Signals from the Surface of Texts: How Lexical Cohesion Reflects Writers' Tones in Nigerian Newspaper Editorials

Zubairu Malah

Postgraduate Student
Department of English Language
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
43400, Selangor Darul Ehsan

Abstract

Lexical cohesion has been an essential tool that texts producers and receivers collaboratively utilized to facilitate the production and reception of texts. While previous text-oriented researches exploring lexical cohesion mostly reported on its interaction with coherence, register, and genre, this paper argues that lexical cohesion interacts with writers' tones that amplify the meanings conveyed and facilitate the fulfilment of persuasive intentions. The objectives of the study include to: (1) identify the major sources of lexical cohesion in Nigerian newspaper editorials, and (2) examine how lexical cohesion devices signal writers' tones in Nigerian newspaper editorials. Drawing on Systemic Functional Linguistics, the study adopted qualitative approach and applied Eggins' (2004) lexical cohesion model, where the analysis of writers' tones was anchored in lexical cohesion devices. The data analyzed comprised 32 editorials of 19,094 words culled online from four Nigerian newspapers: The Guardian, The Nation, Leadership, and Vanguard. The analysis discovered 2,623 lexical ties across 819 sentences, where the major sources of cohesion include repetition (49.2%), expectancy relations (16.5%), synonymy (11.5), and class/sub-class (10%). In addition, the data demonstrated that 1,183 (45.1%) of the lexical ties identified, most of which are also repetition, expectancy relations, synonymy, and class/sub-class, reflect the writers' tones. The study concludes that lexical cohesion determines writers' tones in the editorials, and this ultimately contributes significantly in constructing persuasion in the editorials. It has also been highlighted that the findings of this study could broaden the literature on lexical cohesion, and also be beneficial to editorialists, readers, and ESL/EFL learners especially in persuasive writing and reading comprehension.

Key Words: lexical cohesion, lexical chains, lexical ties, newspaper editorials, Nigerian newspapers, persuasive writing, school genres, writer's tones

1. Introduction

The surface resources of lexical cohesion have been essential tools that facilitate the production and reception of texts, spoken or written. They are open-system items which encode lexical contents in texts and enable language users to be creative. Scholars have shown how these surface elements signal relations between parts of texts (see, for example, McCarthy, 1991; Martin, 2001; Eggins, 2004), where they operate like threads woven to stitch texts together (Carter, 2001). They give texts texture and render them as united wholes than random collections of unrelated sentences or utterances (Halliday and Hasan, 1976; Halliday and Hasan, 1989).Therefore, these text-forming resources often make texts appear as semantic units in which ideas hang together smoothly for text receivers to follow.

In addition, further explorations of lexical cohesion in texts have discovered that these surface elements are not merely devices for building coherence in discourses. Many text-focused researchers have demonstrated how lexical cohesion also interacts with other properties of textual communication. For instance, Lewin, Fine and Young (2001) reported how lexical cohesion interacts with genre moves in the introduction and discussion sections of SSR research articles. Li (2010) has shown how lexical cohesion contributes to ideology construction in media texts. Gonzalez (2013) has unraveled how lexical cohesion establishes interpersonal relations among interlocutors.

Gonzalez (2010) discovered how lexical cohesion supports inference processes in the (re)construction of frames and triggers among communicators. Gil (1995), Klebanov, Diermeir, and Beigman (2008), and Prados and Penuelas (2012) have reported how lexical cohesion is utilized for the construction of persuasion in texts. In addition, in their discussion of lexical cohesion, Halliday and Hasan (1976) have drawn attention to how the use of General Nouns informs listeners of the interpersonal elements of speaker's attitude. Halliday and Hasan illustrate that besides being cohesive, this category of nouns such as *devil, idiot, fool,* and *dear*, may color the speaker's attitude as *contemptuous, sympathetic e.t.c.* (see Halliday and Hasan, 1976:276). Therefore, it is arguable that lexical cohesion could also signal writers' tones, and it could be more revealing if more types of lexical cohesion relations are examined to see how they are utilized to signal tones in writing.

The phenomenon of writers' tones in texts has much to do with the meanings conveyed, such that to misunderstand the writer's tone is to misunderstand the writer's meaning. The tone in writing is inevitably part of the writer's meaning. It could be likened to the movements with which signers produce signs in sign language: sometimes rapid, sometimes slow, large, or small, which characteristically bring out clearly the meanings intended. Tones of writers refer to the webs of feelings evoked across the texts. Similar to the tone of voice in speech, the tone in writing signals the attitudes of the text producer to his/her subject, audience, or (him/her) self. The writer's tone plays key role especially in persuasive writing, such as the newspaper editorials, where the writer tries to convince the reader on the ideas expressed (Kane, 2000; Kolin, 2009; Flemming, 2011). Furthermore, every text, depending on its purpose (such as informative or persuasive), characteristically has tone; and tones range from absolutely formal, impersonal and neural (as in scientific reports) to informal, personal, and subjective, where writers' words are obviously colored with different emotions (as in persuasive writings). A writer's tone, for example, could be *neutral, sarcastic, contemptuous, angry, humorous, admiring, joyful, tolerant,* and so on (Kane, 2000; Kolin, 2009; Flemming, 2012).

Moreover, the tone in writing is signaled by particular words and phrases used, figurative language employed, details given, sentence typology exhibited, imagery depicted, and so forth. This fact suggests that authors' tones are identified by closely examining these linguistic features in the texts (Kane, 2000; Flemming 2011; Flemming, 2012; Kolin, 2012). However, among all these indicators of tone, it is arguable that words and phrases are the most powerful. This is because most literatures on tone mostly concentrate on the roles of words and phrases the writers deliberately choose. For instance, in an attempt to illustrate how words and phrases stand prominent in signalling the writer's intended tone, Kolin (2012:12) cites how describing a person as a *nitpicker* signals a negative tone than when the phrase *interested in details* is used, how *economical* signals positive tone compared to *stingy*, and how *rude* sounds negative compared to *assertive*. In addition, Kane (2000:85) also posits that the writer's tone could be identified by specifically anchoring one's assessment in particular words and phrases. Therefore in the present study, the assessment of writers' tones is specifically anchored in *lexical cohesive units,* which can be simple (single-word items) or complex (multi-word items) as used in the texts (see Martin, 1992; Eggins, 2004; Tanskanen, 2006).

On the other hand, this study focused on the newspaper editorials because they are typical persuasive writings where writers' tones play key roles in creating bonds between the editorialists and the readership (Maddalena and Belmonte, 2011; Bhatia, 2014; Khuhi and Mojood, 2014). Like other types of persuasive writings, newspaper editorials are characteristically loaded with emotions, and it is obvious to see how writers utilize range of tones in order to encourage readers' agreement (Flemming, 2011).They are distinct genres within the newspaper. The editorial page is variously termed as 'leading article', 'opinion', 'comment', 'we say', and so on (Reah, 2002). As a separate column, it is written by the newspaper editors, under anonymity, to represent the newspaper institution's voice. The pages are often radically different compared to the other sections of the paper because while the other pages are meant to report daily news accurately and dispassionately, the editorial page is written purposely to encode the views, analyses, opinions, verdicts and stands of the newspaper institutions on various events and topical issues (Bhatia, 2013). Consequently, newspaper editorials always represent rich linguistic data, where lexical and structural elements are utilized for persuasive purposes (Bhatia, 2004; Conboy, 2010). Therefore, while previous analyses of lexical cohesion in texts examined its interaction with coherence, register and genre (see also 2.1 and 2.2 below), the focus of the present study is to investigate the interaction between lexical cohesion and the writers' tones that illuminate meanings and construct persuasion in Nigerian newspaper editorials. In an attempt to take care of this gap in literature, the study was guided by the following research questions.

1.2 Research Questions

II.   What are the major sources of lexical cohesion in Nigerian newspaper editorials?
III. How do lexical cohesion devices signal writers' tones in Nigerian newspaper editorials?

1.3 Theoretical Underpinning

This study draws its theoretical impetus from the *Systemic Functional Linguistics* (henceforth SFL). As a theory of language and texts, SFL was developed by Halliday and colleagues. The theory was developed so that *sensible and useful things* (Halliday, 1994: xv) can be said about texts. In developing this theory, Halliday drew on ideas of some scholars like Malinowski, Firth, Whorf, Hjelmsev, and the Prague School (Flowerdew, 2013; Eggins, 2004; Bloor and Bloor, 2004; Widdowson, 2004; Kaplan and Grape, 2002). SFL is both *systemic* and *functional*. The approach is systemic because language is viewed as a system of *paradigmatic choices* from where users can choose in order to make meanings. It is functional because the theory gives more emphasis to how language is used in naturally-occurring interactions (Eggins, 2004; Flowerdew, 2013; Halliday, 1985/1994; Halliday and Matthiessen, 2014).

Unlike Chomsky's *Generative Grammar,* which is strictly formal, SFL is additionally functional. Consequently, while the Chomskyan grammarians are busy analyzing the formal properties of intuitively created sentences, the Hallidayan grammarians, on the other hand, are busy analyzing both sentences and texts – what some discourse analysts describe as 'language above the clause or sentence' (see, Widdowson, 2004; Jones, 2012:45). The SFL accommodates the analyses of texts as in: genre analysis, cohesion analysis, registers analysis, information structure analysis, thematic structure analysis, grammatical metaphor analysis, and so on (Halliday and Hasan, 1989; Kaplan and Grape, 2002; Widdowson, 2004). The theory is also called *lexicogrammar* because in this approach lexis and grammar are believed to be working together in making meaning. The systemic linguists have identified three major *metafunctions* for expressing meanings –Ideational, Interpersonal, and Textual metafuntions. From these three metafunctions, textual metafunction is the enabling one because it relates directly to how texts are built to be capable of fulfilling the communicative function. Therefore, the properties of texts being examined by the textual metafunction include *cohesion* and *thematic progression*. These are properties that also contribute to the texture of texts (Eggins, 2004; Flowerdew, 2013; Halliday and Hasan, 1989; Taboada, 2004).

From the foregoing discussions, it would be apparent that the approach adopted in the present study is basically systemic and functional. The study's approach is systemic because it focused on lexical cohesion devices as potential choices that editorialists could utilize as tools for making meanings through the tones signaled in the editorials. The approach is also functional because attention was focused on newspaper editorials, authentic texts with which systemic linguists are more comfortable. In addition, the study applied Eggins' (2004) lexical cohesion model to explore the interaction between an aspect of *textual metafunction* (surface cohesion) and an aspect of *interpersonal metafunction* (writers' attitudes/tones), so that sensible and useful findings could emerge from the analysis.

2. Review of Related Studies

2.1 Past Studies of Lexical Cohesion in Spoken Discourse

Spoken discourse has been a major source of prolific inquiries among lexical cohesion analysts. To begin with, Angermeyer (2002) examined lexical cohesion in natural conversations. The study explored how lexical cohesion operates in multilingual conversations (of English, French, and German). It has discovered that lexical cohesion, in the form of lexical insertions into the matrix language, enable interlocutors to achieve coherence in multilingual dialogues. It was shown how this happens even between different conversation episodes. Arguably, Angermeyer's findings have suggested that lexical cohesion is a tool utilized in most languages (or at least in the languages investigated) to achieve conversational coherence.

While Angermeyer's (2002) studied multilingual conversations, Taboada (2004) was concerned with comparing monolingual conversations of different languages. Taboada's study focused on lexical cohesion in English and Spanish conversations. In addition to lexical cohesion, the study also investigated other discourse resources (speech genre moves and rhetorical structure) that interlocutors collaboratively employ to build cohesive and coherent conversations.

The study observed that lexical cohesion is the most dominant source of cohesion in both English and Spanish dialogues, where *repetition* is also the most dominant type of lexical cohesion in both the languages. These findings have supported Hoey's (1991) claims that lexical cohesion is the major source of texture in texts, and that *repetition* is also the most basic cohesive relation in texts. However, Taboada (2004) contends that Spanish dialogues contain higher frequency of links (620) compared to English dialogues (464). Therefore, Taboada's findings have to some extent corroborated Angermeyer's findings on how interlocutors in multilingual conversations of English, French, and German utilize lexical cohesion to achieve coherence. But Taboada's study has additionally drawn attention to the fact that languages may differ in their degree of utilization of lexical cohesion in building coherence.

Unlike Angermeyer (2002) and Taboada (2004), which both focused on dialogic discourses only, Tanskanen (2006) was concerned with both dialogic and monologic discourses. The study examined how lexical cohesion is utilized, in different genres and registers, by communicators to collaborate towards coherence in conversations, prepared speeches, written dialogues, and academic writings. The study discovered that in all the text types explored, communicators employ *long lexical chains, shorter chains,* and *isolated pairs* to achieve coherence. The researcher contends that long chains support topical coherence, while shorter chains reflect topical segments. These findings, to some extent, support Taboada's (2004) findings that *major chains* and *minor chains* support the coherence of English and Spanish conversations. Moreover, like Taboada, Tanskanen also reported that *long chains* are capable of distinguishing between multi-topic and single-topic conversations, where the former exhibit several long chains and the latter only one interacting with shorter chains. Therefore, Tanskanen's findings have suggested that communicators, in texts of different registers and genres, utilize lexical cohesion to interactively build coherence.

Similar to Taboada (2004) who investigated natural conversations, Gonzalez (2010) investigated how lexical cohesion operates in telephone conversations. While adopting discourse-oriented approach, Gonzalez (2010) also applied an integrative model of lexical cohesion that replaces *collocation* with *associative cohesion*. Gonzalez's *associative cohesion*, unlike Halliday and Hasan's (1976) *collocation*, gives emphasis to contextualized lexical relations, where *associates* could relate even without being *collocates* decontextually. The investigation revealed that the major sources of lexical cohesion in telephone conversations are *repetition, associative cohesion,* and *inclusive relations*. Moreover, it was observed that (telephone) interlocutors mainly utilize *repetition* as a topic continuity device, while *associative cohesion* is mainly used for shifting or drifting into different aspects of global topics. Therefore, Gonzalez's findings support Taboada's (2004) that interlocutors mostly use *repetitions* to weave conversations. Gonzalez has also shown how lexical cohesion is also utilized by interlocutors for techniques of topic management and coherence.

Nevertheless, in a different study, Gonzalez (2011) employed the same integrative model and discourse-specific approach, as applied in Gonzalez (2010), in examining how lexical cohesion operates in multiparty conversations. The focus of the study was to examine the interaction between lexical cohesion, coherence, and other generic characteristics of broadcast multiparty conversations. The investigation observed that broadcast discussions, owing to their collaboratively interactive nature, have high frequency of lexical cohesion, and ties are produced mainly across turns. As in Gonzalez (2010), Gonzalez (2011) also reported that the most dominant types of lexical cohesion in broadcast multiparty conversations are *repetition, associative cohesion,* and *inclusive relations*. In addition, Gonzalez (2011) also discovered that interlocutors utilize lexical cohesion devices as contextualization cues for evoking frames that facilitate understanding, and also as tools for turn-taking behaviors. Therefore, the study has revealed lexical cohesion is used as a resource for achieving coherence and other genre features of multiparty discussions.

Finally, similar to Gonzalez (2011), Gonzalez (2013) was also concerned with lexical cohesion in conversational discourse. But unlike Gonzalez (2011), which focused on a single genre (multiparty conversations), Gonzalez (2013) compared how lexical cohesion operates across two distinct genres (telephone conversations and multiparty conversations). The study sought to unravel how the genre-specific features of these spoken genres interact with lexical cohesion. The analysis revealed that multiparty conversations are nearly six times more lexically cohesive compared to telephone conversations. However, it was observed that in both the two genres, interlocutors utilize lexical cohesion devices as tools for topic management strategies and turn-taking behaviors. Therefore, Gonzalez (2013) has shown how sensitive lexical cohesion is to genre-specific features of spoken genres, and how it contributes in establishing interpersonal relations among interlocutors.

2.2 Past Studies of Lexical Cohesion in Written Discourse

Written discourse has also been a rich source of investigation among lexical cohesion analysts. For instance, Lewin, Fine, and Young (2001) were concerned with lexical cohesion in written texts. The study investigated how lexical cohesion operates in the *introduction* and *discussion* sections of Social Science Research (SSR) articles. The research discovered that *repetition* and *synonymy* are the most dominant sources of lexical cohesion in these genres. The researchers concluded that texts of the same genre exhibit the same cohesive features, and that the introduction and discussion sections exhibit these patterns because they are scientific texts where resources that facilitate clarity and definition are preferred.

Therefore, Lewin et al's findings have to some extent been corroborated by earlier findings such as those of Taboada (2004) and Gonzalez (2010) on the preponderance of *repetition* as a cohesive feature in texts. However, Lewin et al's findings that *synonymy* is the second most dominant cohesion contrast with Gonzalez's (2010) and Gonzalez (2011), which both reported *associative cohesion* as the second most dominant. This contrast could be due to the fact that while Lewin et al's data were constituted by scientific texts where precision, clarity, and definition are significant features, Gonzalez (2010) and Gonzalez (2011) data were made up of casual and informal conversations that exhibit little or no features of precision, definition, and clarity.

Similar to Lewin et al's (2001) study, Mirzapour and Ahmadi's (2011) study also focused on lexical cohesion in research articles. But while Lewin et were concerned with research articles written in a single language (English), Mirzapour and Ahmadi investigated lexical cohesion across English and Persian research articles. The study's focus was to identify the major types of lexical cohesion and to examine their interaction with the coherence of the articles. The research reported that the major types of lexical cohesion in English and Persian research articles are *repetition, collocation, and* synonymy; and that lexical cohesion supports the coherence of the texts. However, it was also observed that while English articles tend to exhibit *repetition* and *collocation,* Persian articles tend to exhibit *repetition* and *synonymy*. This suggests that while both the languages mostly utilize *repetition,* they contrast in that English prefers *collocation* to *synonymy,* and Persian prefers *synonymy* to *collocation.* Therefore, Mirzapour and Ahmadi's findings have corroborated Lewin et al's (2001) findings that *repetition* and *synonymy* are the most preponderant types of lexical cohesion in research articles. These findings have also supported Taboada's (2004) and Gonzalez's (2011) findings that *repetition* is the most utilized lexical cohesion across languages.

Finally, like Lewin et al (2001) and Mirzapour and Ahmadi (2011), Malah (2015) also explored lexical cohesion in research articles. Malah's study sought to identify the types of lexical cohesion and how they interact with generic coherence of abstracts in applied linguistic research articles. The study revealed that the major types of lexical cohesion in the abstracts are *repetition, collocation,* and *hyponymy.* Moreover, it was also observed that lexical cohesion contributes to the coherence of the abstracts as a genre by supporting the typical moves. Therefore, it could be understood that Malah's findings are close to Mirzapour and Ahmadi's findings that *repetition* and *collocation* are the most frequent types of lexical cohesion in English research articles. Malah's findings have also supported Hoey's (1991) argument that *repetition* is the most basic cohesive relation in texts, and also Lewin et al's (2001) findings that *repetition* is the most dominant source of lexical cohesion in SSR articles.

However, Malah's (2015) findings contrast with Mirzapour and Ahmadi's findings because Malah has additionally reported *hyponymy* as a major type of lexical cohesion. This contrast could be due to the nature of Malah's data and how certain generic constraints make *hyponymy* preponderant in writing the abstracts of applied linguistic articles.

2.3 Past Studies of Newspaper Editorials

The newspaper editorials have also been variously researched, and these text types continue to receive the attention of discourse analysts. To begin with, Bolivar (1994) explored the macro-structural patterns of English newspaper editorials. The study discovered that the editorials typically exhibit three functional turns: *lead, follow,* and *valuate* as elements of their internal structure and each is realized in sentences. Likewise, Riazi and Assar (2000) also investigated the macro-structure of Persian newspaper editorials. Riazi and Assar's findings corroborated Bolivar's findings because they also discovered similar tripartite structural pattern in Persian newspaper editorials.

Therefore, based on Bolivar's (1994) and Riazi and Assar's (2000) findings, it could be plausible to believe that most newspaper editorials have the three-part structural elements of *lead, follow,* and *valuate.*

Similar to Riazi and Assar's (2000) study, Uche (2005) was also concerned with newspaper editorials. Uche's study focused on how private newspapers in Nigeria utilize the editorials to set agenda. The study reported that the newspapers mostly use the editorials to criticize or condemn political issues and government policies, where they ultimately call for change. Therefore, Uche's study has given some insight into how agendas are set through the preponderant contents of Nigerian newspaper editorials. However, while Uche (2005) was concerned with how editorial contents are utilized to set agendas in Nigerian newspapers, Ansary and Babaii (2005) investigated the *generic integrity* of English newspaper editorials. The study sought to identify typical rhetorical patterns in English newspaper editorials, and to propose a unique *Generic Structure Potential (GSP)* for the editorial genre. The study observed that there are obligatory and optional structural elements in the English newspaper editorials. The obligatory elements, observed Ansary and Babaii, include *Headline (H), Addressing an Issue (AI), Argumentation (A),* and *Articulating a Position (AP);* while the optional elements are *providing Background Information* (BI), *Initiating an Argument* (IA), and *Closure of Argument (CA).*Therefore Ansary and Babaii (2005), like Bolivar (1994), have also unraveled some structural patterns of the English newspaper editorials. But while Bolivar adopted Birmingham school's approach and was concerned with macro-structural elements, Ansary and Babaii adopted *SFL's* approach and were concerned with rhetorical patterns.

Like Uche (2005), where attention was focused on agenda setting through the editorials of Nigerian private newspapers, Hua (2008) was concerned with critical analysis of representations of bilateral issues relating Malaysia and Singapore in Malaysian and Singaporean major newspaper editorials. The study discovered that the editorialists always employed discursive strategies to favorably represent their countries' positions in matters concerning bilateral issues between the two countries. Therefore, Hua's study has demonstrated how the newspaper editorials are used as tools or weapons to defend countries' interest in terms of bilateral issues. In a similar study, Le (2009) examined how active the media roles are as participants in the public sphere. The research specifically focused on the editorial genre of the *Le Monde* newspaper (a most popular newspaper in Paris, France) from 1999 to 2005. The study discovers that the editorials of *Le Monde* participated fully in public spheres with its values and positions in national, European, and international issues.

Nevertheless, like Uche (2005), Ekeanyanwu (2009) also analyzed the contents of Nigerian newspapers editorials. The study focused on four major newspapers in the country for a period of 6 months. The content analysis demonstrated that the newspapers mostly concentrated on socio-economic issues drawn from the major news items. In addition, findings of this study agree with Uche's (2005) because it is also reported that editorials written on governmental issues often criticize government policies.In a different study, Ansary and Babaii (2009), still from the SFL perspective, cross-examined editorials of English newspapers produced in different socio-cultural environments –Iran, Pakistan, and the USA. This study was a kind of contrastive rhetoric because its motive was to capture the rhetorical structure patterns of the editorials, formulate their *Generic Structure Potentials (GSP)*; and then compare them to see if there exist any differences or similarities. The study concluded that English newspaper editorials, written by people of different socio-cultural contexts, generally exhibit no significant differences with regards to their rhetorical elements of structure. They discovered four *Obligatory* elements –Headline (H), Addressing an Issue (AI), Argumentation (A), and Articulating a Position (AP) –and also two *Optional* elements –providing Background Information (BI), and Closing Remarks (CR). These findings agree to a certain extent with the findings of earlier study by Ansary and Babaii (2005), where similar findings were reported.

Similar to Ansary and Babaii (2009), Maddalena and Belmonte (2011) cross-linguistically investigated the writer-reader interaction in newspaper editorials written in American English and Peninsular Spanish. To evaluate the kind of relationship writers set out to establish in the editorials, the study examined the rhetorical relations that hold between sentences, and then categorized them into *nuclei* and *satellites.* Generally, the study discovered that the American English editorials are more writer-responsible than the Peninsular Spanish ones. In other words, American English editorials demonstrate that the editorialists mostly explain, justify, and reformulate their points for readers to have good grasp; while the Peninsular Spanish editorials suggest that the editorialists are less reader-sensitive because they exhibit negligible amount of ancillary rhetorical relations. Therefore, Maddalena and Belmonte's study has illustrated how cultural factors affect the utilization of rhetorical resources meant for writer-reader interaction in the newspaper editorials.

Finally, as Maddalena and Belmonte (2011) cross-culturally researched American English and Peninsular Spanish newspaper editorials, Kuhi and Mojood (2014) similarly explored English and Persian newspaper editorials. The focus of Kuhi and Mojood's study was to investigate how metadiscourse resources are utilized in English and Persian newspaper editorials. The study sought to unravel the effect of generic conventions and cultural factors on the use and distribution of interactive and interactional metadiscourse within the newspaper editorial genre. It was reported that due to genre conventions and constraints, English and Persian newspaper editorials exhibit similar use and distribution of metadiscourse resources. In addition, the study discovered that the interactional metadiscourse and attitude markers are the predominant metadiscourse categories and sub-categories in both English and Persian newspaper editorials. However, some slight differences between the two sets of editorials regarding the use and distribution of metadiscourse devices were attributed to cultural backgrounds of the editorialists. Therefore, like Maddalena and Belmonte's (2011) study, Kuhi and Mojood (2014) have also reported cross-linguistically on interactional resources that editorialists utilize. The study has shown how close English and Persian languages are in the utilization of metadiscourse resources among newspaper editorialists.

From the foregoing discussions, it would be understood that the literature suggests a gap that could be filled by the present study. The literature suggests a gap because so far, previous studies of lexical cohesion, on the one hand, and those on newspaper editorials, on the other, have made no attempt to investigate the area explored by the present study. As the literature suggests, past studies of lexical cohesion have not focused on its relation with writers' tones that support the persuasion in newspaper editorials. Similarly, the literature also shows that studies of newspaper editorials have so far not examined how lexical cohesion operates in the persuasive genre. Therefore, conducting the present study is deemed imperative so that the niche in literature could be taken care of. The study would be propitious because it would reveal further interactions between lexical cohesion and other aspects of textual interaction (namely, writers' tones) that illuminate the writers' meanings in persuasive writings.

3. Methodology

3.1 Research Approach

The study adopted qualitative approach in both the two layers of analysis conducted. This approach was deemed appropriate for the two analyses because while the first was concerned with identifying the types of lexical cohesion in the data, the second focused on examining how lexical cohesion devices reflect the writers' tones to amplify the meanings conveyed. Therefore, following Merriam (2009), both the analyses of the study are language-based.

3.2 Sampling

The study utilized purposive sampling for selecting newspapers and the editorial texts analyzed. The sampling of newspapers was purposive because, following Creswell (2012), Tavakoli (2012), and Matthew and Rozz (2010), the researcher intentionally selected newspapers that would enable the identification and selection of the appropriate data for the study. The sampling was also homogeneous for all the newspapers selected had similar characteristics – they were all national dailies published in English in Nigeria, they all published fairly long editorial columns that would provide good data for the analysis, and they were all accessible online. These newspapers included: *The Nation*, *The Guardian*, *Leadership*, and *Vanguard*. On the other hand, the editorials identified and selected for the study also had common characteristics. First, the editorials were all written on *social issues*. This was because earlier studies had reported that this category of editorials was among the most frequent in Nigerian newspapers (see Ekeanyanwu, 2009). Second, the study selected editorials that were mainly texts, not editorial cartoons. This is because its focus was text, not images. In sum, a total of 32 editorial texts of 19, 094 words were analyzed, where 8 texts were collected from each of the four newspapers for a period of 5 months – May to September, 2015.

3.3 Data Collection

The data were extracted online from the websites of the four Nigerian newspapers: *The Nation*, *The Guardian*, *Leadership*, and *Vanguard.* This was for a period of 5 months – May to September, 2015 – where 8 texts were collected from each of the four newspapers.

3.4 Analysis Framework

The study applied Eggins' (2004) lexical cohesion model. This model was chosen for the study because it is so detailed that readers would find much easier to comprehend compared to other models of lexical cohesion.

More importantly, the model does not contain some of the lexical relations – such as *collocation, near-synonymy,* and *superordinate* – that are often the sources of disagreements among cohesion analysts (see, for example, Martin, 1992; Lewin, Fine, & Young, 2001; Martin, 2001; Tanskanen, 2006). In total, Eggins' (2004) model identifies eight lexical relations. These relations are discussed below, as adopted in the analysis:

1) *Co-hyponymy:* where lexical items in text are all (or both) *subordinate* members of a given *superordinate* item. Examples include **(1)** *Nigeria* – **(3)** *Libya* as both types of the common *superordinate* item *country* in text **N-01.** However, for this relation to hold between *co-hyponyms*, it is not a condition that the *superordinate* item must also be found in the text being analyzed (see Halliday and Matthiessen, 2014; Eggins, 2004; Halliday, 1994).

2) *Class/Sub-class:* when lexical items used in the text are related through *sub-classification.* Unlike *co-hyponymy* seen above, *class/sub-class* relation could hold only when both the *superordinate* item and its *subordinate* member(s) are found in the text. Examples include **(1)** *parents* - **(3)** *fathers* - **(7)** *mother,* where *fathers* and *mother* are the subordinate items that relate to the superordinate item *parents* because each encodes its *sub-class* in text **G-07**.

3) *Contrast:* this is what in some models is variously referred to as *Antonymy, opposition, or complex paraphrase* (see Halliday and Matthiessen, 2014; McCarthy, 1988; Hoey, 1991; respectively).However, other models, such as Martin (1992) and Tanskanen (2006), also refer to it as *contrast*. It is a relation of opposition between items, when lexical items in text encode a contrast relationship. Examples include **(5)** *idle youths* – **(15)** *useful citizens,* and **(6)** *haphazard* – **(7)** *organized* as used in **L-06.**

4) *Synonymy:* when lexical items express similar meanings in texts. The relation is termed *simple paraphrase* in Hoey's (1991) model; while in Tanskanen's (2006) and Taboada's (2004) models, it is labelled as *equivalence.* Examples include **(1)** *dying* – **(4)** *perish,* and also **(8)** *death sentence* – **(16)** *jaws of death* as used in **V-01.**

5) *Repetition:* as the name implies, this is a relation between items in which the same form, irrespective of identity of reference, is subsequently repeated in text. The morphological form of the subsequent item might be slightly modified, or it may even belong to a different category than the earlier-mentioned item. Moreover, except for a few models, such as McCarthy (1988), most lexical cohesion models contain *repetition* (see for example, Gonzalez, 2011; Taboada, 2004; Gutwinski, 1976). Examples include: **(1)** *terror* – **(12)** *terrorists* – **(22)** *terrorised* – **(23)** *terroristic* as used in **N-04.**

6) *Meronymy:* this is the part-to-whole (or vice versa) relation between lexical items in texts. Therefore, this relation holds only when the lexical unit denoting the whole-item and the one(s) denoting the part-item(s) are (both) found in the text. Like *repetition* as seen above, most models of lexical cohesion have this relation; and it is similarly termed *meronymy* (see, for example, Halliday and Matthiessen, 2014; Martin, 1992; Hasan, 1984).Examples include: **(5)** *buttocks* – **(8)** *body* – **(9)** *neck* – **(10)** *arms* as used in **G-07.**

7) *Co-meronymy:* this is the relation between parts of a common whole. As in the case of *co-hyponymy* seen above, *co-meronymy* remains constant even when the lexical item encoding the whole-item is not found in the text being investigated. Therefore, for *co-meronyms* to relate, the whole-item need not be in the text. For example, **(5)** *buttocks* — **(9)** *neck* –and **(10)** *arms* would still relate as *co-meronyms* even without *body* that denotes the whole-item as seen under *meronymy* from **G-**07 above.

8) *Expectancy relation:* this category of lexical relations is based on relations between lexical items that often co-occur in contexts. It is close to Halliday and Hasan's (1976) *collocation* or Gutwinski's (1976) *co-occurrence group* because it is also holds between lexical items that *go together* in texts. However, like in Martin (1992) and Tanskanen (2006), Eggins' (2004) *expectancy relation* is a redefinition of Halliday and Hasan's (1976) *collocation*. In this model, Eggins has specified the following four major conditions for *expectancy relation* to hold:

  i.   Between an action and the characteristic (or expected) doer of the action e.g. researchers/discover, doctors/diagnose, or **(1)** *impersonating* – **(2)** *impostor* as used in **L-02.**

  ii.   Between an action/process and the characteristic sufferer affected by the action e.g. play/guitar, write/letter, or **(3)** *social dislocation* – **(20)** *flood victims* as used in **L01.**

  iii. in accordance with the predictability tendency between an event/process and its typical location of occurrence e.g. learn/school, read/library, or **(1)** *kidnaps* – **(2)** *Ekiti State* as used in **V-03.**

  iv.   between compound nouns and individual lexical items forming their parts e.g. heart/disease, child/birth

3.5 Analysis Procedure

3.5.1 Identifying Sources of Lexical Cohesion

In an attempt to identify the types of lexical cohesion in the data, the analysis was guided by Creswell (2012), Dornyei (2007), Tanskanen (2006), Eggins (2004), and Halliday and Hasan (1976). In sum, five analytical steps were taken in this analysis. The analysis began by preparing, organizing, sorting, and storing the data on a computer file. The editorial texts were organized and labelled according to newspapers –*The Nation, The Guardian, Leadership,* and *Vanguard. The Nation* newspapers' editorials were labelled **N-01** to **N-08,** those of *The Guardian* were labelled **G-01** to **G-08,** those of *Leadership* newspapers were labelled **L-01** to **L-08,** and those of *Vanguard* newspapers were labelled **V-01** to **V-08** respectively**.** This was in keeping with Creswell (2012).

Moreover, following Dornyei (2007), the organization of data was followed by *pre-coding reflections* and also *initial coding***.** These were the stages at which each text in the data was carefully explored and texts segments (sentences) were assigned number codes: **(1) - (2) - (3)**. This step was pertinent in the study due to the approach adapted from Halliday and Hasan (1976) that analyzing cohesion across the sentence boundaries is the most significant because inter-sentence cohesion is the only source of texts' texture. The scholars argue that the relations between items within the same sentence are basically structural not cohesive (see Halliday and Hasan, 1976:6-10).

Nevertheless, while *initial coding* was concerned with segmenting texts and labelling texts segments with number codes, *second-level coding* was concerned with highlighting all interesting-looking lexical units. Therefore, following Tanskanen (2006), Eggins (2004), and Martin (1992), in these coding, lexical units were either simple (single-item units) or complex (multi-item units). Lexical units were also not orthographically restricted, so that expressions in numerical forms (such as *2016*) could relate cohesively with words (such as *year(s)*). Finally, *identification of cohesive units* was the stage at which each text was carefully explored again, focusing more attention on the meanings of the highlighted lexical units. Moreover, the analysis adopted Gonzalez (2011), Tanskanen (2006), and McCarthy (1988) in paying more attention to contextualized than decontextualized meanings of lexical units. Therefore, lexical relations were analyzed based on the meanings that lexical units assumed in the particular contexts of the texts being handled. At this stage, related cohesive units were identified and lines were drawn to connect them. This usually gave the chain pattern that looks more like webs as in Hoey (1991). In addition, in this analysis, cohesive units could relate to other multiple units through different cohesive relations. Cohesive units were then exhaustively identified and connected.

3.5.2 Examining How Lexical Cohesion Devices Signal Writers' Tones

This analysis was guided by Creswell (2012), Flemming (2012), Flemming (2011), Dornyei (2007), and Kane (2000). In the first place, it was understood that the number of possible tones that writers could set are 'almost endless' (Kane, 2000:80), and types of tones are as numerous as types of 'emotions' (Wyrick, 2011:156). Therefore, the types of tones focused on in the analysis were determined by the nature of the data being investigated. Newspaper editorials are typical persuasive writings where writers utilize tones in conveying their intended meanings (Bhatia, 2014; Khuhi and Mojood, 2014; Maddalena and Belmonte, 2011). Consequently, the analysis drew exclusively on the types of writers' tones typical of persuasive writings as identified in Flemming (2012:553-557) and Flemming (2011:622-624). These types of tones include the following in table 1:

	Tone	Description
1	**Admonishing**	When a writer advises, counsels, or caution the reader(s) against something, or to act in certain ways
2	**Angry**	When a writer expresses anger at something or someone's bad, unacceptable behavior
3	**Critical**	When a writer makes careful judgement and readily finds faults in something or someone
4	**Cynical**	When a writer bitterly scorn the virtues, behaviors, and motives of some people whom he distrusts because they have no good, honest, or sincere reasons for some of their actions
5	**Disapproving**	When a writer expresses strong disapproval of something
6	**Indignant**	When a writer angrily expresses strong displeasure at something unfair, unjust, cruel, or offensive
7	**Optimistic**	When a writer takes a favorable view of something and believes that it would yield some positive outcome
8	**Sorrowful**	When a writer expresses strong sadness on something
9	**Sympathetic**	When a writer expresses sympathy or compassion for someone who is in bad situation
10	**Worried**	When a writer expresses worry and how he is concerned about something

Table 1: Writers' tones typical of persuasive writings

Moreover, the analytical steps and procedures taken in this analysis were also guided by Creswell (2012), Flemming (2012), Flemming (2011), Dornyei (2007), and Kane (2000). These steps are three in number, and their sequential flow is discussed here. The analysis began with critical reading of the data. At this stage, each editorial text was critically explored and its overall tone was discerned. This is because writers' tones are as abstract as the *persona* and *point of* view in writing. Their identifications are based on critical readings and inference, unlike aspects such as *signposts* and *interparagraph transitions* (Flemming, 2012; Flemming, 2011; Kane, 2000). Therefore, based on what the writers say, the analysis was able to draw logical conclusions and inferences on their purposes, tones, and bias. In this light, the writers 'arguments and evidences were also evaluated. After this critical reading and identifying the overall tone of each text, the whole data was sorted out into the different types of tones.

Furthermore, the initial critical reading was accompanied by coding and memoing of the data. The coding began with another critical reading of the sorted and tone-tagged texts, focusing attention solely on the lexical cohesion devices in order to discern how they contributed to the overall tones. This approach is in agreement with Kolin (2009/2013), Flemming (2012), Flemming (2011), and Kane (2000) where it has been posited that writers' tones could be identified by specifically anchoring the assessment in particular words and phrases. Therefore, while reading, memos were written on the perceived tones and cohesive units that logically contributed to such tones were highlighted. In this attempt, attention was specifically focused on the identified lexical cohesive units that described the writers' feelings, biased judgements, and opinions.

Finally, the analysis identified more accurately the tone-signalling lexical cohesion devices in the texts. This was facilitated at this stage because after the coding and memoing of potential signals in the last step, it had then become more apparent which of the lexical cohesion devices more accurately reflected the writers' tones.

4. Results and Discussion

4.1 Sources of Lexical Cohesion in Nigerian Newspaper Editorials

The analysis revealed 2,623 lexical ties across the boundaries of 819 sentences of the data. The data analyzed showed that Nigerian newspaper editorialists achieve cohesion by utilizing different types of lexical relations. However, it has also been demonstrated by the data that while some sources of lexical cohesion are preponderant in the editorials, others are relatively infrequent. Table 2 below gives a general overview of these results:

	The Guardian		The Nation		Leadership		Vanguard		Summation	
	NO	%	NO	%	NO	%	NO	%	scores	%
Co-hyponymy	36	4.6	11	1.3	6	1.4	9	1.5	**62**	**2.3**
Class/sub-class	83	10.7	66	8	47	11.1	64	10.6	**260**	**10**
Contrast	16	2.1	15	1.8	17	4.1	19	3.1	**67**	**2.5**
Synonymy	80	10.3	106	13	62	14.6	53	8.7	**301**	**11.5**
Repetition	387	49.8	392	48	201	47.5	312	51.6	**1,292**	**49.2**
Meronymy	52	6.7	37	4.5	24	5.7	23	3.8	**136**	**5.2**
Co-meronymy	25	3.2	28	3.4	7	1.6	11	1.8	**71**	**2.7**
Expectancy Relations	98	12.6	163	20	59	14	114	18.8	**434**	**16.5**
Total	**777**	**100%**	**818**	**100%**	**423**	**100%**	**605**	**100%**	**2,623**	**100%**

Table 2: Sources of lexical cohesion in Nigerian newspaper editorials

As seen in table 2 above, the most preponderant source of lexical cohesion in Nigerian newspaper editorials is *repetition* (49.2%), followed by *expectancy relations* (16.5%), *synonymy* (11.5%) and *class/sub-class* (10%). This discovery suggests that Nigerian newspaper editorialists mostly unify their sentences and paragraphs by *repeating* key lexical items, using lexical items that *regularly co-occur,* employing lexical items of different forms but *similar lexical contents*, and by utilizing *general-class* lexical items vis-à-vis their *sub-class* members. Arguably, the preponderance of these types of lexical cohesion in newspaper editorials could be attributed to the persuasive nature of the genre. It could be argued, for instance, that reiterating key lexical items and ideas would enable the editorialists to not only build coherence but also drum their points so that they succeed in persuading the readership. Moreover, the use of synonymous items and those with co-occurrence tendencies would also enable the editorialists to be explicit in their explanations, to be able to reformulate their points and justify their opinions, and consequently create bond between them and the readership.

184

On the other hand, table 2 also shows that *meronymy* (5.7%), *co-meronymy* (2.7%), *contrast* (2.5%), and *co-hyponymy* (2.3%) are *relatively* infrequent as sources of lexical cohesion in the editorials. This finding could also be related to the nature of these text types. It could be plausible to conceive that newspaper editorials do not exhibit much of these types of lexical cohesion because, unlike scientific texts, they rarely focus on topics that require much use of *part-whole, co-part, opposing,* or *co-hyponymous* lexical items.

Therefore, to augment these explanations, the major sources of lexical cohesion in the newspaper editorials – *repetition, expectancy relations*, *synonymy* and *class/sub-class* – are illustrated below. The first excerpt is extracted from **G-02,** which is written on the occasion of Children's Day celebration. In this text, the repetition of the unit *Children's Day* has enabled the writer to weave the text's sentences and paragraphs together:

Example 1

(1) Today is ***Children's Day***. **(2)** …***Children's Day*** … is celebrated … to honour … children globally. …**(4)** … countries all over the world celebrate ***Children's Day***. **(5)** ***Children's Day*** was institutionalised to [among other things] benefit and promote the welfare of the world's children … … **(10)** ***Children's Day*** … presents a great opportunity to evaluate existing set plans on how to **…** impact the children['s] … future … **(16)** … ***Children's Day*** is not simply a day to celebrate children for who they are ...

The Guardian Newspapers, 27 May 2015

In excerpt 1 above, it can be seen that every mention of the unit *Children's Day* creates certain degree of cohesive force that ultimately unites the text's sentences. However, after *repetition,* the next is *expectancy relations.* This type of lexical cohesion is illustrated below in excerpt 2. The excerpt is culled from **N-01,** which is written on how young Nigerian girls are being kidnapped, sold and trafficked out of the country for sex slavery:

Example 2

… **(2)** … the country must begin to seriously investigate the rise in the horrifying phenomenon of ***sex slavery***… **(3)** … ***Precious Ugochi Okoro***, a 15-year-old secondary school student … was trafficked to Libya to engage in coerced prostitution. **(4)** She … was ***kidnapped***… and handed over to traffickers … **(5)** She was … forced to work as a prostitute and eventually ***sold*** … **(7)** The traffickers … had the temerity to demand ransom from the family for a victim who had already been ***taken out*** of the country… **(15)** … the ubiquity of ***criminal gangs*** specialising in sex trafficking … [explained] … how a young girl can disappear from her own country so easily …

The Nation Newspapers, May 06, 2015

Example 2 above illustrates how six lexical units are related through the use of *expectancy relations*. This is the relation between *nouns/actions/processes* and their typical *sufferers/doers/locations*. The lexical noun *Precious Ugochi Okoro* in sentence 3 enters into a cohesive relation with the noun phrase *sex slavery* in sentence 2. In this relation, *Precious Ugochi Okoro* encodes the characteristic sufferer of *sex slavery* in the context of the text. The same *Precious* also enters into a cohesive relation with *kidnapped* in sentence 4 encoding the sufferer of being kidnapped. *Precious* also enters into a similar relation with *sold* in sentence 5, and *taken out* in 7 by being the typical sufferer of being sold and *taken out* of the country. Finally, the lexical item *criminal gangs* in sentence 15 encode the typical doers of the actions *kidnapped*, *sold*, and *taken out* in the text.

These criminal gangs are the doers who were involved in the deviant behaviors (*kidnapped*, *sold*, and *taken out*) described in the text. It is therefore obvious how these relations have unified the sentences of the text.

Nevertheless, *synonymy* is also evidenced from the data in example 3 below. The excerpt was culled from **L-05,** which is written on an incident of kidnap of an elder statesman in Nigeria – Chief Olu Falae. In this excerpt, the lexical unit's *hoodlums, criminals*, *goons*, and *animals* encode similar meanings, and this meaning relation between the units allows the writer to lexicalize the same content differently, which indicates how the text's sentences are related by focusing on similar ideas:

Example 3

… **(2)** … it was easy to imagine that he was out of the reach of those *hoodlums* … **(5)** … [They are] *criminals* who needed quick cash … **(7)** … [Kidnapping for ransom, from Western countries] … reared its ugly head in Nigeria and today, we are almost out-doing the *goons* in those countries … **(11)** …most parts of the South East and South South became a no go area as a result of the reprehensible activities of these *animals*…

Leadership Newspapers, Sep 23, 2015

Finally, *class/sub-class* is also illustrated from the data in example 4 below. The excerpt is extracted from **V-08,** which is written on the phenomenon of kidnap in the Nigerian society. The shows how sentences are unified by the *class/sub-class* relation:

Example 4

… **(3)** … *armed robbers* invaded the home of the Deputy Managing Director of The SUN Newspapers … and … took his wife … away. **(4)** She spent four days in her *captors'* den. **(5)** Kidnapping has … graduated from a crime of protest by *Niger Delta militants* to a situation … [where] … human beings … [are stolen] … for ransom … **(16)** These *criminals* live among the people … **(19)** We urge the Buhari administration to beam the same level of attention it is giving to the war on corruption and the eradication of *Boko Haram* to the protection of lives and property of Nigerians …

Vanguard Newspapers, Sept. 24, 2015

Example 4 above illustrates how five lexical items relate in *class/sub-class* cohesion. In this relation, the item *criminals,* which is the most general in meaning, is the general-class item and the lexical items *armed robbers*, *captors'*, *Niger Delta militants*, and *Boko Haram*, are all its subordinate members. The writer uses each of the four lexical items as an instance of *criminals.* Therefore, the results that emerged from this study have revealed the most preponderant sources of lexical cohesion in newspaper editorials. It can also be seen that these findings are to some extent consistent with Hoey's (1991) argument that *repetition* is the most basic source of cohesion in non-narrative texts. Similarly, the findings of many previous studies such as Gonzalez (2011), Mirzapour and Ahmadi (2011), Gonzalez (2010), Taboada (2004), and Lewin et al (2001) have all corroborated the findings of the present study. Gonzalez (2011), who explored lexical cohesion in multiparty conversations, discovered that *repetition* is the most dominant type of cohesion in her data. Mirzapour and Ahmadi (2011) also observed that *repetition* is the most preponderant source of cohesion in both English and Persian research articles. Gonzalez (2010) reported that *repetition* is the most frequent type of cohesion in telephone conversations. Taboada (2004) investigated English and Spanish conversations.

The study revealed that *repetition* is the most dominant cohesion in both English and Spanish conversations. Lewin et al (2001) also reported that *repetition* is the most dominant source of cohesion in SSR articles. These findings have all supported Hoey's (1991) claim that while lexical cohesion is the most pervasive source of texture in texts, lexical *repetition* is also the most dominant source of lexical cohesion in texts. However, the present study has additionally discovered that *co-hyponymy, contrast, meronymy,* and *co-meronymy* are relatively infrequent in the editorial genre. This finding could suggest that the genre does not utilize these types of cohesion.

4.2 How Lexical Cohesion Devices Signal Writers' Tones in Nigerian Newspaper Editorials

The analysis of the data discovered eight categories of writers' tones at different frequencies. Figure 1 below displays the tone types discovered and their frequencies:
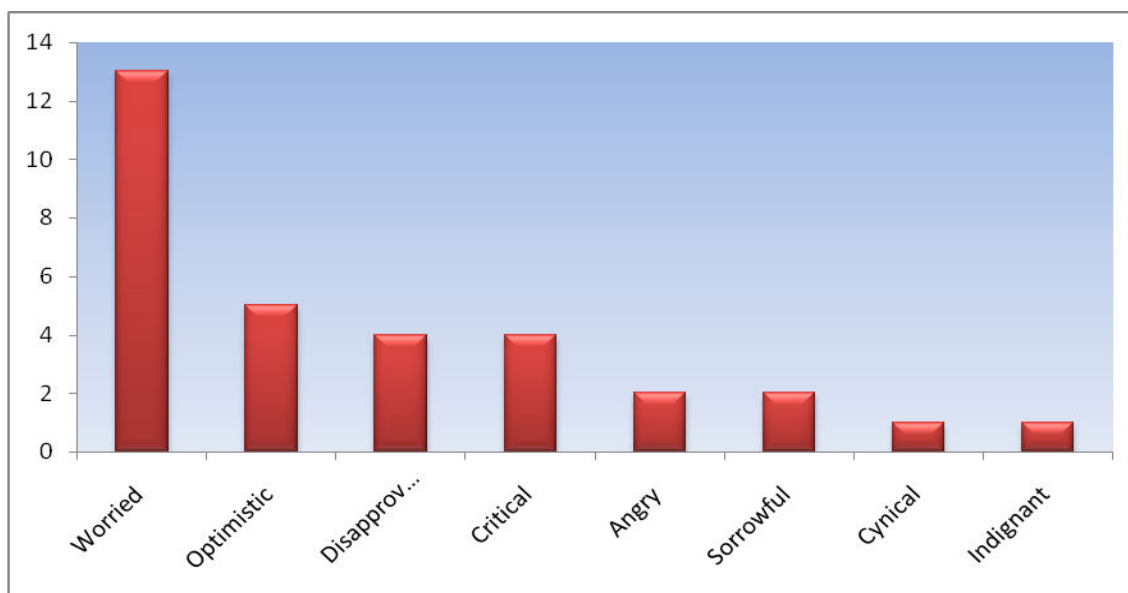
Figure 1: Categories and frequencies of writers' tones in Nigerian newspaper editorials

As seen from figure 1 above, most of the editorial texts analyzed exhibited *worried tone* (13 texts, 40.6%); and some considerable proportions also showed *optimistic tone* (5 texts, 15.6%), *disapproving tone* (4 texts, 12.5%), and *critical tone* (4 texts, 12.5%). This finding implies that the Nigerian newspaper editors mostly write to express concern, share optimism, show disapproval, or level criticism against some individuals regarding topical issues unfolding in the country. This has also revealed that the editors utilize the editorials as tools for the analyses and commentaries on issues of public interest in the country. Nonetheless, the figure also shows that a relatively small percentage of the editorials was found to exhibit *angry tone* (2 texts, 6.2%), *sorrowful tone* (2 texts, 6.2%), *cynical tone* (1 text, 3.1%) and *indignant tone* (1 text, 3.1%). This finding suggests, for example, that the Nigerian newspaper editorialists rarely write to express anger or cynicism against individuals. This could be due to realization that those tone types are often less successful in winning readers' agreement, or due to professional constraints that regulate the editors' writings.

On the other hand, further analysis revealed that lexical cohesion devices contribute in signaling the writers' tones in the editorials. Examined carefully, 1,183 (45.1%) of the 2,623 lexical ties identified in the data reflects the writers' tones. In addition, the study observed that *repetition, expectancy relations, synonymy,* and *class/sub-class* are the major contributing types of lexical cohesion to writers' tones in the editorials. These types of cohesion consequently contribute to the construction of persuasion in the editorials. Moreover, it has also been discovered that the editorialists utilize *long lexical chains, short lexical chains,* and *isolated pairs* in setting their desired tones. Therefore, these findings suggest that although lexical cohesion relates to writers' tones, not all lexical cohesion devices signal writers' tones. This is because while the lexical cohesion devices that project the tones in the data are obviously emotive, others are neutral and they are obviously not related to the emotive tones.

Furthermore, the types of lexical cohesion observed as most contributing to writers' tones – *repetition, expectancy relations, synonymy,* and *class/sub-class* – have also been reported as the most preponderant in the data (see 4.1 above). However, these types of lexical cohesion have been further observed to take the form of *long chains, short chains,* and *isolated pairs* in reflecting writers' tones.

These findings could strengthen the suggestion advanced earlier that these types of lexical cohesion are preferred in the editorial genre owing to its persuasive nature. In a similar manner, it could be conceived here too, for instance, that reiterating key lexical items and ideas would enable the editorialists to set desired tones in attempts to persuade their readers. The use of synonymous items and those with co-occurrence tendencies would also enable the editorialists to be explicit in their commentaries/analyses, to be able to reformulate their points and justify their positions. This would also go a long way in creating bond between them and the readership. The following subsections illustrate some examples of how lexical cohesion devices signal the writers' tones that ultimately support the writers' persuasive intentions as identified in the data:

4.2.1 Lexical Cohesion and Worried Tone

The editorialists write in worried tone to expresses worry and how they are concerned about something. The data analyzed demonstrated that the editorialists write in this tone to lament how they are affected by certain subjects in the Nigerian society. Examples of subjects the editorialists handled in this tone include kidnap, armed robbery, communal conflicts, and human/drugs trafficking. In most texts written in this tone, the writers' feelings, opinions, and judgments are conveyed through many of the lexical items used and the cohesion between them. For instance, lexical cohesion devices are utilized in conveying the writer's *worried tone* shown in example 5 from **V-01** below. The text is about how Nigerians perish in attempts of drugs and human trafficking. The excerpt illustrates a long chain of *repetition* of the lexical item *death*:

Example 5

… **(2)** … they have procured *death* for themselves … **(9)** Their prospects are blinded to the dangers … including *death* … **(10)** … the *death* by firing squad … for drug offences … should be enough to deter … Nigerians … **(12)** Are … Nigerians not boarding the … flight to their *death* …? **(23)** Pictures of the rickety craft that borne Nigerians to *death* … are graphic illustrations of extents some go. **(24)** … some Nigerians prefer *death*…?

Vanguard Newspapers, May 07, 2015

As seen in example 5 above, a*re petition* chain of 5 links has been utilized by the writer to emotively express concern on the subject being discussed. Each instance of the emotive item *death* signals how worried the writer is about how lives of Nigerians were lost in attempts of drugs or human trafficking. The constant repetition of the word enables the writer to sound worried on the severity of the loss Nigeria suffers in such cases. The web of this emotion is spread across the length of the essay, which emphasizes the writer's concern.

4.2.2 Lexical Cohesion and Optimistic Tone

The editorialists write in *optimistic tone* when they take favorable views of something and believe that it would yield some positive outcome. When writing in this tone, the editors mostly intend to persuade the readership to reason with them and be hopeful that the future outcome of the subjects being discussed would be positive. An example is cited in excerpt 6 below from **G-04**, which is an optimistic text written on the ban of begging and hawking in Kaduna. Instances of lexical cohesion devices that relate to the optimistic tone are highlighted in the excerpt:

Example 6

> **(1)** … the ***ban on street begging and hawking*** is a reassuring step to finding a lasting ***solution*** to what has become a challenge and an embarrassment. **(2)** … Kaduna is destined to set the pace in turning round a long-held ***social problem*** that has defied ***solution*** … **(4)** If the ***Kaduna treatment*** works out fine … the other parts of the country … stand to benefit from an ***audacious move***… **(5)** In its insistence to take the ***beggars*** off the streets, the Kaduna government has decided to rehabilitate and train ***physically challenged persons*** … **(6)** … the interests of a group of people who think they have a right to ***begging*** should not override the security of millions of residents of the state in the face of daunting ***security challenges*** …

The Guardian Newspapers, July 24, 2015

As seen above, lexical units are utilized in chains of different relations in setting the writer's *optimistic* tone. For instance, the lexical unit *ban on street begging and hawking* relates to *solution* in sentence 2 in a class/sub-class relation. Through these phrase and word, the writer asserts that the *ban* is a type of *solution* to the social problem of insecurity. The *ban* is also described as a type of *audacious move* in a class/sub-class relation. So while other people are grumbling at the ban, the writer is seemingly impressed by it. The lexical item *solution* is also repeated in sentence 2, while *Kaduna treatment* is in synonymy relation with *ban on street begging and hawking*. By this mild description of the ban, the writer is taking a favorable view of it. On the other hand, the item *social problem* relates to *beggars* and *security challenges* of sentence 6 in a class/sub-class relation to mean that *beggars* and *security challenges* are also types of *social problems*. This description implies the writer's support of the ban. Finally, *physically challenged persons* relates to *begging* of sentence 6 as the former encodes the characteristic doers of the latter. As can be seen in the excerpt, the use of these lexical cohesion devices have contributed in signaling the writer's optimistic tone towards the subject matter.

4.2.3 Lexical Cohesion and Disapproving Tone

Disapproving tones are employed by the editorialists to express strong disapproval of something. The analyzed data revealed that some editorial texts were written to show disapproval towards certain attitudes or practices in the Nigerian society. Lexical cohesion resources are also utilized by the writers in setting this tone. To illustrate this from the data, example 7is given below from **V-07,** which was written on the rampant attitude of blocking Nigeria's highways by protesters? In this text, the *disapproving* tone of the writer could be felt through the lexical units that constitute the text's heated language as follows

Example 7

(1) … **protesters** have now found the nation's … express ways as the best places to take their grievances to … (3) … they **barricade** … highways, … making it impossible for travellers … to move … (5) … the former militants of the Niger Delta … would **invade** the highways and subject the travelling public to **harrowing experiences** … (7) … students … or women who wish to call attention to some perceived injustices … **block** the highways. (8) Citizens travelling …are thus made to suffer **painful experiences** … (12) It is … part of their **constitutional rights** to peacefully assemble and express themselves freely. (13) But this **constitutional right** … guarantees the right of **travellers** to move … without any **unlawful hindrance**. (14) The **blockage of highways by protesters violates the rights** of **other legitimate users of the highways** … (16) … it … spreads the **pain to other innocent people** … (19) They must not **violate** the law or **other people's rights** … (23) We must … educate our people on the **proper ways of living in a democracy** and avoid **imposing pain** … on other **law abiding citizens**.

Vanguard Newspapers, September 3, 2015

From example 7 above, it would be seen that the lexical cohesion devices highlighted signal the writer's disapproving tone. First, the excerpt illustrates a long chain of expectancy relations involving the item *protesters* in sentence 1. In this chain, *protesters* are discussed as characteristically *imposing pain* on and *violating the constitutional rights* of *other legitimate users of the highways* by blocking the highways *unlawfully*. On the other hand, the other road users, whom have variously been referred to as using *legitimate users of the highways, innocent people,* and *law abiding citizens,* are portrayed, in a chain of expectancy relations, as characteristic sufferers of *harrowing experiences, painful experiences* as a result of the protesters' *unlawful hindrance.* To strengthen his disapproval further, the writer relexicalizes the same content in a short chain of synonymy as *barricade, block,* and *invade* to describe the actions of the protesters. A short chain of repetition as *constitutional right, constitutional rights, the rights,* and *other people's rights* is also used to reiterate the writer's argument that protesters *violate* constitutional rights for blocking the highways. Therefore, the writer's use of these negative connotations creates an overall disapproving tone that consequently encourages readers' agreement that the protesters' action of blocking highways in Nigeria is quite wrong.

4.2.4 Lexical Cohesion and Critical Tone

The editorialists write in *critical tone* when they make careful judgements and readily find faults in something or someone. The data analyzed indicates that editorialists write in this tone in order to show how some people, even administrators, are at fault. In the data, editorials written in this tone highlight certain societal follies that impact negatively on the public. Example 8 below, which is extracted from **V-04,** illustrates the writer's critical tone on the negligent attitudes of the Nigerian police force that allow kidnappers to prosper in their atrocities. The excerpt shows how the writer utilizes lexical cohesion devices to convey his attitude towards the emphasized subject matter, i.e putting the blame on the police:

Example 8

(1) … ***police*** … uncovered a den of kidnappers … **(6)** The police had ***ignored*** complaints … about suspicious activities of the kidnappers … **(17)** Emboldened by the ***slack management*** of these cases … kidnappers are on the prowl … **(20)** … incidents may differ, but a common thread that runs through them is ***poor investigations***…

Vanguard Newspapers, June 24, 2015

In example 8 above, a short chain of *expectancy relations* is identified as signaling the writer's *critical tone*. In the chain, the lexical item *police* encodes people who characteristically *ignored* complaints, did *slack management* [of cases], and also *poor investigations.* This lexical chain has therefore reflected the negative attributes of the police. The lexical devices signal the writer's judgment and negative perception towards the police, whom he believes have been at fault, and that this consequently allows the kidnappers to prosper in their activities. In other words, the tone of the writer in the excerpt is critical in nature.

4.2.5 Lexical Cohesion and Angry Tone

The editorialists write in this tone to express anger at something or someone's bad, unacceptable behavior. The data demonstrates that the editorialists utilized lexical cohesion to signal their intense anger and hostility. For instance, some feelings of bitterness could be felt in **L-03.** The text is about the rape and murder of an aged grandmother by some young men for cult-related motives, a practice that has recently become rampant among youths in some parts of Nigeria. In this text, the writer's anger towards the perpetuators of such acts could be perceived through the lexical cohesion devices used:

Example 9

… **(4)** ... **cowards** masquerading as hired **assassins** snuffed out her [Iyaloja General of Ijebuland, Alhaja Sadiat Elewuju's] life … **(9)** … hitting women is an **act of cowardice. (10)** Only **demons** from the pit of hell will dare to **kill** or **rape** the elderly … **(15)** [At 82,] It may not have occurred to her or … anyone else … to think of shielding her[self] from the **assassin's** bullets … **(19)** … killing an aged grandma … will bring no pleasure to the perpetrators but **generational curse. (20)** The Police … are investigating the **abominable act** and will … bring the **monsters** to justice … **(22)** … the society is resorting to **bestiality** …

Leadership Newspapers, July 12, 2015

In example 9 above, it can be seen how the writer utilizes an isolated pair of *repetition,* a chain of *synonymy,* and a chain of *expectancy relations* to reflect angry tone. The *repetition* pair is between *assassins* in sentence 4 and *assassin's* in 15. By the use of this tie, the writer emphasizes his anger because an important aged woman has been killed. Secondly, the *synonymy* chain links the items *cowards, demons, monsters,* and *assassins*. In this particular text, the writer uses these emotive items to describe the rapists and killers of the old woman. Thirdly, the *expectancy relation* chain involves the item *cowards,* which encodes the typical doers of *act of cowardice,* *abominable act,* and *bestiality*; who are characteristically the sufferers of *generational curse.*

Therefore, the use of these devices has contributed in bringing out clearly the writer's anger towards the killers of the old woman. The emotive items and the cohesive force between them have added to the feelings stretched and the writer's meaning in the text.

4.2.6 Lexical Cohesion and Indignant Tone

The editorialists write in indignant tone when they express displeasure at something unfair, unjust, and offensive done by someone else. The analyses revealed that the editorialists exhibit this tone through the use of certain lexical cohesion devices. This is illustrated in excerpt 12 below from **G-07**. The text is about the rampant practice of child abuse among Nigerians. In this excerpt, the writer seemingly feels that parents are being unfair to children and offensive:

Example 10

(1) … *children* resume for another school year … **(2)** During the … holiday, newspapers were awash with *shocking cases of child abuse* …**(4)** … **fathers** turn[ed] their homes into *torture chambers* …**(8)** [for instance], five year-old Olamilekan had bloody sores … *inflicted* … **(9)** Another five year-old, was so *brutally beaten* … **(10)** … a nine year-old, had burns on his arms *inflicted* … **(11)** The same kind of injury was *inflicted* on another Kafayat, 16, … **(15)** … *extreme punishment* and …*inflicting* injuries … [are] neither punishment nor any means of reforming or correcting a child. **(18)** … the traditional belief that *extreme punishment* is tantamount to child training [is wrong]. **(19)** … *extreme punishment* and *infliction of injuries* [even] have negative effects on children… **(23)** … maltreated children are likely to *inflict* such *negative treatments* on their own children … **(24)** … *extreme punishment* … [is] likely to negatively affect the cognitive function of the child…

The Guardian Newspapers, September 16, 2015

In example 10 above, four lexical chains are utilized to signal the indignant tone. The first is a chain of *expectancy relations* involving the lexical items *children, shocking cases of child abuse, torture chamber, brutally beaten, extreme punishment, infliction of injuries,* and *negative treatments.* In this chain, the item *children* encodes the characteristic sufferers of the *shocking cases of child abuse, being brutally beaten, extreme punishment, infliction of injuries,* and *negative treatments;* and all these happen characteristically at the *torture chamber* – what child-abusing homes have turned into. What can be observed here is that the writer's feelings, emphasis, and judgements that parents are being unfair and unjust to children are reflected by the lexical chain. The second chain is a *repetition* of the item *inflicted* as *inflicted, inflicted, inflicting* and *inflict,* where the writer angrily cites different incidents of children being inflicted with different forms of injuries by the child-abusing parents. The third is a *repetition* of the item *extreme punishment,* which is also used by the writer to stress his point regarding the degree of punishment given to children, which is unusually severe. This particular chain overlaps with the expectancy chain where children are portrayed as the characteristic sufferers of extreme punishment. The fourth is also a chain of *expectancy relations* involving the items *fathers, inflicted,* and *extreme punishment.* By this chain, the writer portrays *fathers* as characteristic doers of *inflicting* injuries through *extreme punishment* to children. Through the use of these emotive lexical items in the text, the writer's feelings that children are being handled unfairly and unjustly could be captured and the indignant tone of the writer is reflected.

Therefore, this study has unraveled the interaction between lexical cohesion and writers' tones in newspaper editorials. The findings of the study are, to some extent, consistent with Halliday and Hasan's (1976) claim that the use of General Nouns usually informs listeners about the interpersonal element of speakers' attitude. In a similar direction, this study is an endeavor to explore how additional categories of lexical cohesion could relate to writers' tones.

The findings of the current study that lexical cohesion reflects writers' tones that support the persuasion in newspaper editorials have to some extent corroborated the findings of Gil (1995) who report that lexical cohesion fulfill persuasive functions in Chairmen's Statements of companies' Annual Business Reports. The findings from the present study are also consistent with the findings of Klebanov, Diermeir, and Beigman (2008) who observed that lexical cohesion supports the persuasion in Margaret Thatcher's political rhetoric. Nevertheless, the findings of the current study are also consistent with the findings of Prados and Penuelas (2012) who discovered that lexical cohesion contributes significantly to the persuasive effects of American political rhetoric examined in The Gettysburg Address by the US president Abraham Lincoln, I Have a Dream by Martin Luther King, and President Obama's Inaugural Address. This has further unraveled the persuasive potentials of lexical cohesion in discourse.

In sum, as suggested by Kane (2000), the present study is able to discern writers' tones by anchoring its assessment in lexical cohesion devices. This is also supported by Flemming (2012), Flemming (2011), and Kolin (2009/2013), who also believe that writers' tones are signaled in part by particular words and phrases the writers choose. The findings of the study are also corroborated by findings of Gonzalez (2011), Tanskanen (2006), Taboada (2004) and Morris and Hirst (1991). Similar to the present study, these studies have all discovered lexical chains and isolated ties in their data. Tanskanen and Taboada, for instance, observed that communicators utilize long lexical chains, short lexical chains, and isolated ties to achieve cohesion and build coherence. They draw attention that long and short lexical chains are capable of distinguishing single-topic texts, where communicators concentrate on single topics, from multi-topic ones, where communicators collaboratively initiate, abandon or shift topics. However, while the long and short chains and ties discovered in these studies are utilized in building coherence, the chains and ties discovered in the present study are observed to have been utilized for setting writers' tones.

5. Conclusion

This study has unraveled the interaction between lexical cohesion and writers' tones that facilitate the construction of persuasion in newspaper editorials. It has discovered that the devices of lexical cohesion also relate to the emotions, attitudes, and feelings stretched across texts. Observed carefully, the study is significant in at least three broad areas. First, the findings could be of benefit to editorialists as well as editorial readers because it would sensitize them on how lexical cohesion contributes to writers' tones that impact on the persuasion constructed in editorials. Secondly, in the field of discourse studies, the study would add to the body of literature on the interaction between lexical cohesion and other properties of discourse. In this respect, the study uncovers more knowledge on how lexical cohesion operates in discourse. Thirdly, findings of the study would have impact in the area of pedagogy relating to composition writing and reading comprehension. The findings would impact pedagogy because they could sensitize especially ESL/EFL learners, teachers, material developers, and novice editors on the phenomenon of writers' tones in texts. In supportive developments, studies have discovered that findings from the study of editorials could be applied successfully in handling school genres that are also persuasive in nature (see Ansary and Babaii, 2005; So, 2005; Maddalena & Belmonte, 2011). In addition, the shared features and overlaps between genres allow for transferability of knowledge from genre to genre (Bhatia, 2013; Flowerdew, 2015), therefore, the findings of this study could be utilized, for example, in handling school argumentative essays.

References

Angermeyer, P. S. (2002). Lexical cohesion in multilingual conversations. *International journal of Bilingualism*, 6(4), 361-393.

Ansary, H., & Babaii, E. (2005). The Generic Integrity of Newspaper Editorials: A Systemic Functional Perspective. *RELC Journal*, 36(3), 271-295.

Ansary, H., & Babaii, E. (2009). A Cross-cultural Analysis of English Newspaper Editorials: A Systemic-Functional View of Text for Contrastive Rhetoric Research. *RELC Journal*, 40(2), 211-249.

Baker, P., & Ellece, S. (2011). *Key terms in discourse analysis*. A&C Black.

Bhatia, V. K. (2014). *Analysing genre: Language use in professional settings*. London/Newyork: Routledge.

Bhatia, V. (2004).*Worlds of written discourse: A genre-based view*. A&C Black.

Blakemore, D. (1992). *Understanding utterances: An introduction to pragmatics* (pp. 155-78). Oxford: Blackwell.

Blommaert, J. (2005). *Discourse: A critical introduction*. Cambridge University Press.

Bloor, T., & Bloor, M. (2004).*The functional analysis of English*. London: Arnold

Bolivar, A. (1994). The structure of newspaper editorials. *Advances in written text analysis*, ed. By Malcom Coulthard, 276-294.

Bloor, T., & Bloor, M. (2004).*The functional analysis of English*. Routledge.

Brown, G., & Yule, G. (1983).*Discourse analysis*. Cambridge University Press.

Carter, R. (2001). *Working with texts: a core introduction to language analysis*. Psychology Press.

Carter, R., & McCarthy, M. (1988).*Vocabulary and language teaching*. Routledge.

Castro, C. D. (2004). Cohesion and the social construction of meaning in the essays of Filipino college students writing in L2 English. *Asia Pacific Education Review*, 5(2), 215-225.

Childs, P., & Fowler, R. (Eds.).(2006). *The Routledge dictionary of literary terms*.Routledge.

Conboy, M. (2010).*The language of newspapers: Socio-historical perspectives*. Bloomsbury Publishing.

Creswell, J. W. (2012). *Educational research: planning, conducting and evaluating quantitative and qualitative research*. Boston/New York: Pearson

De Beaugrande, R. & Dressler, W. (1981).*Introduction to text linguistics*. London: Longman

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.

Eggins, S. (2004). *Introduction to systemic functional linguistics.* A&C Black.

Ekeanyanwu, N. T. (2009). Analysis of the Content of Nigeria's Newspaper Editorials. *Oko Journal of Communication & Information Science*, 1(2), 74-103.

Enkvist, N. E. (1978). *Coherence, Pseudo-Coherence, and Non-Coherence*

Fetzer, A. (2004). *Recontextualizing context: Grammaticality meets appropriateness*. John Benjamins Publishing.

Flemming, L. (2012). *Reading for results*.(7theds) Nelson Education

Flemming, L. (2011). *Reading for thinking*.(6theds) Boston: Wadsworth

Fowler, R. (1991).*Language in the News: Discourse and Ideology in the Press*. London and New York: Routledge.

Flowerdew, J. (2013). *Discourse in English language education*. Routledge.

Flowerdew, J. (2015). John Swales's approach to pedagogy in Genre Analysis: A perspective from 25 years on. *Journal of English for Academic Purposes*, 19, 102-112.

Gee, J. P. (2011). *How to do discourse analysis: A toolkit*. Routledge.

Gee, J. P. (2011). *An introduction to discourse analysis:* Theory and method. Routledge.

Gil, M. C. F. (1995). The Persuasive Function of Lexical Cohesion in English: A Pragmatic Approach to the Study of Chairman´s Statements. *Estudios ingleses de la Universidad Complutense*, (3), 87.

González, M. D. L. Á. G. (2010). Evaluating lexical cohesion in telephone conversations. *Discourse Studies*, 12(5), 599-623.

González, M. D. L. Á. G. (2011). Lexical cohesion in multiparty conversations. *Language Sciences*, 33(1), 167-179.

González, M. D. L. Á. G. (2013). A reappraisal of lexical cohesion in conversational discourse. *Applied linguistics*, *34*(2), 128-150.

Gutwinski, W. (1976).*Cohesion in literary texts: a study of some grammatical and lexical features of English discourse* (Vol. 204). Walter de Gruyter.

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

Halliday, M. A., & Matthiessen, C. M. (2014).*Halliday's introduction to functional grammar*. Routledge.

Halliday, M. A. K., & Hasan, R. (1976).*Cohesion in English*. Routledge.

Hameed, H. T. (2008). Cohesion in Texts: A Discourse Analysis of a News Article in a Magazine. *Al-Faith Journal*. No 37, pp. 81-144

Hasan, R. (1984). Coherence and cohesive harmony.Understanding reading comprehension: Cognition, language and the structure of prose, 181-219.

Henry, A., & Roseberry, R. L. (2007).Language errors in the genre-based writing of advanced academic ESL students.*RELC Journal*, 38(2), 171-198.

Hoey, M. (2001).*Textual interaction: An introduction to written discourse analysis*. London/New York: Psychology Press.

Hoey, M. (1991).*Patterns of lexis in text*.

Hyland, K. (2003). *Second language writing*. Ernst Klett Sprachen.

Hyland, K. (2009). *Teaching and researching writing*. Routledge.

Jones, R. H. (2012). *Discourse analysis*. London and New York: Routledge.

Kane, T. S. (2000). *Oxford essential guide to writing*. Berkey Publishing Group.

Kaplan, R. B., &Grabe, W. (2002).A modern history of written discourse analysis. *Journal of second language writing*, 11(3), 191-223.

Khabbazi-Oskouei, L. (2013). Propositional or non-propositional, that is the question: A new approach to analyzing 'interpersonal meta discourse'in editorials. *Journal of Pragmatics*, 47(1), 93-107.

Klebanov, B. B., Diermeier, D., & Beigman, E. (2008). Lexical cohesion analysis of political speech. *Political Analysis*, *16*(4), 447-463.

Kolin, P. (2013). *Successful writing at work*.(10th eds) Boston: Wadsworth

Kolin, P. (2009). *Successful writing at work*.(4th eds) Cengage Learning.

Kuhi, D., &Mojood, M. (2014). Met discourse in Newspaper Genre: A Cross-linguistic Study of English and Persian Editorials. *Procedia-Social and Behavioral Sciences*, 98, 1046-1055.

Le, E. (2009). Editorials' genre and media roles: Le Monde's editorials from 1999 to 2001. *Journal of Pragmatics*, 41(9), 1727-1748.

Lewin, B., Fine, J., & Young, L. (2001).*Expository discourse*. A&C Black.

Li, J. (2010). Transitivity and lexical cohesion: Press representations of a political disaster and its actors. *Journal of Pragmatics*, 42(12), 3444-3458.

Liu, M., & Braine, G. (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System*, 33(4), 623-636.

Lyons, J. (2002). *Language and linguistics*. Cambridge University Press.

Maddalena, A., & Belmonte, I. A. (2011). Unveiling the writer–reader interaction in Peninsular Spanish and American English newspaper editorials: A cross linguistic study. *Journal of Pragmatics*, 43(3), 891-903.

Malah, Z. (2015). Lexical Cohesion in Academic Discourse: Exploring Applied Linguistics Research Articles Abstracts. *Research Journal of English Language and Literature*, 3(4), 291-299.

Martin, J. R. (2001). Cohesion and Texture. *The Hand Book of Discourse Analysis*.

Martin, J. R. (1992). *English text: System and structure*. John Benjamins Publishing.

Matthiessen, C., Teruya, K., & Lam, M. (2010).*Key terms in systemic functional linguistics*. A & C Black.

Matthews, B., & Ross, L. (2010).*Research methods*. Pearson Higher Ed.

Mayor, M. (2009).*Longman dictionary of contemporary English*. Pearson Education India.

McCarthy, M. (1991).*Discourse analysis for language teachers*. Cambridge University Press.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation: Revised and expanded from qualitative research and case study applications in education*. San Franscisco: Jossey-Bass.

Meyer, C. F., Halliday, M. A. K., & Hasan, R. (1987).*Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective.*

Mirzapour, F., & Ahmadi, M. (2011). Study on lexical cohesion in English and Persian research articles (A Comparative Study). *English Language Teaching*, 4(4), 245.a

Morris, J., &Hirst, G. (1991). Lexical cohesion computed by the saural relations as an indicator of the structure of text. *Computational linguistics*, 17(1), 21-48.

Onyebadi, U. (2005). *Nigeria's private media and agenda setting: An evaluation of This day newspaper's house editorials* (2004) (Doctoral dissertation, University of Missouri--Columbia).

Parsons, G. (1990). *Cohesion and Coherence: Scientific Texts* (A Comparative Study) [Monographs in Systemic Linguistics 1]. Nottingham: University of Nottingham, Department of English Studies.

Prados, M. D., & Peñuelas, A. B. C. (2012). Cohesion in American political rhetoric: The Gettysburg Address, I have a dream and Obama's Inaugural Address/La cohesión en la retórica política americana: Los

discursos Gettysburg Address, I have a dream y el de la Investidura de Obama. *Estudios Ingleses de la Universidad Complutense*, *20*, 37.

Reah, D. (2002). *The Language of Newspapers*. London and New York: Routledge

Sanders, T., & Maat, H. P. (2006). Cohesion and coherence: Linguistic approaches. *Reading*, 99, 440-466.

Schiffrin, D., Tannen, D., & Hamilton, H. E. (Eds.). (2008). *The handbook of discourse analysis*. John Wiley & Sons.

So, B. P. (2005). From analysis to pedagogic applications: Using newspaper genres to write school genres. *Journal of English for Academic Purposes*, 4(1), 67-82.

Stubbs, M. (2001).Computer-assisted Text and Corpus Analysis: Lexical Cohesion and Communicative Competence. *The handbook of discourse analysis*, 18, 304.

Swales, J. (1990).*Genre analysis: English in academic and research settings*. Cambridge University Press.

Taboada, M. T. (2004). *Building coherence and cohesion: Task-oriented dialogue in English and Spanish* (Vol. 129). John Benjamins Publishing.

Talbot, M. (2007).*Media discourse: Representation and interaction*. Edinburgh University Press.

Tanskanen, S. K. (2006). *Collaborating towards coherence: Lexical cohesion in English discourse* (Vol. 146).John Benjamins Publishing.

Tavakoli, H. (2010). *A dictionary of research methodology and statistics in applied linguistics*. Tehran:Rahnama press.

Van Dijk, T. A. (2008). *Discourse and context*. A socio cognitive approach. Cambridge.

Van Dijk, T. A. (1997). *Discourse as social interaction* (Vol. 2).Sage.

Widdowson, H. G. (2004). *Text, context, pretext*. Malden/Oxford: Blackwell Publishing.

Widdowson, H. G. (1978). *Teaching language as communication*. Oxford University Press.

Wu, S. (2010).Lexical cohesion in oral English. *Journal of Language Teaching and Research*, 1(1), 97-101.

Wyrick, J. (2011). *Steps to writing well with additional readings*. (8theds) Boston: WADSWORTH Cengage Learning.

Yule, G. (2014). *The study of language*. Cambridge University Press.

Yin, Z. (2015). The Use of Cohesive Devices in News Language: Overuse, Underuse or Misuse? *RELC Journal*, 46(3), 309-326.