

Infelicitous Use of Anaphoric “This” in Undergraduate Academic Writing

Gordon S. K. Adika¹

Abstract

The objective of this paper is to describe the contexts of misuse of the anaphoric pronoun “this” in paragraphs composed by undergraduate students in their academic writing assignments and account for the infelicities, with the hope that the findings will extend the frame of reference for the analysis of such infelicities for instructional purposes. The study unearthed the following infelicities: (a) Ambiguous co-reference; (b) Extensive use of “this”; and (c) Textual distance between “this” and its referent. Practical intervention measures are proposed to help both students and instructors to deal with the problem.

1. Introduction

1.1 Motivation for the study

Anaphora may be defined as the process where a word or phrase refers back to another word or phrase which was used earlier in a text. The theoretical area of anaphora is vast and complex (Aoun, 1985, Langacker, 1991; King, 2005). Indeed, the phenomenon of anaphora has been treated at a high level of abstraction as it relates to the theory of government and binding in some linguistic studies, and in the area of psycholinguistics and philosophy in terms of psychological processes involved in interpretation processes and discourse representation theory, context dependent quantifier approach and dynamic logic approaches, among others. However, in this paper, I am simply concerned with the anaphoric function of the demonstrative pronoun *this* in paragraphs composed by undergraduate students in their academic writing assignments. The objective of the paper is to describe the contexts of misuse and account for the infelicities. Considering various philosophical and linguistic debates on approaches to the analysis of anaphora and in the light of the motivation for this study, I must stress

¹ Gordon S.K. Adika is a Senior Research Fellow at the Language Centre, University of Ghana, Legon.

that this paper should be placed and appraised simply in the context of writing instruction and pedagogy.

1.2 Review of related literature

Academic writing I would define simply as writing for scholarly purposes in scholarly contexts. Texts so produced would have to fulfill the expectations or requirements of the academic discourse community.

Discipline specific requirements may vary, but the general principles of effective written communication are fairly uniform and they include appropriate vocabulary, correct sentence structures and linkages, spelling and punctuation .

Infelicitous use of pronominal reference in undergraduate academic writing has received some attention by Dako (1997). She examined scripts in literature by Part II (i.e. final year) students of the Department of English of the University of Ghana in a specific year in the 1980's. Her aim was to find out how effective the writing skills of English graduates were. Her study focused on such issues as sentence variation, use of sentence-transition devices, extent of vocabulary and general language competence. Of particular note are instances where she discusses linkage under sentence variation. She explains that a common device used by students is linkage by means of pronouns referring to antecedents found in preceding sentences. She cites the case of an essay that comprised 55 sentences and of these, 32 sentences started with the pronoun "he" and 11 sentences started with "that is/this is". The conclusion Dako draws from her analysis is that:

Pronominal reference appears to be an overused linkage device in students' essays. The rules of reference were often not adhered to so that it at times was difficult to know which NP was the antecedent. As a result many essays were unplanned enumerative sequences rather than clearly structured texts with an introduction, a discussion and a conclusion (p. 268).

Dako's conclusion is most revealing, but the problem of pronominal reference, especially infelicitous use of anaphoric "this", deserves a more exhaustive characterization. Therefore, the objective of this paper as mentioned earlier is to describe the contexts of misuse of the anaphoric pronoun "this" and account for the infelicities, with the hope that the findings will extend the frame of reference for the analysis of such infelicities for instructional purposes.

1.3 The problem and the data

1.3.1 The problem

Infelicitous use of anaphoric "this" in undergraduate academic writing involves:

- (a) Ambiguous co-reference;
- (b) Extensive use of "this"; and
- (c) Textual distance between "this" and its referent.

These infelicities create looseness in information links across the text, which leads to a breakdown in communication in the text.

1.3.2 The data

Part of the data for this paper comes from samples of academic writing texts which were originally collected in the late 90s as part of my research work towards a higher degree. The texts for that research consisted of samples of extended writing from Level 100 students both in the Humanities and Science from the University of Ghana who were doing Language and Study Skills (i.e., Academic Writing). The assumption at that time (which is true even now) was that a typical academic writing class is a meeting of a cross-section of first-year students, with each class containing a cohort of students with different subject combinations straddling the Arts and Social Studies in the case of the Humanities, and Biological, Mathematical or Earth Sciences in the case of the Sciences. In all, 179 texts were collected from both the Humanities and Science. The texts for Levels 100 and 200 (Humanities) were students' essay-type responses to take-home assignments on questions from their subject

areas. The data for the science students represented a challenge since their writing involved mainly responses to objective type questions and short notes. Fortunately, a course that involved extended writing, namely Earth Science, was taken by all level 100 science students, so texts were obtained directly from the lecturers handling the course. Data for level 200 science students were collected from the Departments of Zoology and Chemistry for the following reasons: first, Level 200 science students do not take Language and Study Skills, and second, some aspects of Chemistry and Zoology are compulsory for this category of students. Those aspects which involved extended writing were identified and samples from these areas were collected from the lecturers teaching these courses. The materials consisted of mainly laboratory reports in the case of Chemistry and an essay on the topic, "Discuss the consequences when the functional niches of two closely related species overlap", in the case of Zoology.

The other part of the data consists of cases of infelicitous use of the demonstrative pronoun "this" as and when they occur in the scripts of students who happened to be in my academic writing groups over the years. In addition, I have examined some long essays, spanning the years 1994 to 2004, of final year undergraduate students of the Sociology department which I randomly selected. I have also enhanced the data with a focus group study on anaphoric "this" based on Swales and Feak (2004) with my 2005/2006 academic writing group which comprised a mix of students from the humanities and sciences.

1.4 Norms of usage-- Anaphoric "this"

The Webster's 1913 dictionary defines the demonstrative pronoun "this" as "a pronoun distinctly designating that to which it refers". Other dictionaries have defined it as "a pronoun that points out an intended referent". Numerous grammar books have spelt out the nature and use of the demonstrative pronoun "this", but I will here specifically draw from the works of Quirk and Greenbaum (1976), and Downing and Locke (1992) to explain the pronoun "this" in general terms. From their perspective, the demonstrative pronoun "this" can be used to refer to a whole proposition and this reference may be characterized as anaphoric for references to a previous part of the text, cataphoric to a later part of the text or exophoric

to something outside the text, and some references are idiomatic. Below are examples taken from Downing and Locke (1992: 414-415):

Anaphoric: You are working too long and too hard, and **this/that** is bound to affect your health in the long run.

Cataphoric: The plan is **this**: plane to Cairo, night train to Luxor and then up the Nile by boat as far as Aswan. That makes sense, what you've just said.

Exophoric: I hate working like **this!** (= in this way)

In discussing discourse reference in general, Quirk and Greenbaum (ibid) provide specific examples to illustrate the different ways of indicating anaphoric or cataphoric reference. This is useful; however, the Halliday and Hasan (1976: 64-65) summary of the norms of usage for anaphoric "this" captures, in a theoretically concise manner, the linguistic behaviour of the pronoun and its variants, namely, "that", "these", and "those":

Since ... they identify semantically and not grammatically, when they are anaphoric [they] require the explicit repetition of the noun, or some form of synonym, if they are to signal exact identity of specific reference; that is to refer unambiguously to the presupposed item at the identical degree of particularization. A demonstrative without a following noun may refer to some more general class that includes the presupposed items, and this also applies under certain conditions to a demonstrative with a following noun - namely if the context is such that the noun can be INTERPRETED more generally.

1. Analysis and Discussion

2.1 Ambiguous co-reference

Ambiguous co-reference refers to cases where neither the content of the preceding text nor any idea or specific piece of information in the preceding text relates directly or clearly to the pronoun "this".

Extract 1 below is taken from an essay on the topic “Explain the rise of President Rawlings to power in Ghana”. It consists of four sentences, with sentence 3 beginning with the phrase, “with regard to this”.

Extract 1

However, it was not until 1981 that Rawlings saw the ineffectiveness of Dr. Hilla Limann. (2) Besides, he needed to rule the country by himself. (3) With regard to this, Dr. Hilla Limann handed over to him and Rawlings became the President of Ghana. (4) From 1981, President Rawlings started to find solutions to the problems which contributed to the retardation of the country's economy.

In interpreting the presupposition set up by the anaphoric “this” in sentence 3, the reader's expectation is that sentences 1 and 2, in whole or in part, constitute likely antecedents. Such an interpretation would mean that “Dr. Hilla Limann” as the grammatical subject of sentence 3 handed over to Rawlings in consideration of antecedents 1 and 2, that Rawlings had seen his ineffectiveness and that Rawlings needed to rule the country by himself. Indeed, from a slightly humorous perspective such an interpretation would be considered plausible in the light of the social and political situation at that time or the circumstances surrounding the handing over of Rawlings to Limann in 1979. Or are we to interpret the use of “this” from the writer's perceptual centre? In that case, the interpretation would be that from the writer's point of view the propositions in sentences 1 and 2 led to Limann's action as indicated in sentence 3. If that is the case then probably the transitional word needed to link sentence 3 with the preceding information is “so” or “therefore”. The awkward interpretational plausibility as exemplified above creates an ambiguous referential relation.

Let us consider another extract from a student's essay on the topic, “Compare and contrast urban and rural life in terms of personal safety and educational facilities”. In this extract, there is a lack of clarity as to the co-referential relationship between “this” in sentence 3 and its assumed antecedents. The ambiguity is partly a consequence of the grammatical and the stylistic infelicities which characterize the preceding text.

Extract 2

When also we take education into consideration we will find out that the rural areas do lack teaching facilities such as school buildings, qualified teachers, textbooks, libraries, laboratory for their practicals, bookshops to enable them acquire some of their books for learning, also their administration becomes very poor in terms of planning and ruling the school well. (2) In all, it brings about low educational background as the people have not acquired much for productive ventures. (3) This brings about less productivity in the areas and even makes it difficult for them to know the essence of going to school.

Sentence 1 of extract 2 is long and unwieldy. Two points are made here: that the rural areas lack teaching facilities and that the administration of the schools is poor. Part of the weak information linkage in this text is due to the inexplicitness of the phrase “the rural areas”, considered in terms of the surrounding information. The phrase should appropriately read “the schools in the rural areas”, which then renders the interpretation of the phrase “their administration” easy. “Their” would then relate anaphorically to the schools. As the phrase stands there is an intelligibility problem. The phrase “their administration” is in reference to the schools and not the rural areas. Additionally, the grammatical subject of sentence 2 is the pronoun “it”, which in this sentence is functioning like “this” since it is supposed to refer to the situation that has been described in the preceding sentence. The point is that some explicitness is desirable at this stage. Probably, the substitution of “it” with the demonstrative pronoun “this” combined with the appropriate summary word (for example: this situation) would have been much more felicitous. This substitution would then allow the writer to use “it” instead of “this” in sentence 3, in combination with an appropriate sentence connective. A possible restructuring is as follows: “... this situation brings about low educational background... and it (reference to this situation) also brings about less productivity... “ The restructuring is motivated by the parallelism engendered by the repetition of the verb phrase “brings about” in sentences 2 and 3.

Extract 3 is taken from an essay entitled, “Show how the Christian missionaries influenced the social life of Ghanaians”. In this extract, the

antecedent of “this” is “cocoa”, but the surrounding information does not allow such straightforward interpretation.

Extract 3

(1) *The Dutch also introduced coffee which served as a basis of their trade. Cocoa was also introduced but could not thrive well.* (2) *Somewhere in 1869 it was reintroduced and it served as the basis of Ghana’s economy.* (3) *This was brought by Tetteh Quarshie of Ghana.*

The development of information is as follows: ***The Dutch introduced both coffee and cocoa. However, cocoa was not successful. In 1869, cocoa was re-introduced and it served as the basis of Ghana’s economy.*** It is after these pieces of information that the student writes: ***This was brought by Tetteh Quarshie of Ghana.*** Anaphoric “this” cannot refer to all the preceding pieces of information. A reader with knowledge of Ghana’s history can figure out that the writer is referring to the introduction of cocoa to Ghana; however, a reader who does not have this knowledge will be left floundering. In order to ascribe a coherent interpretation to the text, the reader may come up with the theory that there is probably missing information— information that should constitute the antecedent of “**this**”.

Extract 4 below is taken from an essay on the topic, “Discuss the consequences when the functional niche of two species overlap”.

Extract 4:

1. The following graphs can be realized. [Graphs]
2. When cultured separately *P. caudatum* and *P. Aurelia* both show a sigmoid curve.
3. This explains that they increase in number.

Sentence 2 of extract 4 is in reference to the graphs that have been presented. In other words, the sigmoid curve is what the graphs denote. The absence of a transitional word to explicitly establish the relationship

between sentences 1 and 2 blurs the characterization of the antecedent for “this” in sentence 3. A possible restructuring is as follows: “As presented in the graphs, when cultured separately *P. caudatum* and *P. Aurelia* both show a sigmoid curve. This (i.e., the sigmoid curve) shows that they increase in number. This curve...”

2.2 Extensive use of “this”

Extensive use of “this” refers to cases where “this” is used three or four times or more and in succession in the same paragraph, thus creating a referential chain of presupposed items, and in cases of “unsupported” this (Swales and Feak, 2004: 33) ambiguous co-reference and a looseness in information relationships result.

Extract 5 is taken from an essay on the topic, “Assess the value of your main subject of study at the university to the development of the nation”.

Extract 5

*Psychology helps in Guidance and Counselling. (2) **This** helps students to help others like counselling them on the type of jobs people should do so that by **this** people are able to do the type of work suitable for them. (3) **This** guidance and counselling also helps in schools like the secondary schools, by helping them with their problems like type of subjects to choose and by doing **this**, the children in turn benefit by choosing the right course which will not give them problems.*

In sentence 2 of extract 5, the referent of the demonstrative pronoun “this” is the immediately preceding sentence, which is “Psychology helps in Guidance and Counselling”. The nature of this help is not provided, an indication of which would have constituted a clear antecedent for the demonstrative “this”. What is evident is that the way in which the subject or the course “psychology” helps in guidance and counselling is assumed to be known by the reader. This assumption contributes to the uncertainty of the co-reference tie. The sequencing of information may be illustrated as follows:

Psychology helps in Guidance and Counselling ———→this (that psychology helps in Guidance and Counselling) helps students to help others like counselling them on the type of jobs people should do (the inference is that psychology probably trains students in the areas of guidance and counselling and so psychology students are equipped to counsel people on their careers; another inference is that the general study of psychology will enable the student to offer guidance and counselling services), “by this” (is it a reference to the psychology students’ ability to counsel people on the type of jobs they should do, or simply to guidance and counselling in general?)

In sentence 3 of Extract 5 which reads, “This guidance and counselling also helps in schools like the secondary schools, by helping them with their problems like the type of subjects to choose and by doing this the children in turn benefit by choosing the right course which will not give them problems”, the use of “This”, with its effect of particularizing “guidance and counselling” within the sequence of information, rather confuses the orientation of the discourse. Should “guidance and counselling” be interpreted strictly in terms of “counselling on types of jobs”? The information in the rest of the clause does not allow for this straightforward interpretation. In sum, extract 5 does not communicate the writer’s message clearly, and this stems from the extensive use of “this”.

Extract 6, which consists of two sentences, is taken from an essay on the topic, “Why do we have to live a moral life?”

Extract 6

- (1) Omoregbe (1979:212) counteracts **this claim** by saying that in the first place one has to be a believer in God and in life after death before one can be convinced by **this answer** as a reason for living a moral life. (2) An atheist, for example, cannot accept **this answer** because he does not believe in God so **this** has no meaning for him.

In terms of text structure, there is, strictly speaking, no serious impropriety in the referential chain:

this claim —→ **this answer** —→ **this answer** —→ **this**.
 The claim being referred to was made in a paragraph preceding extract 6. So the antecedent is easily recoverable from the preceding text. The problem is that the extensive use of “this” especially for a two-sentence text, besides being tautological, increases the remoteness of the semantic relationship between the referring expression and the propositions that constitute the antecedent.

Extract 7 below actually constitutes the entire response of the writer to a writing task which required students to write short notes on the topic, “Hardness of a mineral”. The text consists of six sentences.

Extract 7

(1) ***This*** is ability for a mineral to resist abrasion. (2) It is not its ability to smash. (3)

*When two minerals are rubbed together the one that is able to scratch the other is referred to as the hardest. (4) There are various scales used for measuring or determining the hardness of a mineral some of which are moh scale and ***this*** deals with different types of object being able to scratch a mineral. (5) It is scaled 1-10 and some of the objects considered are finger nails, knife, etc., and according to ***this*** the hardest mineral is diamond and talc is the least. (6) The other one is the absolute scale and ***this*** is scaled 10,000 to 0 and the hardest mineral is nearing 10,000 and the rest lie within the range of 2000 and 0.*

The text is initiated with anaphoric “this” in apparent reference to the topic under consideration. Tracing the antecedent of “this” in sentence 4 presents some difficulty. If “this” is a reference to the moh scale, then the clause “... ***and this deals with different types of objects being able to scratch a metal***” is absurd. The rest of the paragraph degenerates largely because of the overuse of anaphoric “this” and to some extent the writer’s weak control of English sentence structure and limited vocabulary. In tracking the antecedents of anaphoric “this” across the text, a reader in search of a coherent interpretation may try to find an interpretational path from the following: **“there are various scales [sets up a general**

category] ... some of which are the moh scale [sets up a subset of the general category] ... the other one is the absolute scale [sets up an alternative within the subset] ... and this [makes specific reference to the alternative]". The attempt at a sub-categorization may be helpful, but beyond anaphoric "this" in sentence 6 we are taken on a path of unintelligibility: how do we interpret "*this is scaled 10,000 to 0*" and the noun phrase "**the rest**"?

Extract 8 is taken from an essay topic, "Critically examine the view that the relatively underdeveloped state of the tropical world is due fundamentally to the character of its climate". In this extract, there is an extensive use of "this" which creates looseness in information relationships.

Extract 8

*Also, developed countries like the USA and Japan for example have exploited the third world by coming down and collecting our scarce goods and capital to their countries, manufacturing or processing them then sending them back to us to buy for money which they pocket, more or less leaving us with nothing. (2) **This** can be clearly seen under the 'core-periphery model' which illustrates **this**. Gourou also supports **this factor**.*

What seems clear is that anaphoric "this" in the first two instances of its use (sentence 2) refers to the same antecedent, namely, the situation described in the preceding sentence, though it is arguable that some degree of explicitness is desirable in the second instance. For example, explicitness may be achieved by attaching the pronoun "this" to a noun that captures the central idea of the preceding sentence. The word "situation" may appropriately be used to achieve such a degree of explicitness. Thus, the sentence will read, "This can clearly be seen under the 'core-periphery model' which illustrates **this situation**..." In sentence 2 again, the noun phrase "this factor" which refers again to the situation as described in the preceding sentence further increases the looseness in information relationships for two reasons. First, it occurs as part of a sequence of a long referential chain, and second, there is the difficulty of establishing a clear semantic relation between the word "factor" and the situation under discussion.

Extract 9 is taken from a student's long essay. In this extract, the infelicitous use of anaphoric "this" emanates from the overuse of the pronoun.

Extract 9

*The problem of corruption is central to almost all developing nations woes/plight to under development and **this calls** for effective "war tactics" to win **this war** at all cost. (2) But **this** depends on good governance as well as good morals among political leaders/politicians, civil/public servants as well as rallying in all stakeholders including the effective involvement of our churches, and other religious bodies to achieve **this target**.*

Let us consider the antecedents of the referential chain: [**Antecedent: that the problem of corruption leads to under development calls for ...**] this..... [Antecedent: the problem of corruption characterized metaphorically as war] ←————— this war [Antecedent: winning this war]←————— this [Antecedent: is it wining this war?] ←————— this target.

By the time we get to the last occurrence of anaphoric "this", even in this case where it has been combined with a summary word, namely, "target", the prose has become limp simply because of the extensive use of anaphoric "this".

2.3 Textual distance between "this" and its referent

Textual distance between the pronoun "this" and its referent refers to cases where there is an intervening example or where there are several sentences (or clauses) between "this" and its referent, thereby creating a sense of a gap between the pronoun and the presupposed item.

Extract 10 below is an extract from an essay on the topic, "Assess the view that foreign policy is the reflection of domestic realities". It consists of three sentences.

Extract 10:

*[1] It has been argued that mere possessing of the natural raw materials will make a country viable on the international scene and that unless a country is able to identify **its** natural resources, manage to extract **it** and harness **it** with other areas of **its** economy its foreign policy will still be negative. (2) For example, **it** has been proved right that Ghana has crude oil (a large quantity) in the Volta Region but **it** could not organize and extract it and harness **it** with other resources due to other economic reasons. (3) **This** has been the case in many countries especially Africa “and the foreign policies are seriously shaped by **this factor**.”*

In extract 10, the two cases of anaphoric “this” occur in sentence 3, the last sentence of the paragraph. The preceding text, which constitutes the antecedent either in part or whole, comprises two long sentences, each of which exhibits an overuse of the pronoun “it”. In all, there are 10 instances of the use of “it”, some of which are infelicitous. For example, the two cases of “it” in sentence 1 in reference to “natural resources” should be “them”. Also “it” after “but” in sentence 2 should probably be changed to “the country” since that seems to be a better characterization. It is clear then that the antecedents of anaphoric “this” in sentence 3 suffer from some grammatical and stylistic infelicities. While the sentence-initial “this” in sentence 3 may refer to the content of sentences 1 and 2, “this factor” vaguely points to sentence one. The textual distance combined with the grammatical and stylistic infelicities somewhat create looseness in the presupposition being evoked.

Extract 11 is taken from a long essay. It is a two-paragraph text comprising eight sentences.

Extract 11

(1) ... the Ghana Police Service with reference to the Motor Transport and Traffic Unit (MTTU) responsible for Road Traffic regulation have come under strong criticism from the general public for being

*corrupt. (2) The MTTU personnel are seen collecting monies during broad daylight from drivers when performing their normal duties, thus when inspecting and checking documents and conditions of vehicles applying [sic, plying] our roads. (3) **This** is a known fact which needs no empirical evidence to substantiate. (4) It is even on the lips of even toddlers or young [sic, the young] as well as adults that the service has lost its credibility, confidence and respect in the eyes of the Ghanaian public. (5) **This** may be due to the fact that personnel of the service are publicly seen collecting bribes from motorists especially drivers of commercial vehicles.*

*(6) **It is in the light of these** that the researcher wants to ascertain to which [sic, what] extent the nature of the policy work (enforcement of the laws) renders them vulnerable or whether the officers face constant temptations from people seeking to corrupt them (organized crime syndicates) among other factors. (7) Especially what accounts for the apparent disregard for principle of integrity and public condemnation among perpetrators? (8) **This** among other things has called for **this criticism**.*

In extract 11, anaphoric “this” and its variant “these” have been used felicitously in the text preceding sentence 8. However, the two instances of the use of “this” in sentence 8 present us with interpretation challenges. In sentence 8, the sentence-initial anaphoric “this” probably refers to sentence 7. “This criticism” on the other hand takes us on a hazy interpretation journey: is it in reference to sentence 1?

3. Implications of analysis

3.1 Insights from Swales and Feak (2004)

One of the implications of the analysis is that students pay scant regard to the norms of usage of the pronoun “this”, and how these norms of usage affect information relationships. Additionally, the extensive use of “this”, probably, also stems from students’ refusal to think hard about the link they hope to establish or evoke when they use the demonstrative pronoun. Furthermore, students may not be aware of the disambiguating power of a combination of the demonstrative pronoun “this” and a summary

word as explained for instance by Swales and Feak (2004), "... if there is a possibility your reader will not understand what *this* is referring to, your best strategy is to follow *this* with a noun so that your meaning is clear." In this section of the paper, I present the results of an exercise I gave to my 2005/2006 academic writing class based on extracts from Swales and Feak (see appendix). These extracts comprise an explanation of strategies for using *this* felicitously and exercises that test the ability of students to compose appropriate summary words and produce alternative summary words that are relevant to the context in question.

3.1.1 Methodology and Data Analysis

The experiment involving the Swales and Feak extracts was done during a two-hour class session. First, the class discussed the use of "this" in text reference and examined a few cases of ambiguities. Next, we discussed the strategy proposed by Swales and Feak. Students were then given 30 minutes to do Tasks one, two and three. Their performance was then analyzed with the one-way ANOVA (i.e., Analysis of Variance).

One hypothesis was tested with the One-Way ANOVA:

- There will be significant difference in the performance of the students in the three tasks – Task One, Task Two and Task Three.

Task One involved choosing a correct noun from a list of nouns to complete sentences, Task Two involved choosing a summary word from a list of words to complete sentences, and Task Three required that students find or provide summary words that best complete the given sentences.

The responses of the students were converted into marks or percentage scores and (considering the fact that the scores are measured on the interval scale), One-way ANOVA was used to test for significant differences in the performance of the students in the three tasks. The test was carried out at 95% significance level ($p=0.05$). One-Way ANOVA (Analysis of Variance F-test) was used to compare the performances of the students of the three tasks. The assumptions underlying the use of the One-Way ANOVA include:

1. The scores obtained by the students were independent and randomly distributed.
2. The probability distribution of the performance of the students was normal.
3. The variances of the performance of the students were equal.

The results in Table 1.0 show the proportion of students with regard to the total number of correct answers provided to the sentences in Task One. The results appear to be normally distributed. It can be observed that a few (6 13.0%) students provided no answers at all, quite a number of them 16 (34.8%) provided one correct answer, a further 18 (39.1%) provided two correct answers and a few (6 13.0%) students provided the expected number of three correct answers. The result in Table 1.0 indicates that just a little over a tenth (6 13.0%) of the students' performance measures up to the expectation. *Thus the performance of the majority (over two thirds) of the students did not measure up to expectation.*

Table 1.0: Total Number of Correct Answers - Task One

Number of correct answers	Frequency	Percentage
No correct answer	6	13.0
One	16	34.8
Two	18	39.1
Three	6	13.0
Total	46	100.0

It can be observed from Table 2.0 that the students performed creditably in Task Two. Out of an expected number of six correct answers, 9 (19.6%) of the students were able to provide four correct answers, 15 (32.6%) provided five correct answers and a further 13 (28.3%) of them provided the expected six correct answers to the sentences in Task Two.

The results in Table 2.0 therefore indicate that the performance of the majority of the students in Task Two was commendable.

Table 2.0: Total Number of Correct Answers - Task Two

Number of correct answers	Frequency	Percentage
No correct answer	10	21.7
One	28	60.9
Two	8	17.4
Three	0	0.0
Four	0	0.0
Five	0	0.0
Total	46	100.0

The results in Table 3.0, however, show a rather poor performance by the students in Task Three. The majority (60.9%) of the students could provide only one correct answer out of an expected number of five correct answers and at best two correct answers, which was provided by only 8 (17.4%) of the students. *These results indicate that because the students were not provided with a list of answers to choose from, they were not able to supply their own words based on their understanding of the surrounding information in Task Three.*

Table of 3.0: Total Number of Correct Answers - Task Three

Number of correct answers	Frequency	Percentage
No correct answer	10	21.7
One	28	60.9
Two	8	17.4
Three	0	0.0
Four	0	0.0
Five	0	0.0
Total	46	100.0

On the whole, it can be observed that students performed better in the multiple choice tasks (Task One and Task Two) than they did in Task Three, which required students to fall on their own stock of vocabulary.

3.1.2 Hypothesis Testing

Table 4.1: Statistics of the Performance of students on the three Tasks

Task	N	Mean Score (%)	Standard Deviation
Task One	46	50.73	29.59
Task Two	46	75.73	22.96
Task Three	46	19.13	12.62
Total	138	48.53	32.46

The results in Table 4.1 show the performance of the students in the three tasks. It can be observed that the students performed poorly in Task Three, scoring just 19.13 percent, performed averagely (50.73%) in Task One and performed excellently in Task Two, scoring 75.73 percent. The differences in the scores obtained by the students in the three tasks were found to be significant ($F=71.04$, $df = 2, 35$; $p<0.05$). Thus at 95% significance level, there were differences in the performance of the students in the three tasks.

Summary Table of One-Way ANOVA on the performance of students in the three tasks

Source of Variation	Sum of squares	df	Mean Square	F	Sig.
Between Groups	74000.161	2	37000.081	71.041	0.00
Within Groups	70311.353	135	520.825		
Total	144311.5	137			

The post-hoc test for multiple comparison shows that the students performed significantly better in Task Two (75.73%) than in Task One

(50.73%) and Task Three (19.13%). Also, the performance of the students in Task One (50.73%) was significantly better than in Task Three (19.13%).

Multiple Comparison: Post Hoc Tests for performance of students in the three tasks using least Square Deviation (LSD).

Type of task	Task One	Task Two	Task Three
Task One		<0.05	<0.05
Task Two			
Task Three			

NB: $p < 0.05$ - The mean difference is significant at 0.05.

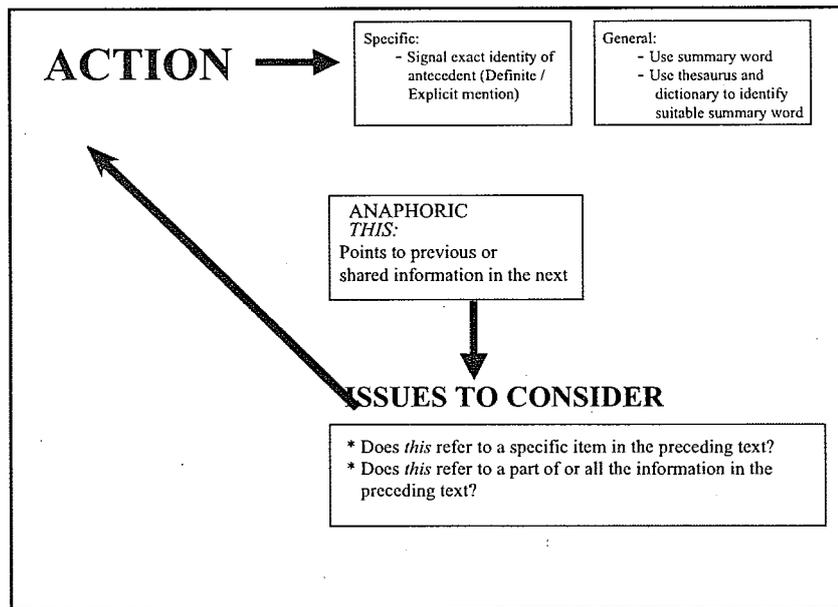
3.1.3. Summary

In sum, the poor performance of the students in task three suggests that they might have a fundamental problem with generalizing across pieces of information and providing summary words to capture the thrust of the surrounding information. My speculation is that this problem may be a consequence of the students' small vocabulary size and their lack of practice in exercising the intellectual effort required in re-conceptualization.

3. 2. An Evaluative grid for the use of “this”

I believe that the ultimate responsibility for the quality of students' writing lies with the students themselves. As an advocate of process writing philosophy which sees the written product as the culmination of several stages of composing— pre-drafting, drafting, rewriting, and revising— I propose evaluative grids for use by students as part of rewriting and revising activities during the writing process. Undergraduate students should be able to work on their own with these grids after some practice in class with their writing instructors.

Fig. 1: An evaluative grid for the avoidance of ambiguous use of anaphoric *this*

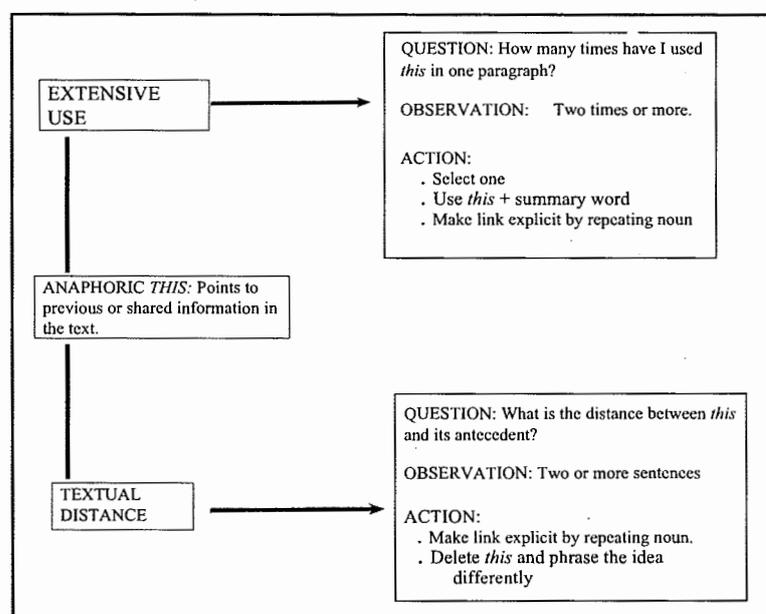


The evaluative grid in figure 1 is supposed to help students engage with their writing in an interactive way with the specific objective of dealing with ambiguous co-reference. The questions under “issues to consider” direct the writer’s attention to possible ambiguities in the text: does *this* refer to a specific item in the preceding text? If it does and you have not clearly demonstrated it, then take the necessary disambiguating action—signal exact identity of antecedent through a definite or explicit mention. If you intend *this* to refer to a part of or all the information in the preceding text, make yourself clearer by using a summary word. Also consult a thesaurus and a dictionary to identify suitable summary words.

Figure 2 below is designed to help students to avoid using the pronoun *this* extensively and to think about the textual distance between the point where the pronoun is used and its referent. During the rewriting and

revising stage of writing, students may appeal to figure 2 as an evaluator or co-editor of their text. The question under extensive use requires the writer to take another look at the frequency of occurrence of *this*, while the question under textual distance invites the student to take another look at the intervening pieces of information between *this* and its intended referent.

Fig. 2: An evaluative grid for dealing with extensive use of *this* and the textual distance



4. Conclusion

This study has been concerned with describing and accounting for infelicities in the use of anaphoric *this* in the writing of undergraduate students. In all, three types of infelicities, namely, (1) Ambiguous co-reference; (2) Extensive use of *this*; and (3) Textual distance between *this* and its intended referent were analyzed and discussed. The analysis was restricted to the effects of the misuse of *this* on text's intelligibility and information relationships. Clearly, the infelicitous use of *this* creates lack

of clarity and distorts information relationships in the text. As writing instructors, we need to continue to provide fresh and innovative guidelines that would help our students to deal with the problems presented by anaphoric *this*. Additionally, we need to help our students to deal with the fundamental issue of re-conceptualization through vocabulary development and expanded reading. Finally, I hasten to point out that the study recognizes the interplay of other factors such as weak sentence construction, limited vocabulary and inappropriate use of other pronoun references like “it” as contributing to the ambiguities and problems of interpretation in undergraduate academic writing. Nonetheless, the focus on anaphoric “this” has fulfilled a critical objective, which is documenting contexts of infelicitous use in an exhaustive and systematic way.

REFERENCES

Adika, G.S.K. 1999. *An analysis of university students expository discourse*.

Unpublished PhD thesis. University of Ghana, Legon, Ghana.

Aoun, J. 1985. *A grammar of anaphora*. Cambridge, Massachusetts: MIT.

Dako, K. 1997. Features of stylistic versatility in English as observed in the writing of English graduates. In M.E. Kropp Dakubu (Ed.) *English in Ghana*. pp. 263-274. Accra: GESA.

Downing, A. & Locke, P.1992. *A university course in English grammar*. New York: Prentice Hall.

Halliday, M.A.K. & Hasan, R 1976. *Cohesion in English*. Harlow: Longman.

King, J.C. 2005. Anaphora. *Stanford Encyclopaedia of Philosophy*.

Langacker, RW. 1991. *Foundations of cognitive grammar*. Stanford: Stanford University Press.

Quirk, R & Greenbaum, S.1976. *A university grammar of English*. Longman.

Swales, J.M. & Feak, C. B. 2004. *Academic writing for graduate students: Essential Tasks*

and Skills (2nd Ed.) Ann Arbor, MI: University of Michigan Press.

Appendix

Source: Swales, J.M. and Feak, C. B., (2004) *Academic Writing for Graduate Students: Essential Tasks and Skills*. 2nd Ed., Ann Arbor: The University of Michigan Press. Extract reprinted with the permission of the publishers. Tasks one, two, and three in the experiment are in reference to tasks seventeen, eighteen, and nineteen in the Swales and Feak extract.

Language Focus: **this + Summary Word**

Another way to maintain flow is to use *this/these* + a noun to join ideas together: Consider the following sentences.

ESL lecturers know that students need to understand the differences between formal and informal language. However, *this* understanding cannot be usually achieved quickly.

What does *this understanding* refer to?

Consider the following sentences:

In recent years, the number of students applying to Ph.D. programmes has increased steadily, while the number of places available remains constant. *This situation* has resulted in intense competition for admission.

What does *this situation* refer to? What is the effect of using *this* instead of *that*?

The phrases in italics contain a summary noun or word that refers back to the idea in the previous sentence. These phrases summarize what has already been said and pick up where the previous sentence has left off. You may have noticed in your academic reading that *this* is not always followed by a noun, that is, *this* is “unsupported.” Keep in mind, however, that if there is a possibility your reader will not understand what *this* is referring to your best strategy is to follow *this* with a noun so that your meaning is clear.

TASK SEVENTEEN

Choose a noun to complete the following.

1. According to a recent survey, 26% of all American adults, down from 38% 30 years ago, now smoke. This _____ can be partly attributed to the mounting evidence linking smoking and fatal diseases, such as cancer.

- a. decline b. reduction c. improvement
d. decrease e. drop

Can you think of any other nouns that could complete the sentence?

2. Early in September each year, the population of Ann Arbor, Michigan, suddenly increases by about 20,000 as students arrive for the new academic year. This _____ changes the character of the town in a number of ways.

- a. Influx b. Increase c. invasion
d. rise e. jump

Can you think of any other nouns that could complete the sentence?

3. Nowadays, laptop computers are lighter, more powerful, and easier to use than they were five years ago. These _____ have led to an increase in these machines.

- a. changes b. developments c. advances
d. improvements

TASK EIGHTEEN

Choose a summary word from the list to complete each sentence. Can you think of other possible summary words in addition to those on the list?

- | | | |
|------------|------------|------------|
| Process | situation | finding |
| Problem | difficulty | disruption |
| estimation | view | |

1. The traditional economic and consumer behaviour models assume a rational, thoughtful consumer who gathers information about a good and carefully makes a purchase. This _____ has recently been challenged, particularly because of the growing number of consumer choices.
2. Our pilot study has shown that wind turbines used to generate electricity can pose a threat to flying birds. This _____ suggests a need for further research on improving the safety of these mechanisms.
3. In soccer, goalkeepers routinely wear gloves that may restrict heat loss from the hands and cause discomfort. In order to alleviate this _____, special materials, called phase control materials (PCMs), have been incorporated into gloves to reduce the amount of heat inside the glove, thus maintaining a comfortable temperature.
4. Normal average human temperature is 37°C. At any lower environmental temperature, heat will be lost from the skin to the environment as the body attempts to heat up the air in direct contact with the body. This _____ is known as conduction.
5. Until adjustment of the body clock has occurred, individuals suffering from “jet lag” feel tired during the new daytime, yet they are unable to sleep properly during the new night. For athletes in particular this _____ of sleep can affect mood and powers of concentration and might result in poorer training performances and competition results (Reilly et al. 1997b).
6. Until recently, the support needs of frail older people in Sweden have been met primarily by the state, with there being little expectation that the family would provide care. This _____ is now changing as increasing emphasis is being placed on the role of the family.

TASK NINETEEN

Now try to find summary words that can complete these sentences.

1. Irrigation in sub-Saharan Africa is in most cases performed using a rope and a bucket to raise and distribute water from a shallow open well. While this _____ has the advantage of being inexpensive, its low capacity and labor intensive nature is decidedly a disadvantage.

2. Motor vehicle deaths in the U.S. declined from nearly 60,000 in 1966 to just over 40,000 last year, even though Americans drive millions more miles now and millions more vehicles are on the road. The death rate, which was 7.6 deaths per 100 million miles in 1950, declined from 5.5 in 1966 to 1.6 last year. This _____ can be attributed to the manufacture of safer vehicles, with features such as airbags and antilock brakes.