The Taxis Relations of Clause Complexing in the Editorials of The Daily Graphic

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Abstract
This paper focuses on the use of taxis relations of clause complex in editorial writing to match the length which seems not longer than a page. The problems discussed are: the hypotactic and paratactic clause complexes in ten editorials spanning January 2014 to March, 2014, and the realization of those clause complexes through the use of conjunctive devices in the lexicogrammar. The theory of Systemic Functional Grammar which opines that the taxis can be of two kinds *parataxis* and *hypotaxis,* suggested by Halliday (1994), and Halliday & Matthiessen (2004) underpins the discussion. This study adopts a qualitative approach as it investigates 10 purposively sampled editorials of the *Daily Graphic*. A first step of the analysis explores the choice of the hypotactic vs. paratactic clause complexes in the editorials while the second step also reveals the use of conjunctives to realise the choice of a particular clause complex structure. The results reveal that the clause complexes are of both parataxis and hypotaxis in the editorials but hypotaxis dominates parataxis, as the writers do not depart from the dominant use of hypotaxis in all the ten editorials. The realization is relatively excellent as the choice among parataxis and hypotaxis characterizes each relation between clauses (each nexus) within a clause complex.
Keywords: Clause Complexing, Taxis, Parataxis, Hypotaxis, Conjunctives
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INTRODUCTION AND BACKGROUND
Clause complexing has received consideration from linguists and language researchers and there are many studies involved with clause complexing in English Language use. As suggested by Halliday (1994, p. 216), a sentence can be interpreted as a clause complex: a Head clause together with other clauses that modify it. He further states that a combination of clauses can be related paratactically or hypotactically but not through embedding; the manner of combination is the method of organization of the logical subtype of the ideational metafunction. In this regard, he indicates that for example, clauses joined through coordination and subordination form a clause complex. He argues that the concept of "clause complex" thus allows us to describe in full for the functional organization of sentences (Halliday 1994, p. 216). Eggins (2004 pp.255-256) states that the term "clause" itself is called clause complex. Setial, Sutjaja, Saragih, and Putrayadnya (2009, p.1) state that clause or clause simplex equals simple sentence in formal grammar and clause complex equals compound and complex sentences.

Interdependency between constituent clauses
In Systemic Functional Grammar (henceforth, SFG), structural relations of clauses consist of coordination (parataxis) and subordination (hypotaxis). Parataxis is the same as compounding which is the relation between two-like-elements of equal status, one initiating and the other continuing while hypotaxis is the same as complex sentence which is the relation between a dependent element and its dominant, the element on which it is dependent. Setia et al (2009, p.1) argue that the distinction between parataxis and hypotaxis has grown as a strong grammatical strategy for showing the rhetorical development of texts. They further explain that the choice between parataxis and hypotaxis characterizes each relation between two clauses (each nexus) within a clause complex, and clause complexes are often formed out of a combination of compound and complex sentences. Halliday (1994 p. 216) states that parataxis is logical interdependency between clauses where the relationships are of equal status. In this regard, he further states that hypotaxis is logical interdependency between clauses where the relationships are of unequal status.

In terms of the interdependency between the constituent clauses, two types of structural relations, and consequently of clause combinations, can be recognized: (i) *paratactic* and (ii) *hypotactic*, depending on whether the constituent clauses in the combination are of equal or unequal grammatical statuses, respectively (Halliday and Matthiessen, 2004).With regard to terms, an *independent clause* is also called a *paratactic clause*, and a *dependent clause* a *hypotactic clause*. Similarly, a *compound sentence* is known as a *paratactic construction*, and a *complex sentence* a *hypotactic construction*. For the sake of comparison between *parataxis* and *hypotaxis*, it may be useful to use the name *primary clauses* for both the *initiating clause* of a *paratactic construction* and the

main clause of a *hypotactic construction*; and *secondary clauses* for both the *continuing clause* of a *paratactic construction* and the *dependent clause* of a *hypotactic construction*.

Halliday uses Greek letters; *α - alpha; β - beta; γ - gamma; δ – delta* to represent the clauses in a hypotactic structure. The alpha (α) stands for the dominant or the independent clause while beta (β), gamma (γ), delta (δ)… are for dependent or subordinate clauses successively. Again, he uses Arabic numerals (1, 2, 3…) to represent those in a paratactic structure. Symbolically, the *initiating* and *continuing* clauses of a *paratactic structure* can be written as '1 2'. If there is another clause which is paratactically related to the *continuing clause*, we write '1 2 3'. The *dominant* and *dependent* clauses of a *hypotactic structure* may also be represented in a similar manner: 'α β' and 'α β γ'. In each type of relational structure, there is one primary clause (also called 'initiating' in parataxis, and 'dominant' in hypotaxis) and one or more secondary clauses ('continuing' in parataxis and 'dependent' in hypotaxis).

Context and scope of the study

This paper focuses on the analysis of taxis relations of clause complexing; parataxis and hypotaxis in 10 editions of editorials in the *Daily Graphic,* a Ghanaian newspaper. The 10 editions were taken without any prejudice from January to March 2014. In this regard, two research questions were set up to meet the purpose of the study as follows.

1) What structural types of sentences are used in the editorials profusely?
2) What conjunctive signals are employed in the use of the structural types of sentences?

FRAMEWORK AND LITERATURE REVIEW

Systemic refers to the view that language is an interrelated set of choices for making meaning (Eggins 2004, p.194; Halliday & Matthiessen, 2004, p.31). Besides, functional refers to the view that language has evolved to do what it does, that is, satisfying human needs, the variety of purposes language is used for and what it has evolved to do in order to make meaning (Halliday & Matthiessen, 2004, p.24; Halliday, 1994).

Systemic functional grammar analyses language as a social-semiotic of communicative meaning-making explaining the internal relations in language as a system network of choices (Zhuanglin, 1988, p.307; Gonzales 2008, p.9; Halliday & Matthiessen 2004, p.23). In systemic functional grammar, language is analysed from different levels; (i) from below (phonology), (ii) from round about, (operator) (iii) from above (semantics) (Halliday & Matthiessen, 2004, p.119). Systemic functional grammar emphasises the view from above (semantics) and views language as *meaning potential*. For Halliday, grammar is described as systems not as rules, but on the basis that every grammatical structure involves a choice or choices from a describable set of options, confirming the notion that language is functional, and is organized to satisfy human needs and not for itself.

Language has two basic functions in relation to our ecological and social environment, according to Halliday and Matthiessen (2004, p.30):

> We suggested two: making sense of our experience, and acting out our social relationships. It is clear that language does – as we put it – *construe* human experience. It names things, thus construing them into categories; and then, typically, goes further and construes the categories into taxonomies, often using more names for doing so…

Accordingly, we use language for common knowledge through our experience and interaction with people and thus, it is language that actually helps us to understand each other in our day to day activities. Halliday and Matthiessen (2004, p.30) say that language mainly serves three functions which we refer to as metafunctions: *the ideational, interpersonal* and *textual* meta-functions. Metafunctions refer to the intrinsic functions that language is meant to perform in society and is used to describe functions in order to distinguish them from particular speech acts such as 'describing' and 'informing', and also to emphasise the fact that they are inherent in the very structure of language (Halliday & Matthiessen, 2004, p.31). This implies that metafunctions are the purpose or over-riding idea for using language. Function is therefore an integral component within the overall SFG theory. Each of these three metafunctions is about a different aspect of the world, and is concerned with a different mode of meaning of language use based on human lives and human conceptualization of the world of experience (Halliday, 1994, p.34; Gonzales 2008, p.9). This is the basis of Halliday's claim that language is *metafunctionally* organised and argues that the *raison d'être* of language is meaning in social life and choices, and for this reason all languages have three kinds of semantic components (Halliday & Matthiessen, 2004, p.3, 31).

The *ideational* metafunction refers to the use of language to represent experience and meaning (Halliday & Matthiessen, 2004, p.30). It can be subdivided into *experiential* and *logical* meanings. *Experiential meaning* is concerned with the "things" that we can talk about to conceptualise the experiential world to ourselves, including the inner world of our own consciousness (Halliday, 1971, p. 106). The *logical meaning* refers to the logical semantic relationships that exist among the structural units of language such as coordination, subordination, modification and apposition (Halliday, 1971).

The *interpersonal* metafunction indicates that while construing, whenever we use language, there is always something else going on so language has resources for enacting humans' diverse and complex social relations and is concerned with establishing and maintaining interactions between speakers and the hearers/listeners. Halliday and Matthiessen (2004, p.29) refer to interpersonal metafunction as "a proposition, or a proposal, whereby we inform or question, give an order or make an offer, and express our appraisal of and attitude towards whoever we are addressing and what we are talking about." Shore (1992, p.44) indicates that interpersonal meaning is the meaning associated with language as a way of getting things done, as a way of acting upon the world in which we live. Interpersonal meaning can be subdivided into *interactional* and *attitudinal* meaning. Interactional meaning has to do with the interactional roles that are created in the speech situation. Attitudinal meaning is concerned with the way in which the speaker (or listener) relates to what is being said.

Textual meaning relates to the way by which language users are able to use language to make links with itself and with the situations in which it is used as a resource for enabling different kinds of textual connections to result in coherent texts (Zhuanglin, 1988; Halliday & Matthiessen, 2004, p.30-31).

The Clause in Systemic Functional Grammar

Systemic Functional Grammar (henceforth SFG) perceives the clause as the highest and central grammatical unit for construing our world of experience, enacting our world's interpersonal interactions, and managing the free flow of discourse across a text. Downing and Locke (2006, p.5-27) say that the clause in systemic functional grammar is the major grammatical unit used by speakers to ask questions, make statements and issue directives. According to them:

> The clause or simple sentence is the basic unit that embodies our construal of representational meaning and interpersonal meaning. The clause is also the unit whose elements can be reordered in certain ways to facilitate the creation of textual meaning. The three kinds of meaning derive from the consideration of a clause include: (a) the linguistic representation of our experience of the world; (b) a communicative exchange between persons; (c) an organised message or text (Downing & Locke 2006, p.5).

This implies that the clause itself is regarded as a meaningful unit which can be arranged in different ways to realize a conglomeration of functions for the purpose of communication. Halliday and Matthiessen (2004, p.309) point out that there are three (3) lines of meaning in a clause which are combinations of three different structures deriving from distinct functional components.

(i) A clause has meaning as a message, a quantum of information.
(ii) A clause has meaning as an exchange, a transaction between speaker and listener.
(iii) A clause has meaning as a representation of some process in ongoing human experience.

Source (Halliday & Matthiessen, 2004, p.58, 59, 60).

Halliday and Matthiessen (2004, pp.9, 10, 309) view the clause as the highest grammatical unit on the rank scale. It implies that clauses consist of groups/phrases, which rotate to consist of words, and words consist of morphemes. Halliday and Matthiessen (ibid), continue that the clause is the central processing unit in the description of lexis and structure which we refer to as lexicogrammar — in the specific sense that it is in the clause that meanings of different kinds are mapped into an integrated grammatical structure. Again, they construe that the clause is the mainspring of grammatical energy in systemic functional grammar.

It is significant to say that in dealing with systemic functional grammar, rank plays an important role. Halliday and Matthiessen (2004, p.5) explain rank as the hierarchy of units that reflects the basic realization patterns and orders of units according to their constituency relation: the highest ranking units consist of units of the rank immediately or next rank below, and so on, until we arrive at the units of the lowest rank, which have no internal constituent structure. This suggests that rank is a particular position, higher or lower than others. Therefore, systemic functional linguists opine that there is a scale of rank in the grammar of every language. The scale of grammar in English Language (which is typical of many) can be represented as:

Clause	Clause Complex
Phrase/Group	Group /Phrase Complex
Word	Word Complex
Morpheme	Morpheme Complex

Adapted from Halliday and Matthiessen systemic functional grammar (2004:9)

From the above, it is seen that units on the rank relate vertically and horizontally. Vertically, units of the rank start from the lowest to the highest or vice versa. Horizontally, units of every rank relate to form *complexes*: not only clause complexes but also phrase complexes, group complexes, word complexes and even morpheme complexes may be generated by the same grammatical resources. The above diagram implies that in SFG, the position of the clause in the hierarchy of grammatical units or what is referred to as the rank scale, either from the highest to the lowest or from the lowest to the highest; (the clause) is the highest unit on the rank.

Contrary to Halliday and Matthiessen's view on clause as the highest, Quirk, Greenbaum, Leech, and Svartvik (1985, pp.42, 43), see the clause as the second highest unit in the rank scale. Though the two authorities disagree on the position of the clause, they appear to share similar view. For example, they explain that the existence of unitary constituents also lead to a superficial difficulty in talking of units of different 'size' or 'length'. In this sense, units of grammar may be placed in a hierarchy of potential size or extensibility as follows: highest unit: *sentences*, which consist of one or more *clauses* which consist of one or more *phrases*, which consist of one or more *words*, which consist of one or more *lowest unit*: morphemes.

The Sentence	Complex Sentence
The Clause	Complex Clause
The Phrase	Complex Phrase
The Word	Word
The Morpheme	Morpheme

Adapted from Quirk et al (1985, pp.42, 43)

From the above, the sentence is seen as the highest on the rankscale in traditional grammar while the clause which is the highest in systemic functional grammar is ranked below next to the sentence. Each of the units also relates to form complexes.

This suggests that a clause from the view of SFG is equivalent to the sentence in structural grammar but it does not have similar position on the grammatical rankscale. This supported by Setial, Sutjaja, Saragih, and Putrayadnya (2009, p.1) that the technical term of "clause" in SFG is identical with 'sentence' in the formal grammar.

Clause Complexing (CC)

According to Halliday and Matthiessen (2004:363, 367), the concept of "clause complexing" refers to "how clauses or sentences are linked to one another. There are two systems involved in the formation of clause complexes: The taxis or tactic system and logico semantic system: this is the system that describes the type of interdependency which link clauses into a clause complex. The system of taxis covers the dependency or independency relationships between adjacent clauses and conflates several strands of meaning which are related to relations between ideas (Thompson, 2004; Bloor, & Bloor. 2004; Opoku, 2015; Adjei & Opoku, 2017 Othman, & Qutob, 2022). There are two options: parataxis (a relationship between equal clauses) and hypotaxis (a relationship between unequal clauses). In parataxis, clauses relate to each other as equals or independents. In hypotaxis, clauses relate to each other in a modifying or dependency relationship. In hypotaxis, there is one clause (the Head clause) which could stand alone as a sentence and the other clause (the modifying or dependent clause) cannot stand alone as a sentence. Tâm (2013) explains that a clause complex is made up of clauses or the mixture of clauses which make up the clause complex. This is expanded by Kurniawan, Luardini, and Karani, (2021) who argue that clause complex indicates how clauses are linked up to one another by means of some kind of logico-semantic relations to form clause complex. Clause complexing implies the situation where a clause is bonded with another clause to make a single complex structure. Each bond in such a complex according to Halliday and Matthiessen (2004, p8) is called a *nexus*. A nexus is seen as the extension of a single clause with two or more clauses with semantic relationship to make it clause complexing.

Clause complexing thus involves two things, the clause and the clause complexes and semantic relationships between them, where the clause complex is made up of clauses and the clause complexing itself is a number of clauses with a central idea called the dominant and the other ideas called the dependent. This is not based on grammatical relationship but on semantic information relationship. Next, are the strategies for linking the dominant clauses and this is where the taxis operates. The taxis implies the grammatical relationships between the clauses whether they are compound, complex, or compound-complex sentences. Clause complexing is an amalgamation of two or more sentences, whether two or more complete (independent) or reliant (dependent) sentences to indicate which ideas weigh equal importance or unequal importance and the kind of meanings which are associated with each complex structure.

Tâm (2013) further states that in their use of language, people in many cases tend to expand and project their arguments by combining the original clause with other related clauses into strings of clauses with the main clause as the core of the message and the coordinate or subordinate clauses as the peripheral information added to reinforce the message. The speaker/writer conveys certain intended meaning of coordination or subordination through the way s/he combines clauses or sentences and the original clause from which the complex is extended can be traced by the listener/reader based on the semantic relations between the clauses.

Considering Clause Complexing

There are two ways of considering clause complexing which Halliday refers to as (a) Taxis and (b) Logico-semantics. In this article, the Logico-semantics aspect shall not be examined. Taxis is about grammar of clause complexing and the logico-semantics is about meaning of clause complexing. Grammatically, clause complexing

involves equal and unequal relationships of sentences. Semantically, clause complexing is about the meaning which is oriented within the clauses.

The grammatical properties of clause complexes are realized through the interdependencies or relations between elements of clauses in the clause complexes.

Taxis	Clauses	Primary	Secondary
Parataxis	1 (initiating)		2 (continuing)
Hypotaxis	α (dominant)		β (dependent)

Clauses in paratactic and hypotactic clause complexes
Source: Halliday and Matthiessen (2004:442)

Parataxis: Degree of Equivalence
Parataxis is comparable to coordination or compound sentence which refers to the degree of equal or balanced status and it is binding together of two or more independent clauses which are considered as primary or initiating and secondary or continuing clauses (Halliday, 1994, p.218). Both the initiating and the continuing clauses are free, in the sense that each could stand as a functioning whole to make meaningful thought. Halliday and Matthiessen, (2004, p.374) use a numerical notation for paratactic structures, therefore, in the analysis the coding used is numerical, such as 1, 2, 3, 4 … etc.; with agglomeration of many different things brought together which we call nesting to agglomerate the usual way: 11 12 2 31 32 means the same as 1(1 2) 2 3(1 2)" 1 stands for the initiating clause or sentence and 2, 3… stand for the continuing clauses or sentences for example:
||| Kukul crouched low to the ground || **and** moved slowly. |||
Source: Halliday and Matthiessen (2004:373)

From the above, there are two clauses that are potentially autonomous of one another. For example, each comprises a proposition in its own right and could thus be tagged — *Kukul crouched low to the ground, didn't he?* and *he moved slowly, didn't he?*. They could select for different moods; for example, *Kukul crouched low to the ground but did he move slowly?* There is a closely agnate side where the two clauses are not brought together structurally in a clause complex but rather form a unified series: *Kukul crouched low to the ground. He moved slowly* (Halliday and Matthiessen 2004:373). Sekyi-Baidoo (2003, p.503) considers Halliday and Matthiessen's examples given as choppy sentences which could be corrected to relate the ideas to make it a compound and a complex sentence. This implies that the kind of relationship through compound sentence may be revealed through addition, contrast or alteration, choice, result, comparison, exemplification. Downing and Locke (2006, p.278) indicate that the linking relationship is made explicit by the coordinating conjunctions ('coordinators' for short) *and*, *or* and *but*. In listing a series of elements, the explicit links may be omitted, although the coordinator is typically retained between the last two items. The coordinator can also be replaced by a comma in short conjoined clauses as in; *This one's yours, that one's mine*.

Hypotaxis: Degree of Non–Equivalence
Arguments exist elsewhere (Quirk et al. (1985), in Frimpong, 2015, p. 47) that the process of subordination is an asymmetrical relationship in which a "sentence and its subordinate clauses are in a *hypotactic* relationship…that is they form a hierarchy in which the subordinate clause is a *constituent* of the sentence as a whole…". Hypotaxis is also comparable to complex or compound-complex sentences which indicate the joining of two or more clauses or sentences which are independent and dependent together. Though the same term, the concept of hypotaxis in systemic functional linguistics is not exactly the same as used in Quirk et al. (1985). In SFL tradition, hypotaxis is a relation between clauses which are grammatically unequal in the sense that one of the clauses is dependent, though not a constituent of the other (Eggins, 2004).

Systemic functional grammar advances a number of concepts about clause subordination which are contrary to Quirk et al.'s argument. They argue, in the first place, that the concept of the sentence is fundamentally a problematic one in the sense that it frustrates a cross-varietal investigation of speech and writing. In place of the sentence, they have created the concept of the clause complex[1] in which we can have a number of clauses grammatically linked together (Halliday & Matthiessen, 2004, p. 8).They argue further that the clause complex typically involves two processes of clause combination: these are paratactic process and hypotactic process. Though the same term, the concept of hypotaxis in systemic functional linguistics is not exactly the same as used in Quirk et al. (1985).

Halliday and Matthiessen (2004, p.374) explain hypotaxis as "the binding of elements of two or more clauses which may be treated as being of unequal or imbalanced status", the relation between a dominant clause is free or can make sense and the dependent clause is not free or make meaningful thought as in:. For example:
|||*When the team failed to win;* | ***people usually blamed the coach***. |||

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1 The opposite of the clause complex is the clause simplex where there is only one clause in a sentence (Eggins, 2004).

|| **β** || **α**
||| **β As** he came to a thicket, || **α** he heard the faint rustling of leaves. |||

Source: Halliday and Matthiessen (2004:373)

The relation between a dominant unit and a dependent one is signalled in the notation by labelling the clauses with the Greek alphabet, an alpha (α) for the dominant clause, a beta (β) for a dependent clause, and a gamma (γ) for one dependent on that, and so on (Halliday & Matthiessen, 2004, p.374). In hypotaxis, the dominant clause or primary clause can either precede the dependent or the secondary clause (α ^ +β) or follow it (+β ^ α). According to Downing and Locke (2006, p.279), the dependency relationship is most clearly signalled by subordinating conjunctions ('subordinators') such as *because, although, if, as*. However, when no subordinator is present, as often happens with non-finite clauses, as in ***Clutching her umbrella***, *she hurried to a bus shelter*, the non-finite form itself indicates dependency.

Previous studies

Srinon and White (2007, p.131) do analysis of clause complex in a small number (nine) of argumentative texts written by three students at Thai government university. The study adopts both qualitative and quantitative methods to analyse the issue of clause complexity based on inter-clausal relations (logico-semantic relation), coordination (parataxis) and subordination (hypotaxis) as mainly outlined by Halliday (1994), Halliday and Matthiessen (2004), and Martin (1992). Methodologically, the essays were divided into clause complexes and simple sentences. Relations between clauses were categorized firstly according to whether, in Halliday's terms, they were "paratactic" or "hypotactic" and secondly according to whether they involved, expansion; extension, elaboration or enhancement. The results show positive trend of developments in the use of semantic relations in the latter students' text in which they included rich conjunctive relations and lexical resources in their later texts compared to the pretest texts. The present study is interested in how same analysis can be applied to editorial texts to determine the kind of taxis relations which are dominant.

Sriniwass (2009) in an investigation into the system of taxis and logico-semantic relations on three analytical undergraduate chemistry textbooks used at the University of Malaya, displayed the text data as a numbered sequence of ranking clauses and distinguished them for dependency and interdependency relations. Rukmini, (2010) focuses on the logico-semantic relation of clause complexes in the abstracts of final project reports produced by the students of the English department of Universitas Negeri Semarang. The results reveal that the clause complexes are of both parataxis and hypotaxis whereas the logico-semantic relations are elaboration, extension, enhancement and idea projection.

In expressing ideas through spoken or written language by students, Sulistyaningrum, and Rasyid, (2015) argue that people produce clause complexes as the representation of their ideas. Those clauses are combined to produce relations and meanings which can be understood by others. Their results show that the students produce various kinds of taxis and logico-semantic relation in their presentation.

Nguyen, and Quynh (2020) opine that the logical structure of clauses indicates the logical connection among experiential events, which brings smoothness and coherence to writings. There are two fundamental systems that need to be considered in the analysis of how clauses are related to each other: taxis and logico-semantics (Halliday & Matthiessen, 2014). What this means is that ideas are structurally and semantically organised in texts and analysis of taxis relations should exhume those relations oriented within the text.

Sarip and Hidayat's (2019) study reports of taxis realized in clause complexes of selected article abstracts and argue that clause complexes are formed out of logical-semantic relations that link clauses, typically one pair at a time, as interdependent on one another (Halliday and Matthiessen, 2004, p. 367; 2014, p. 432). Their results showed that parataxis is more dominant than hypotaxis in article abstracts, indicating 10% and 8% constructions of parataxis and hypotaxis respectively in the texts. This is confirmed by Sarip, Fitriati, and Rukmini (2020) who, in a related study revealed that there are more (81) clause complexes of parataxis than are hypotaxis (35) in the texts they analysed.

However, Ifadloh and Nufu (2018) found more hypotaxis (50.65%) than parataxis (49.35%) in the transcripts produced by students in which students tried to provide their interlocutors with the central topics of the event. Similarly, Nguyen and Quynh (2020) examining the logical relations of clauses, particularly the study of taxis and logico-semantics in IELTS sample essays found more hypotaxis than parataxis in establishing logical connections between states of affairs, proving that the IELTS writers tend to support their arguments using some unequal clause statuses.

This conceptualization was extended by Kurniawan, Luardini, and Karani, (2021) in their analysis of clause complex of analytical exposition text written by the English teachers of SMKN 2 Palangka Raya, who argue that the analysis of taxis and logico-semantic reveal a good complexity in the production of the teacher language. This means that a clause complex contains some complex types of relations and information strategies which reveals the movability of the message or meaning in a text. That is, an editorial text may exhibit complexity of ideas which determine the transferability meaning.

METHODOLOGY

The qualitative design was the main approach used in determining the taxis and conjunctives used to write the clause complexes in the editorials and condition in which they occurred. Strauss and Corbin (1990) explain that qualitative design is concerned with describing and understanding the context in which behaviour occurs. According to Creswell, (1994 as cited in, Merriam 2006 p. 145) the aim of qualitative research is on meaning. This implies that qualitative design is used to investigate "how people make sense of their lives, experiences, and their structures of the world". The major reason for choosing the qualitative design is that the present study, as is demonstrated by the research questions, is descriptive and exploratory in nature. As noted by Creswell (1994), qualitative design, with its flexible procedure, is the appropriate design for exploring and describing phenomena that are inconspicuous to the researcher. The specific types of qualitative design methods employed for the study are descriptive survey and textual analysis of the editorials.

Kaid (1989) identifies seven steps that are involved in doing textual analysis, namely, formulating research questions to be answered; selecting the sample to be analysed; defining the categories to be applied; outlining the coding process; implementing the coding process; determining trustworthiness or credibility; and analysing the results of the coding process. It can be observed that central to doing textual analysis is coding, which refers to the process of putting tags, lines, names or labels against the pieces of data.

The *Daily Graphic and Editorials*

The *Daily Graphic* is a public newspaper and has distinguished itself as a credible paper in quality news presentation. It is produced and supplied daily and seems to have a wider circulation that reaches a greater percentage of the newspaper reading public in Ghana. It covers such issues as politics, business and finance, sports, education, development, the environment, social and international affairs *(source: Daily Graphic homepage)*. People from all walks of life have access to the *Daily Graphic*. It also has several appeals to the general and reading public as far as religious, social, economic, and political issues are concerned. It thus becomes a good choice for the present analysis.

This study has chosen the editorials, whose function is not only to inform but to influence public opinion to share the same views by its authors. Broadly speaking, the editorials are restricted to expressing of thoughts or ideas, locution or speeches', either of the editorial writer's or the newspaper's editorial board. Newspaper editorial articles belong to the large class of opinion discourse, largely considered a newspaper sub-genre nowadays (van Dijk, 1995, p.32). The systematic and explicit study of editorials has been of interest in the past years because they reflect not personal, but mainly institutional opinions, in line with the editorial policy and ideology of the newspaper.

Consequently, Reah (2002, p.8) indicates that readers who need explicit guidance on how to approach events and participants are expected to turn towards editorials rather than towards news reports. The editorials in their position of opinion represent the official voice of the publication. Therefore, they are persuasive and biased types of writing which encode the respective newspaper's ideology. Editorials can be written on a variety of subjects and reality can be represented in a number of ways, thus the editorial writer chooses the topic and the perspective from which to view it in such a way that it serves the institutional (ideological) interests (Zdrenghea, 2013, p.7). It is interesting to note that editorials contain copious use of grammatical structures such as words, phrases, clauses, sentences, which could be explored and analysed by linguists. It is upon this observation that we choose to look at the packing of sentence information to provide extensive accounts of a special framework of systemic functional grammar, clause complexing in the editorials which is the opinion of the newspaper.

For the reader, the editorial clarifies issues that have been raised in the paper or elsewhere. Adjei & Opoku (2017) also assert that editorials carry interpretations, which encourage readers to think about subjects they may otherwise not have been considered before, and draw attention to issues, especially local ones that may have otherwise been ignored. Logogye, (2012) already agreed that one very crucial factor for the choice of editorial, especially the state-owned ones such as *Daily Graphic* is that, it is read everyday on radio which has larger coverage in terms of how far it can reach in Ghana if one has access to radio. The choice of the text type is due to its continuing importance as medium for communication. Also, in terms of structure, the editorial shows a more formal structure as compared to other columns of the newspaper (Adjei, 2010, p.105). The selection is also justified by the fact that the study is interested in the packing of ideas and other linguistic choices in the selected text and the messages they carry through pure textual analysis.

Data

This study used documents; editorials of *Daily Graphic* were the documents or data for this research. Tuckman (1999) says documents are information about an event or phenomenon which people have prepared. They are written accounts to describe and occasionally to explain phenomena that have taken place. The choice was informed by the fact that descriptive and textual analysis as indicated by Creswell (2000) lends itself to documents. Textual analysis typically employs written documents to determine the opinion, attitude, preferences,

and perception of persons of interest to the research. Document analysis helps to ensure validity and reliability of data collected. Creswell (2009:180) lists the merits of using documents as follows:

a. Enable the researcher to obtain the language and words of participants.
b. Can be accessed at a time convenient to the researcher.
c. When compiling data provided by participants pay attention.
d. It saves a researcher time and expanse of transcribing.

The editorials were collected weekly from Techiman High School library from January 6, 2014 to March 13, 2014, without any discrimination bias or interest. The study was only interested in the editorial text, therefore any editorial from the selected newspaper could be used. The library serves as a source of reliable information for teachers and students, and further provides a wide range of content categories ranging from news, articles, press releases, information from government organizations and more.

Analysis Procedure

According to Halliday and Matthiessen (2004, p. 9), the basic unit for analysis is the clause at lower and higher ranks. Therefore, the basic units for analysis of the data were clause complexes which were numbered and grouped into compound and complex sentences. In all, there were **158** clause complexes with **462** clauses which were counted in the editorials**.** Each of the 10 editions was divided into clause complexes, which, for ease of reference are usually termed "sentences" in this article. The clause complex/sentence was defined as combination of clauses which together formed a distinct, detach and autonomous *grammatical* and *semantical* units. The total number of clause complexes/sentences was tallied for each text and the tally placed in a Microsoft Excel database for the purpose of statistical analysis.

ANALYSIS

A typical *Daily Graphic* editorial starts with the name of the newspaper: *Daily Graphic* which is followed by the day, month and year of publication. The next item is the title, which is mostly written in block letters. The final part is body which contains the message and arranged in sentential paragraphs. Another feature of the *Daily Graphic* editorial has to do with its paragraphing. The indentation style is quite different from the ordinary essay types; here, the topic sentence is pushed out from the rest of the text. The number of paragraphs in the editorials analysed range from fourteen to twenty. Each editorial presents a different issue and the introductory paragraph usually introduces the issue or the problem under discussion whereas the concluding paragraph often represents or projects the voice of the editor. The sentences in the editorials are well packed with compound and complex sentences which we refer to as clause complexing in this regard. Finally, it is not uncommon to find a one-sentence paragraph in *Daily Graphic* editorials. Such paragraphs often carry vital information as shown below:

1. *The result is now history. EDT1 CN8*
2. *It exposes our inefficiency. EDT10 CN169*
3. *Others have lost their lives and property due to technical problems in electricity supply EDT2 CN22*

The use of single-clause paragraphs seems to draw attention to sensitive issues the writer wants readers to take notice of but these clause simplexes are not the focus of this analysis.

Structural Sentence Types used Predominantly in the Editorials

The editorials under study contain a lot of clause complexing which equally or unequally showcase the ideas presented by editors. The average number of clauses, both clause simplexes and clause complexes, counted in each of the 10 editorials range between fourteen and twenty. The total number of clauses, both clause simplexes and clause complexes identified in all the 10 editorials were one hundred and sixty–nine (169). Out of 169 clauses, one hundred and fifty–eight (158), containing 462 clauses constituting 80.61%, were clause complexes while only eleven (11) forming 19.39%, were clause simplexes which were not coded for the analysis since the unit for the analysis was clause complexing. The editorials were coded from EDT1 to EDT10 and clause complexes were numbered in each editorial and given the code from CC1 to CC158 for clause complexing.

The distribution of sentences running in the various editorials shown in the table below addresses the question; *what structural sentences types are used predominantly in the editorials?*

Table 1: The prevalence of clause complexing running in the editorials

Editorial (EDT)	Overall number of clauses (NC)	Total number of clause simplexes (CS)	Total number of clause complexes (CC)	Percentage (%)
EDT1	17	1	16	94.12
EDT2	18	1	17	94.44
EDT3	17	1	16	94.12
EDT4	14	0	14	100
EDT5	19	0	19	100
EDT6	14	1	13	92.86
EDT7	15	1	14	93.33
EDT8	18	1	17	94.44
EDT9	17	1	16	94.12
EDT10	20	3	17	85
TOTAL	**169**	**11**	**158**	**80.61**

From table (1) above, it could be seen that the clause complex mean density for the entire editorials was **80. 61%.** Again, in almost all the editorials analyzed, the proportion of clause complexing to the total number of running clauses was found to be higher. For instance, EDT4 and EDT5, recorded no clause simplex and have clause complex density of **20%** followed by EDT1, EDT2, EDT3, EDT6, EDT7, EDT8, and EDT9, which recorded one clause simplexes each representing **70%**. Finally, EDT 10 recorded three clause simplexes of **10%** complex density**.** The above observation confirms the claim by Sekyi-Baidoo (2003: p. 197) that language of the formal level is generally complex in structure and specialized in vocabulary. Therefore, one could say that *Daily Graphic* editorial is highly formal and complex based on the analysis from the table above.

Types of interdependencies employed in the editorials

Interdependency implies a grammatical system that determines the sentential relationships which exist between structural types of sentences. This system indicates the notion of equalness or unequalness of ideas within the complexity of a clause. Halliday and Matthiessen (2004, p 438) posit that two basic systems determine how one clause is related to another. They are i) TAXIS (degree of interdependency); which are of two types; sentence of equalness which is known as parataxis and sentence of unequalness which is also known hypotaxis, (ii) the LOGICO-SEMANTIC RELATION. To explore the dominant choices of sentence information in the editorials, the results of the analysis are explained by identifying the structural sentence types used in the editorials. The results on the systems of interdependencies illustrate the taxis types and their frequencies in the editorials under study and are tabulated below.

Table 2: The use of parataxis and hypotaxis in the editorials

	CC	PARATAXIS	PERCENTAGE	HYPOTAXIS	PERCENTAGE
EDT1	16	1	6.25	15	93. 75
EDT2	16	3	18. 75	13	81.25
EDT3	16	2	12.5	14	87.5
EDT4	14	0	0.0	14	100
EDT5	19	0	0.0	19	100
EDT6	13	1	7.69	12	92.31
EDT7	14	2	14.29	13	85. 71
EDT8	17	0	0.0	17	100
EDT9	16	1	6.25	15	93. 75
EDT10	17	3	17.65	13	82.35
TOTAL	**158**	**13**	**8.23**	**145**	**91. 77**

The analysis of clause complexes presented in the table above implies that the editorials have *hypotaxis or complex sentences* which dominate *parataxis or compound sentences*. This shows that editorial texts contain both types of interdependency relation between clauses: *parataxis* and *hypotaxis* which alternate across the text span with a wide range of dependent relations. It could be said that editors really make use of sentences of equal and unequal statuses to write their editorials with the purpose that their editorials may not be long but they seem to economize a page and they do it successfully since all the editorials are shorter than a page. Based on the number, hypotaxis is predominantly used by the editors; they are nearly twelve times as many as the parataxis. It could be seen that the number of clause complexes in the entire editorials were 158. Parataxis relation recorded only 13 representing 8.23% while hypotaxis recorded 145 representing 91**.** 77%. In sentences which have a combination of equal ideas and unequal ideas, the equal ideas or dominant ideas could be referred to as *Domain* whereas the unequal or dependent ideas could be referred to as *coDomain*. The fact is that the *coDomain* rely on

the *Domain* before it could make a sense, therefore if the *Domain* is not present, the *coDomain* is giving less importance or power. In this sense, according to Downing and Locke (2006: 277), the semantic relations and effects are varied, as they represent the way the speaker or writer conceptualises the connection made between one clause and another, at one point in the discourse. When units of unequal statuses are related, the relationship is one of dependency. Syntactically and semantically, the dependency relationship is most clearly signaled by subordinating conjunctions ('subordinators') such as *because, although, if, as, which, who, when etc*. Such connections do not simply link clauses within a sentence, but clauses within a paragraph and paragraphs within discourse.

This implies that the proportion of clause complexes which are dependent in each editorial and the number of clause complexes in each editorial are varied because hypotaxis is more than parataxis. The dominant use of hypotactic clauses over paratactic clauses seems to show diversity of ideas which hang on others.

Degree of equalness or parataxis in the editorials
Parataxis is the relationship between units of equal status and often of similar form. Semantically, the content of each clause has to be seen as significant and meaningful to each other in some way. From the data, the editors employ the use of such relations to equally menstruate their ideas in the editorial discourse. The linking relationship is made explicit by the use of synchronizers such as *and*, *or* and *but*. It was observed in the editorials that clause complexing *EDT1 CC15, EDT2 CC19, EDT2 CC23, EDT2 CC29, EDT3 CC42, EDT3 CC47, EDT6 CC86, EDT7 CC95, EDT7100, EDT9 CC138, EDT10 CC152, EDT10 CC156, and EDT10 CC158* are all paratactically synchronized to evenly weigh the ideas. These paratactic clause complexes have two or more dominant ideas which are free in their own right and are treated as equal status or compound sentences. For example:

Table 3: Paratactic relationships in the editorials

1 initiating clause	*|| 2 continuing clause*
||| 1Another year has just begun	*|| 2 and the Christian Council, which has a prophetic role as a development partner with responsibility [to] nation-building efforts, has given us food for thought.|||*
|||1 Due to incessant power outages and surges, many of their electricity consumers have had many electrical gadgets destroyed	*|| 2 but they have resigned themselves to their fate. |||*
||| 1 The time has come for all Ghanaians to shed their 'I give it to God' attitude	*|| 2 and make service providers behave more responsibly.|||*
||| 1 Such traffic always impinge on productivity, as a result of lost man-hours,	*|| 2 and also causes fuel wastage ||3 and pollution brought about by the running of engines of many vehicles.|||*
||| 1 The expanding economy and the growing population have unleashed all kinds of characters onto our roads,	*|| 2 some of whom do not respect road regulations.|||*
|||1 Top officials of the DVLA always deny the presence of these 'goro boys'	*|| 2 but they are always around offering services in broad daylight on the premises of the DVLA.|||*
||| 1 The LMIS seeks to identify current and future job market opportunities	*|| 2 and provide analysis of the labour market based on the economic development of the country.|||*
||| 1 The deep potholes cause discomfort	*|| 2 and frustration to all road users.|||*

From the above, clause complexes which carry the same or equal weights have been presented. Clauses in the left side of the table are all dominant or *Domain* clauses, likewise clauses in the right side of the table are also dominant or *Domain* clauses. This implies that each of the clauses in the left and the right sides of the table are very important. They usually have very few clauses, and more importantly, none of the clauses are *coDomained* to one another. Paratactic clauses are used to indicate what the most important part (the independent clause) of a clause is, so when there is no subordinate part, the effect is that it makes every part of the clause equally important. The clauses with label **1** are the *initiating* clauses because they commence the development of the clause complexity. On the other hand, clauses labeled **2** or **3** are *continuing* clauses because

they augment the single idea into a complex scheme. Grammatically, these clauses have equal statuses, because the information presented in one clause is as significant as one that is presented in the other or others and are introduced by linkers. For example;

Table 4: Paratactic linkers

*CC15 ||| 1Another year has just begun || 2 **and** the Christian Council, which has a prophetic role as a development partner with responsibility to nation-building efforts, has given us food for thought.|||*

*CC19 ||| 1 Due to incessant power outages and surges, many of their electricity consumers have had many electrical gadgets destroyed || 2 **but** they have resigned themselves to their fate. |||*

*CC23 ||| 1 Unannounced power cuts and incessant outages have been the order of the day, || 2 **with** the majority of Ghanaians being defenseless and at the receiving end.|||*

*CC29 ||| 1 The time has come for all Ghanaians to shed their 'I give it to God' attitude || 2 **and** make service providers behave more responsibly.|||*

*CC48 ||| **1** We also ask the Motor Traffic and Transport Unit (MTTU) of the Ghana Police Service to collaborate with the MMDAs to apprehend and process the obstinate drivers for the motor court, | **2 so** it will serve as a deterrent to others.|||*

It could be said that the effect is even, because the clauses are direct with the use of linkers; *and, but, with,* and *so.* The sentences do not beat around the bush, since they are independent in their own right. Paratactically, they are of equal relation because each side of the clause makes meaningful thought. Halliday and Matthiessen (2004, p. 384) indicate that in paratactic, both the initiating and the continuing element are free, in the sense that each could stand as a functioning whole. But, one could say that it also leaves it a little mysterious about what the most important part of those clauses are. The degree of equalness can be said to be commutative because the effect is that it does not matter which idea comes first.

The table 5: The commutative properties of equalness

initiating clause	the arrow of equalness	continuing clause
EDT1 CC15 ||| 1Another year has just begun		*||2 and the Christian Council, [which has a prophetic role as a development partner with responsibility to nation-building efforts,] has given us food for thought.|||*
EDT2 CC19 ||| 1 [Due to incessant power outages and surges,] many of their electricity consumers have had many electrical gadgets destroyed		*|| 2 but they have resigned themselves to their fate. ||*
EDT2 CC29 ||| 1 The time has come for all Ghanaians to shed their 'I give it to God' attitude		*|| 2 and make service providers behave more responsibly.|||*
EDT3 CC42 ||| 1 Such traffic always impinge on productivity, as a result of lost man-hours,		*|| 2 and also causes fuel wastage ||3 and pollution brought about by the running of engines of many vehicles.|||*

This means that the clauses are paratactically related because they show the relation between two like elements of equal status, one initiating and the other continuing. From the above, one could say that the commutative property of clauses of equal status is A + B = B + A or A x B = B x A. The paratactic relationship shows that grammatically, 'A' which is the initiating clause is commutative to 'B' which is the continuing clause. Therefore, the equation is A commutative B or B commutative A, in other words, A=B and B=A. This implies that equal status brings about mutuality or affinity because of shared characteristics.

Degree of unequalness or hypotaxis in the Editorials

Downing and Locke (2006: 279) say that when units of unequal status are related, the relationship is one of dependency. One clause is dependent on another or on a cluster of clauses. The relationship between the clauses is therefore unsteadiness, as with coordination and apposition. Grammatically, the dependency relationship is most clearly signaled by subordinating conjunctions such as *because, although, if, as*. Below are samples of hypotaxis distribution of clause complexes in the editorials. Alpha (α) is for dominant clause and beta (β) is for dependent clause, each of them can begin the sentence. From the analysis in the table two above, we observed that there were 145 hypotaxis clause complexes in the editorials understudy but not all of them were used in this analysis those which were sampled have been referred to in the appendix.

α represents the primary | *β represents the secondary*
or the dominant clause   *or dependent clause*

||| *β Thus, when Ghana made the decision in 1992 to return to constitutional rule, |α many citizens and indeed, the international community was of the view that it would bolster our development efforts. |||*

||| *β Although in other places in the world, consumers usually take on the service providers | β when they do not fulfill their part of the bargain, | α Ghanaians have been tolerant to a fault| β and not demanded answers to or compensation for the break in service. |||*

||| *α Despite the existence of a Consumer Protection Agency (CPA), its voice has virtually been drowned | β by the deafening silence of the majority of Ghanaians affected by the utility providers' indiscriminate termination of services. |||*

||| *α We urge PURC to intensify its education of consumers on their rights | β so that utility service providers become more responsible to their publics.|||*

||| *α Bus stops are also meant to afford people the ease and safety |to board vehicles, be they commercial or private, | β while ensuring some order and sanity on and along the roads.|||*

||| *α However, in Ghana, especially in metropolitan cities such as Accra, bus stops have rather been turned into lorry stations |where taxis and 'trotros' park for minutes on end | β as their drivers' mates cry themselves hoarse for unavailable passengers.|||*

||| *α The local currency, the cedi, is experiencing a free fall reminiscent of the late 1990s |when the prices of goods and services could change | β while bargaining was going on | β because of the uncertainties surrounding the value of the cedi against the foreign currencies.|||*

||| *α The country is at the crossroads | β as far as the health of the economy is concerned, especially with the cedi.|||*

From the above, the clauses with alpha (α) label are the dominant or *Domain* clauses which override or govern the combination of the complexity and clauses with beta (β) label are dependent or *coDomain* clauses which rely on the dominant or *Domain* clause to make sense in complex system. Grammatically, these clauses have unequal status, because the information presented in one clause is important than the one presented in the other or others. This can be represented in the table below to indicate the boundary between the *Domain* clause and the *coDomain* clause. Note that the clause complexing are not in order in the table. Use the ampersand (&) sign to denote the beginning of the clause and Greek small letter epsilon (ἐ) to indicate the continuation of the clause. Also, Roman numerals have been used to number the clauses for easy reading and identification.

Table 6: Hypotactic clauses

Alpha ( )for the Dominant Clause	Beta ( )for the Dependent Clause
|||&*i α Numerous accidents have occurred along such chaotic roads*	ἐ*ii* | *β because the vision of both drivers and pedestrians has been obstructed in many instances.*|||
ἐ*iii* | *α Ghanaians have been tolerant to a fault* | *iv α and not demanded answers to or compensation for the break in service.* |||	&*i* ||| *β Although in other places in the world, consumers usually take on the service providers* | *ii β when they do not fulfill their part of the bargain,*
ἐ*ii* | *α many citizens and indeed, the international community was of the view that it would bolster our development efforts.* |||	||| &*i β Thus, when Ghana made the decision in 1992 to return to constitutional rule,*
ἐ*ii* | *α the loss of perspective is dramatic.* |||	||| &*i β However, when they talk about politics and act politics,*
|||&*i α Towards the end of last year and at the beginning of this year, the cedi has been experiencing a free fall,*	ἐ*ii* | *β compounding the cost of doing business in the country.*|||
||| &*i α At certain bus stops abroad, people only have to wait for five, 10 or 15 minutes to catch a bus,*	ἐ*ii* | *β which also allows for effective scheduling of appointments.*|||
|||&*i α Bus stops are also meant to afford people the ease and safety |to board vehicles, be they commercial or private,*	ἐ*ii* | *β while ensuring some order and sanity on and along the roads.*|||

From the above table, one could say that when clauses in clause complexes are subordinated to one another, they are hypotactically related. This is apparent that what we should be focusing on is the dominant clause, which can give an emotional cast to the writing. It points clearly at what is important and what should be read with the most weight. The dominant clause could be referred to as *Domain* clause while the dependent clause could also be referred to as *coDomain*. In hypotactic, one *Domain* could map to one or more members in the *coDomain*. In relations and functions, the *coDomain* depends on the *Domain* to make meaning such that if the *Domain* is unknown or not present, then the *coDomain* becomes meaningless. For example;

Table 7: Domain and coDomain clauses

||| *β Whenever stakeholders do not feel a sense of ownership of a programme,* ***coDomain*** *|* ***α*** *they see the initiative as an imposition.* ***Domain***|||

||| ***α*** *The offices of the Driver and Vehicle Licensing Authority (DVLA) have been taken over by middlemen or fraudsters* ***Domain*** *|* ***β*** *who harass people seeking the services of the authority.*||| ***coDomain***

||| ***α*** *The offices of the DVLA in Accra, for instance, are under siege every day from middlemen or fraudsters* ***Domain*** *|* ***β*** *who want to perform certain duties for drivers and prospective drivers for fees.*||| ***coDomain***

i β As things stand now, ***coDomain*** *|* ***α*** *the student body is strongly against the tolls,* ***Domain*** *| iii β while the leadership of the institution is bent on having its way.*||| ***coDomain***

Domain	CoDomain
	i β As things stand now
ii α the student body is strongly against the tolls	
	iiiβ while the leadership of the institution is bent on having its way.|||
	|ii β 21 years on, smoothly changing ruling ruling parties in transitions
|||i α Ghana has come a long way,	
	|iii β that have been the envy of many fellow African states.|||

In this case, one can clearly state that the Domain is the most important part of the sentences: i. **α** they see the initiative as an imposition; ii. **α** The offices of the Driver and Vehicle Licensing Authority (DVLA) have been taken over by middlemen or fraudsters; iii. **α** The offices of the DVLA in Accra, for instance, are under siege every day from middlemen or fraudsters. But with the added coloration of subordination or dependency called coDomain, we get more of a scene, more of an emotional background of 'expectancy or suspency' in clauses; **β** Whenever stakeholders do not feel a sense of ownership of a programme, **β** who harass people seeking the services of the authority, **β** who want to perform certain duties for drivers and prospective drivers for fees. Neither choice is better than the other, but one could see how different writers have used their style to tell very different stories. In their writings, writers could begin with the Domain idea or the coDomain idea. According to Halliday and Matthiessen (2004:384), in the binding of elements of unequalness, the dominant element is free, but the dependent element is not.

Conjunctive Devices in the editorials

There are few implicit conjunctive structures ||| *α Yet, very few, if any, have had the courage and will |* *β to confront the service providers |who have their gadgets, |* *β let alone taken them on at the courts.*||| while those of explicit ones are the majority. The fact that explicit conjunctions far more exceeds implicit conjunctives tell us that the writer does not leave much for the reader to decode but makes it simple, clear and exact for the sake of the reader. This is also a feature of editorial, bearing in mind that the editorials are written to entertain or inform the reader.

Thirdly, looking more closely at the use of conjunctive signals in the text, we can find that there are 22 clause complexes in the editorials with a very high percentage of conjunction 'and' used to connect the sentences in the texts. For example, ||| *1Another year has just begun | 2* **and** *the Christian Council, which has a prophetic role as a development partner with responsibility to nation-building efforts, has given us food for thought.*||| The temporal conjunctions (while, as, when, before and until) are also used frequently to denote the chronological order of facts in the text. There are spatial conjunctions in the text; this can be explained by the fact that there is no need for it, as the editorials describe the thought of the editor.

||| *α Bus stops are also meant to afford people the ease and safety |to board vehicles, be they commercial or private, |* *β* **while** *ensuring some order and sanity on and along the roads.*|||

||| *α This trend has caught on at many of the city's bus stops, |β* **as** *reported in this paper yesterday, |β has brought about chaos on most routes, |* *β in view of the incessant traffic situation it has brought in its wake.*|||

|||*β However,* **when** *they talk about politics and act politics, |α the loss of perspective is dramatic.* |||

||| *α Basic items such as fire extinguishers are lacking in our markets |* *α and so the traders are unable to fight the fires |β* **before** *calling for assistance from firefighters.*|||

||| *α Making the situation worse is that practice of stopping vehicles right in the middle of the road to pick passengers, |* *β thereby denying other road users the right to use that road, |* *β* **until** *they (trotro and taxis) have*

finished picking or dropping passengers.|||

Moreover, certain complexes can be interpreted in several ways, for example complex ||| *α There were other roads to Tema, particularly the Marine Drive, | α but the Motorway was most convenient | β for those who were prepared for the speed limit on the road.|||* This clause can be analyzed as 1 +2 *α* x 1 *β*, with the third clause as the dependent clause of the second, Thus, this reflects the complexity of language in general and of expansion in particular. Thus, the writer does not leave much for the reader to decode but makes it simple for the reader to decode.

Conjunctive devices whether implicit or explicit, help us to be able to identify the kind of expansion relations which are imbedded in clause complexes and these devices were used in the editorials. There are few implicit conjunctive structures such as ||| *α In every civilised society, service providers owe it a duty to consumers | to announce any intended disruption in services regularly; | β be it supply of water, electricity or other essential services.|||* Below are explicit conjunctives which were used profusely.

Table 15: Explicit conjunctive signals

Conjunctives	Examples of Sentences	No of Sentences
and	||| *1Another year has just begun	2 and the Christian Council, which has a prophetic role as a development partner with responsibility to nation-building efforts, has given us food for thought.|||*	22
because	||| *α Numerous accidents have occurred along such chaotic roads	β because the vision of both drivers and pedestrians has been obstructed in many instances.|||*	15
but	|||*1 Due to incessant power outages and surges, many of their electricity consumers have had many electrical gadgets destroyed |2 but they have resigned themselves to their fate. |||*	11
while	||| *α Bus stops are also meant to afford people the ease and safety |to board vehicles, be they commercial or private, |β while ensuring some order and sanity on and along the roads.|||*	7
that	|||*α Ghana has come a long way,	β 21 years on, smoothly changing ruling parties in transitions	β that have been the envy of many fellow African states. |||*	7
so that	*EDT2 CC27* |||*α We urge PURC to intensify its education of consumers on their rights |β so that utility service providers become more responsible to their publics.|||*	6
when	|||*β However, when they talk about politics and act politics, |α the loss of perspective is dramatic. |||*	6
where	|||*α However, in Ghana, especially in metropolitan cities such as Accra, bus stops have rather been turned into lorry stations	where taxis and 'trotros' park for minutes on end |β as their drivers' mates cry themselves hoarse for unavailable passengers.|||*	5
as	|||*α Investigations by US experts into the Kumasi Central Market fire were inconclusive, |β as people were said to have gone to the site |β to destroy essential evidence.|||*	5
which	|||*α At certain bus stops abroad, people only have to wait for five, 10 or 15 minutes to catch a bus, |β which also allows for effective scheduling of appointments.|||*	5
although	|||*β Although a date is yet to be fixed for the hearing of the writ, |α we believe |β that under the present circumstances, the university authorities should have stayed action on its plans pending the outcome of the court suit.|||*	4

From the above, the fact that explicit conjunctions far more exceeds implicit conjunctives tell us that the writer does not leave much for the reader to decode but makes it simple, clear and exact for the sake of the reader. This is also a feature of editorial, bearing in mind that the editorials are written to entertain or inform the reader.

Again, looking more closely at the use of conjunctive signals in the text, we can find that there are 22 clause complexes in the editorials with a very high percentage of conjunction *and* used to connect clauses in the editorials. For example, ||| *1Another year has just begun | 2 and the Christian Council, which has a prophetic role as a development partner with responsibility to nation-building efforts, has given us food for thought.|||* The temporal conjunctions (while, as, when, before and until) are also used frequently to denote the chronological order of facts in the text. There are spatial conjunctions in the text; this can be explained by the fact that there is no need for it, as the editorials describe the thought of the editor.

|||*α Bus stops are also meant to afford people the ease and safety |to board vehicles, be they commercial or*

*private, |**β** **while** ensuring some order and sanity on and along the roads.|||*

*|||**α** This trend has caught on at many of the city's bus stops, |**β as** reported in this paper yesterday, |**β** has brought about chaos on most routes, |**β** in view of the incessant traffic situation it has brought in its wake.|||*

*|||**β** However, **when** they talk about politics and act politics, |**α** the loss of perspective is dramatic. |||*

*|||**α** Basic items such as fire extinguishers are lacking in our markets |**α** and so the traders are unable to fight the fires |**β before** calling for assistance from firefighters.|||*

*|||**α** Making the situation worse is that practice of stopping vehicles right in the middle of the road to pick passengers, |**β** thereby denying other road users the right to use that road, |**β until** they (trotro and taxis) have finished picking or dropping passengers.|||*

Moreover, certain complexes can be interpreted in several ways, for example complex CC145 ||| **α** There were other roads to Tema, particularly the Marine Drive, | **α** but the Motorway was most convenient | **β** for those who were prepared for the speed limit on the road.||| This clause can be analyzed as 1 +2 **α** x 1 **β**, with the third clause as the dependent clause of the second, Thus, this reflects the complexity of language in general and of expansion in particular. Thus, the writer does not leave much for the reader to decode but makes it simple for the reader to decode.

DISCUSSIONS
The taxis type of clause complex used predominantly in the editorials
The research findings on clause complex realization involve Parataxis and Hypotaxis Relations. From the ten texts, a number of 158 clause complex nexus, consisting of 8.23 % parataxis and 91.77 % hypotaxis is found. On the average, the number of clauses, both clause simplexes and clause complexes, found in each of the 10 editorials range between fourteen and twenty. The total number of clauses, both clause simplexes and complexes identified in all the 10 editorials were one hundred and sixty–nine (169). Out of 169 clauses, one hundred and fifty–eight (158), containing 462 clauses constituting 80.61%, were clause complexes while only eleven (11) forming 19.39%, were clause simplexes which were not coded for the analysis since the unit for the analysis was clause complexing. This means that clause complex is the preferred choice in the editorial text and the reason is that it allows for expansion of ideas.

In the 10 editorials, it was found that hypotaxis dominate parataxis in terms of distribution. For example, EDT1, EDT2, EDT3 and EDT9 have 16 CC each but they had varied paratactic and hypotactic distributions. This supports the view expressed by Ifadloh and Nufu (2018) and Nguyen and Quynh (2020) in their studies that writers employ more hypotactic clause complex than paratactic clause complex. For parataxis, EDT1 had only 1, EDT2 had only 3, EDT3 had only 2, EDT9 had only 1 whereas EDT1 had 15 hypotaxis, EDT2 had 13 hypotaxis, EDT3 had 14 hypotaxis and EDT9 had 15. Also, EDT4 and ED7 have CC 14 each and according to distribution, EDT4 had 14 hypotaxis and no parataxis whereas EDT7 had 12 hypotaxis and only 2 parataxis. Besides, EDT8 and EDT10 had 17 CC each with varied hypotaxis and parataxis distributions; EDT8 had 17 hypotaxis and 0 parataxis while EDT had 14 hypotaxis and 3 parataxis. Again, EDT5 had 19 CC and all of them are hypotaxis. Finally, EDT6 had 13 CC, 12 of them were hypotaxis and only one was parataxis.

The overall picture of frequency in terms of high, mid and low shows that EDT5 had high frequency of 19 CC with zero simplex. This implies that the issue been discussing seems to be very complex hence its complexity is shown in the sentences presented. Therefore, one could conclude that it may impede comprehension and pose a challenge to the reader. Also, EDT1, EDT2, EDT3, EDT8 EDT9 EDT10 recorded mid frequency with 16 and 17 CC. This also shows that the editors seem to tone down in their reportage because we have some clause simplexes and at least the reader would be able to decipher the message. Finally, EDT4, EDT5 and EDT6 recorded low frequency of 13 and 14 CC. This is also an indication that the issue discussing might be so prevalent in terms of its complexity to the editor.

Looking at frequency of high, mid and low CC in the editorials, one could state that the editors did not extensively depart from the use of hypotactic and paratactic structures in the editorials. Therefore, it could be said that hypotactic still maintain the highest frequency between 12 and 19 hypotaxis whereas paratactic move from 0 to 3 in its occurrences in the EDTs. This vivid description is an added indication that hypotaxis dominates the EDTs.

It could be concluded that both taxis; parataxis and hypotaxis relations were used in the editorials under study but from the ongoing discussions, it was found that hypotaxis dominate in the 10 EDTs. Therefore, one could say that the realization and distribution of the taxis types of clause complex are not pleasing in the EDTs. This is critically essential to be considered because it can be said that the EDTs are full of *coDomain* or dependent clauses and the implications are numerous. When the *Domain* or dominant is cut, the rest of the information could be meaningless. This implies that the EDTs which convey the opinions of the editors do not seem to have equal importance of ideas because the writers seem to put across several clauses of unequal importance in the editorials. In conclusion, the research findings indicate that editorial texts favour much more hypotaxis than parataxis since complex clause structures are really packed in the editorials and the editors do not

depart from the use of these complex clause structures which are linked together in the 10 editorials. The realization of the conjunctives had enabled the messages in the editorials presented in distinct manner.

CONCLUSION AND RECOMMENDATION

All the taxis relations; parataxis and hypotaxis are used by the editors of *Daily Graphic* to write clause complexes in the editorials under study. The realization of the clause complexes is relatively so satisfactory; some meanings are appropriately realized in terms of lexical and grammar choices. This is crucially necessary to be considered; otherwise the meanings cannot be well conveyed. The only suggestion which can be given is that all kinds of grammars: traditional, formal and systemic functional should be learned by students of English before they are allowed to complete their Masters Degree. This article only discusses about taxis aspect of clause complex. It means that, there are many more semantic aspects need to be observed and expanded. There are many kinds of texts that can be further studied and observed.

REFERENCES

Adedun, E. A. (2012). *The Use of English for Academic Purposes*: University of Lagos Press; Akoka, Yaba-Lagos, Nigeria. ISBN978-978-51408-3-5.

Ademola-Adeoye, F. (2014). English Grammar and Syntactic Structures: *English Studies in Focus: Readings in Language and Literature:* Edited by Emmanuel A. Adedun and Yaw Sekyi-Baidoo, Faculty of Languages, University of Education, Winneba, Ghana; ISBN9782341441.

Adjei, A. A. (2010). *Theme and Thematic Progression in the Daily Graphic – A Study of the Editorial and the Lead Story*; PhD, University of Education, Winneba Dept. of English Education; Unpublished.

Adjei, A.A. & Opoku, K. (2017). The expanding relations of clause complexing in the editorials in the *Daily Graphic*, in *Journal of Literature, Languages and Linguistics*. Vol. 30, Pp. 12-26.

Bloor, T., and M. Bloor. (2004) *The Functional Analysis of English: A Hallidayan Approach*, (2nd Edition), London: Arnold.

Borg, W. R., & Gall, M. D. (1989). *Educational Research*; *An Introduction*. New York: Longman

Borg, W., Gall, J., and Gall, M. (1993). Applying educational research, a practical guide (3rd edition). New York: Longman.

Creswell, J. W. (1994). *Research design: quantitative and qualitative approaches.* U.S: Sage.

Creswell, J. W. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–*131*.

Creswell, J. W. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd Edition. Los Angeles: Sage Publications, Inc.

Downing, A. and Locke, P. (2006). *English Grammar. A University Course Second edition*: London and New York: Routledge Taylor & Francis Group.

Eggins, S. (2004) *An Introduction to Systemic Functional Linguistics* (2nd Edition), London, New York: Continuum.

Frimpong, G. K. (2015) A Comparative Register Analysis of Editorials from Ghanaian and British Newspapers. University of Ghana, Legon, Department of English. Accra: Unpublished PhD Thesis. Retrieved on 15th November, 2019. From http://ugspace.ug.edu.gh.

Gonzales, E. (2008). *The Language of the University: A Systemic Functional Analysis*: University of Texas at Arlington, Press Inc.

Halliday, M., and C. Matthiessen. (2004) *An Introduction to Functional Grammar* (3rd and 4th Editions), London: Arnold.

Halliday, M.A.K. (1994). *Functional Grammar.* London: Edward Arnold.

Halliday, M.A.K., & Matthiessen, C.M.I.M.(2014). Halliday's introduction to functional grammar, (4th ed). USA and Canada: Routledge.

Ifadloh, N., & Nufus, Z. (2018). The Analysis of Clause Complex in the Students'casual Conversation. *LET: Linguistics, Literature and English Teaching Journal*, 7(2), 120-133.

Kaid, L. L. (1989). Content Analysis. In P. Emmert & L. L. Barker (Eds.), *Measurement of Communication Behaviour* (pp. 197-217). New York: Longman.

Kurniawan, C., Luardini, M. A., & Karani, E. (2021). The analysis of clause complex of analytical exposition texts written by the english teachers of smkn 2 palangka raya. *Intensive Journal*, 4(2), 24-32.

Logogye, C (2012). *Modality In The Print Media: A Study Of Editorials Of Some Ghanaian Newspapers,* UEW, Ghana, Unpublished.

Martin, J.R. (1992). *English text: system and structure.* Amsterdam: Benjamins.

Merriam-Webster Online Dictionary (2006). Retrieved on September 30th, 2014 from http://webster.com

Nguyen, T., & Quynh, H. N. T. (2020) An analysis of logical relations in academic IELTS sample essays. *International Journal of Systemic Functional Linguistics*, 3(1), 37-43.

Oluikpe, B. O. A. (2002). *The use of English for Higher Education*. Onitsha: Africana- FEP Publishers

Ltd.London: Hoddar-Arnold.Prempeh, (2010).

Opoku, K. (2015). *The Study of Clause Complexing in the editorials of the Daily Graphic*, UEW, Ghana, Unpublished.

Othman, W., & Qutob, D. A. (2022). Taxis and logico-semantic relations in English-Arabic translation. *InTRAlinea: Online Translation Journal*, *24*.

Quirk, R., Greenbaum S., Leech, G & Svartvik, J. (1985). *A Comprehensive Grammar of the English Language*. Longman: London.

Reah, D. (2002) *The Language of Newspapers*, 2nd edition, New York: Routledge.

Rukmini, D (2010). The Logico-Semantic Relation of Clause Complexes in the Abstracts of the Final Project Reports Produced by the English Department Students Universitas Negeri *Semarang Ragam Jurnal Pengembangan Humaniora* Vol. 10 No. 3, 107-115.

Sarip, S. K., & Hidayat, Y. (2019). The realization of clause complexes in article abstracts. *Humanitatis: Journal of Language and Literature*, *5*(2), 158-162.

Sarip, S. K., Fitriati, S. W., & Rukmini, D. (2020). The The Paratactic and Hypotactic Constructions in Research Article Abstracts at 2018 ISET Proceedings. *English Education Journal*, *10*(2), 201-207.

Sekyi-Baidoo, Y. (2003). *Learning and Communicating* (2nd ed.). Accra: Infinity Graphics Ltd.

Setial, E, Sutjaja, G. M, Saragih, A & Putrayadnya I. B. (2009) *Clause Complex and Experiential Realization in Court Texts (Bali Bomb Case I): A Systemic Functional Linguistics Study*. Retrieved on 4th April, 2015 from http://ejournal.unud.ac.id/abstrak/eddy%20setia%20pdf.pdf.

Shore, S (1992) *Aspects of a Systemic-Functional Grammar of Finnish*: Doctor of Philosophy in the School of English and Linguistics, Macquarie University, Sydney, N.S.W. Thesis; Unpublished.

Sriniwass, S. (2009). *Methods and Procedures for a Systemic Functional Linguistic Analysis: An Investigation into Clause Complexing Relations*: Faculty of Languages and Linguistics

Srinon U. and White P. (2007). Clause complex analysis on Thai university students' English in a longitudinal genre based course". *Proceedings of the international conference:* Doing Research on Applied Linguistics (131-153).

Strauss, A. and Corbin, J. (1990). *Basics of qualitative research*: *Grounded theory producers and techniques.* Newbury Park, CA: Sage Publications, Inc.

Sulistyaningrum, S. D., & Rasyid, Y. (2015). The Logico-Semantic Relation of Students' Presentation in Acceleration Program of SMA Labschool Jakarta. *IJLECR (International Journal of Language Education and Cultural Review)*, *1*(1), 41-54.

Tâm, N.T.M. (2013). The Notion of Clause Complex in Systemic Functional Linguistics *VNU Journal of Foreign Studies, Vol. 29, No. 4 (2013) 25-36* Research on Applied Linguistics (131-153). Retrieved on 15th March, 2015, from http://ejournal.unud.ac.id/abstrak/eddy%20setia%20pdf.pdf

Thompson, G. (2004) *Introducting Functional Grammar* (2nd Edition), London: Hodder Education.

Tuckman, B. W. (1999).*Conducting Educational Research*, 5th edition, Belmont, CA: Wadsworth Group.

Van Dijk, T. A. (1995). Discourse analysis and ideology analysis. In Wenden, A. and Schaffner, C. (eds) *Language and Peace.* (in press).

Waldrop, A. G. (1958) *Editor and Editorial Writer.*USA: Wm. C. Brown Company Publishers.

Zdrenghea, M. M. (2013) *Newspaper Editorial discourse: The Romanian Editorial at Times of Conflict;* CLUJ-NAPOCA.

Zhuanglin, H. (1988). purpose of exchanging views and experiences in teaching senior English majors. In *Asian-Pacific Papers: Regional Papers Presented at the 8th World Congress of Applied Linguistics, University of Sydney, 16-21 August, 1987* (No. 10, p. 162). Applied Linguistic Association of Australia.

Zhuanglin, H. (1988). *A Course of Linguistics*. Peking: Peking University Press.