Ward, 2005. *The handbook of pragmatics*. Malden, MA: Blackwell, 241-265.
6. Schiffrin, D., D. Tannen and H. Hamilton, 2003. *The handbook of discourse analysis*. Wiley-Blackwell.
7. Schiffrin, D., 1987. Discourse Markers. (*Studies in International Sociolinguistics* 5). Cambridge: Cambridge University Press.
8. Liu, S.X., 2006. Teachers' discourse markers and classroom context. *Journal of Hunan Institute of Humanities (Science and Technology)*, 4: 148-150.
9. Fung, L. and R. Carter, 2007. Discourse markers and spoken English: Native and learner use in pedagogical settings. *Applied Linguistics*, 28(3): 410-439.
10. Halliday, M. and R. Hasan, 1976. *Cohesion in English*. London: Longman.
11. Prommas, P. and K. Sinwongsawat, 2011. A comparative study of discourse connectors used in argumentative compositions produced by Thai EFL learners and English-native speakers. *Proceedings-English Studies in Various Contexts, Thailand*, 3: 1-17.
12. Warsi, J., 2000. *The acquisition of English contrastive discourse markers by advanced Russian ESL students*. Ph.D. Thesis. Boston University.
13. Biber, D., S. Johansson, G. Leech, S. Conrad and E. Finegan, 1999. *Longman Grammar of Spoken and Written English*. Pearson Education Limited, Harlow.
14. Celce-Murcia, M. and D. Larsen-Freeman, 1999. *The grammar book: An ESL/EFL teacher's course*. United States: Heinle and Heinle Publishers.
15. Ostman, J.O., 1995. Pragmatic particles twenty years after. In: B. Warvik *et al.*, *Organization in discourse: Proceedings from the Turku Conference, 1995*. *Anglicana Turkuensia*, 14: 95-108.
16. Ariel, M., 1994. Pragmatic operators. *The Encyclopedia of Language and Linguistics*, 3250-3253. Oxford: Pergamon Press.
17. Knott, A. and R. Dale, 1994. Using linguistic phenomena to motivate a set of coherence relations. *Discourse Processes*, 18(1): 35-62.
18. Erman, B., 1987. *Pragmatic Expressions in English: A study of you know, you see and I mean in face-to-face conversation*. (Stockholm studies in English 69). Stockholm: Almqvist and Wiksell.
19. Redeker, G., 1990. Ideational and pragmatic markers of discourse structure. *Journal of Pragmatics*, 14(3): 367-381.
20. Redeker, G., 1991. Review article: Linguistic markers of discourse structure. *Linguistics*, 29(6): 1139-1172.
21. Bazanella, C., 1990. Phatic connectives as intonational cues in contemporary spoken Italian. *Journal of Pragmatics*, 14(4): 629-647.
22. Fraser, B., 1988. Types of English discourse markers. *Acta Linguistica Hungarica*, 38(1-4): 19-33.
23. Fraser, B., 1990. An approach to discourse markers. *Journal of Pragmatics*, 14: 383-395.
24. Fraser, B., 1987. Pragmatic formatives, in: J. Verschueren and M. Bertuccelli-Papi, eds. *The pragmatic perspective*, 179-194. Amsterdam: Benjamins.
25. Blakemore, D., 1987. *Semantic Constraints on Relevance*. NY, USA: Blackwell.
26. Blakemore, D., 1992. *Understanding utterances*. Oxford: Blackwell.
27. Schourup, L.C., 1985. *Common Discourse Particles in English Conversation*. New York: Garland.
28. Quirk, R., S. Greenbaum, G. Leech and J. Svartvik, 1985. *A comprehensive grammar of the English language*. London: Longman.
29. Polanyi, L. and R. Scha, 1983. The syntax of discourse. *Text*, 3: 261-270.
30. Stubbs, M., 1983. *Discourse analysis*. Chicago, IL: The University of Chicago Press.
31. Bell, D., 1998. Cancellative discourse markers: a core/periphery approach. *International Pragmatics Association*, 8(4): 51-541.
32. Tablebinejad, R. and A. Namdar, 2011. Discourse markers in high school English textbooks in Iran. *Theory and Practice in Language Studies*, 1(11): 159-1602.
33. Jucker, A.H., 1993. The discourse marker well. A relevance-theoretical account. *Journal of Pragmatics*, 19(5): 435-53.
34. Schourup, L.C., 1999. Discourse markers. *Lingua*, 107: 227-265.
35. Unger, C., 1996. The scope of discourse connectives: Implications for discourse organization. *Journal of Linguistics*, 32: 403-438.
36. YANG, Sh. 2011. Investigating discourse markers in pedagogical settings: A literature review. *ARECLS*, 8: 95-108.

37. Lenk, U., 1998. Discourse markers and global coherence in conversation. *Journal of pragmatics*, 30(2): 245-257.
38. Müller, S., 2004. Well you know that type of person: Functions of well in the speech of American and German students. *Journal of pragmatics*, 33: 193-208.
39. Archakis, A., 2001. On discourse markers: Evidence from Modern Greek. *Journal of Pragmatics*, 33: 1235-1261.
40. Othman, Z., 2010. The use of okay, right and yeah in academic lectures by native speaker lecturers: Their “anticipated” and “real” meanings. *Discourse Studies*, 12(5): 665-681.
41. Frank-Job, B., 2006. A dynamic-interactional approach to discourse markers, In: Fischer, K., ed. *Approaches to discourse particles*. Amsterdam: Elsevier. Fraser, B. (1996). *Pragmatic markers*. *Pragmatics*, 6(2): 167-190.
42. Jucker, A.H. and Y. Ziv, 1998. Discourse markers: an introduction. In Jucker andreas H.; Ziv, Yael (eds.). *Discourse markers*. Descriptions and theory. Amsterdam: Benjamins, pp: 1-12.
43. Brinton, L., 1996. *Pragmatic markers in English*. Grammaticalization and discourse functions. Berlin: de Gruyter.
44. Jucker, A.H., 2002. Discourse markers in Early Modern English”. In Watts, Richard; Trudgill, Peter (eds.). *Alternative histories of English*. London: Routledge, pp: 210-230.
45. Parrot, M., 2002. *Grammar for English Language Teachers*. Cambridge University Press.
46. Granger, S. and S. Tyson, 1996. Connector usage in the English essay writing of native and non-native EFL speakers of English. *World Englishes*, 15: 17-27.
47. Altenberg, B. and M. Tapper, 1998. The use of adverbial connectors in advanced Swedish learners written English. In S. Granger (ed.). *Learner English on Computer*. London and New York: Longman.
48. Bolton, K., G. Nelson and J. Hung, 2003. A corpus-based study of connectors in student writing: Research from the International Corpus of English in Hong Kong (ICE-HK). *International Journal of Corpus Linguistics*, 7(2): 165-182.
49. William, F., 1996. Language form and communicative practices. In: John J. Gumperz and Stephen C. Levinson (eds.). *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press, pp; 232-70.
50. Biber, D., 2006. *University Language: A corpus-based study of spoken and written registers (Studies in Corpus Linguistics)*. Amsterdam: John Benjamins B.W.
51. Bauer-Ramazani, C., 2005. Techniques of sentence combination: discourse markers in English sentences. Retrieved May 11, 2012, from <http://academics.smcvt.edu/cbauer-ramazani/AEP/BU113/English/discmarkers.htm>.
52. Dulger, O., 2007. Discourse markers in writing. *Seluck University Sosyal Bilimler Enstitutus Dergis*, 18: 257-270.

## Appendix A

### I. COORDINATING CONJUNCTIONS

Conjunction	Meaning	Conjunction	Meaning
for	REASON	but	CONTRAST, CONCESSION
and	ADDITION	or	CHOICE
nor	NEGATIVE ADDITION	yet	CONCESSION; unexpected result
		so	RESULT, CONSEQUENCE

- Coordinating conjunctions are discourse markers (what we call DCs) that join two INDEPENDENT clauses, which are set off by a comma.



