THE USE OF LEXICAL COHESION ELEMENTS IN THE WRITING OF ESL LEARNERS

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Abstract

This study investigated the use of lexical elements of cohesion in the essay writing of students of English as a Second Language. Two hundred essays of final year students of the University of Nigeria, Nsukka were collated and analyzed by the researchers in order to identify the lexical elements used to achieve cohesion in writing. The result showed that students used three lexical elements as postulated by Gutwinski in varying degrees in their writings. These include: repetition, synonyms, and lexical sets (collocations). Students tended to use more of repetitions and made minimal use of synonyms and lexical sets to achieve cohesion in writing. This has led to poorly written essays by students. It also implies that lexical cohesion elements should be taught in schools to enable students use them appropriately in writing.

Keywords: cohesion, lexical elements, English as a Second Language, writing

1. Introduction

The work is predicated on the fact that writing is the major language skill for academic discourse and examination which helps to convey information about abilities and competencies in the use of the English language as a second language in our society. Writing is a means through which people generally express their feelings, needs, and ideas in a permanent form. It is an important aspect of literacy and an indispensable repository of knowledge and history over

the ages. Since mid-1960's, the investigation of the written composition of second language learners has been a central issue for applied linguists (Murphy 2001). Murphy points out that the majority of the language learners take some definitions of lexical richness to be central in any adequate account of measurement. This means that when approaching the issue of the development of second language writing, applied linguists draw a sharp line between the categories of lexis and grammar in order to focus their attention on the development of lexis.

Otagburuagu (2007) notes that the nature and complexity of writing have often been of concern to writers. Watson cited in Otagburuagu (2007) posits that writing is hard and so does not involve a single process. The writing competence of university graduates has provoked a lot of criticisms from employers of labour, teachers, examiners and the Nigerian public. Two areas of poor performance of Nigerian graduates are identified as: poor mastery of the English language and lack of writing skill. This has been a source of worry and concern to parents, employers and the government. This is because it would be impossible for any student to excel in academic pursuit in Nigeria without the mastery of the English language, which is the medium of instruction, as well as communication between students and teachers. 2003 – 2014 Chief Examiners' Report published by West African Examinations Council (WAEC) show the extremity of the poor performance of students in the English Language. Reports of Chief Examiners show that majority of the weaknesses had to do with little or no exposure to proper writing skills. The examiners identified the areas of poor performance as mostly poor organization of ideas, construction of loose sentences, translation from mother tongue and abuse of basic rules of grammar. This manifests in the lack of cohesion, especially in their essay writing.

The University of Nigeria, Nsukka started the School of General Studies where the Use of English is taught to all students who enter the University. The aim is to help them improve on their spoken and written English. However, it is observed that some of these students do not still write cohesively. This prompted the researchers to investigate the writing of final year students of the University so as to find out the areas of weakness in their writing. Writing, as it is, creates a big problem for learners of the English language.

The way a writer writes is very important because that determines how the reader will read. This study focused on lexical cohesion as employed by students in the English as a Second Language corpus with the view of identifying the lexical cohesion elements which exist in their writing. In view of the importance of cohesive devices to text creation, comprehension, and the ability to combine sentences to produce stretches of connected text, Widdowson and Davies (1975: 37) say it "does not follow as necessary consequences of learning", but there is need to explicitly describe this linguistic phenomenon in ESL texts (Kadiri 2014).

For the past decades, cohesion as a concept has received attention among linguists. This concept put forward by Halliday and Hasan has been in existence

prior to that time. According to Traugott and Pratt cited by Xi, the earliest study of cohesion in English was conducted by Jacobson in 1960. In 1964, Halliday divided cohesion into grammatical cohesion and lexical cohesion (139). After this, other relevant cohesion studies surfaced. Scholars like Widdowson; Robert – Alain de Beaugrande and Wolfgang Dressler; Quirk *et al*; Schiffrin; Bell; Hoe; Baker; Mey; Cook and so on emerged (Xi 2010: 141). All these scholars have their deferent views on cohesion based on Halliday and Hasan's model of cohesion. Cohesion is a linguistic term which examines the grammatical and lexical relationship within a text or sentence. It is a link that holds a text together and gives it meaning. Halliday and Hasan (1976) define cohesion as the set of linguistic means for creating texture. It is the unity of text- 'sticking together'. Halliday's (1994) concept of grammatical analysis sees cohesion as a major term referring to surface-structural features of an utterance or text which link different parts of sentences or large units of discourse; for example, the cross-referencing function of pronouns, articles and some types of adverb.

In the early seventies, a number of models of cohesion were proposed. These models dealt with cohesion from different perspectives. They include the model of:

- Linguistic-stylistic by Enkvist (1976).
- a stratification framework by Gutwinski (1976).
- Hallidayan systemic functional grammar by Halliday and Hasan (1976).
- procedural/ relational model by Beaugrande and Dressler (1981).

However, Gutwinski's linguistic framework for the study of cohesion in literary texts is based on the stratification theory of linguistics and this is the model we used for the study. This is because it is the most suitable for the study. The stratification theory of linguistics which was devised by an American linguist, Sydney M. Lamb (1929), as cited in Crystal (2008: 453), models "language as a system of several related layers (or strata) of structure". Lamb states that there are six strata such as phonology which comprises phonetic and phonemic strata; grammar comprises morphemic and lexemic strata; and semology comprises sememic and hypersememic (or semantic) strata. Semology, Crystal (2008: 432) opines, "is a major component of stratificational grammar... which deals with the statement of meanings, both in terms of semantic features and in terms of referential/cognitive meaning". Gutwinski (1976: 23) deviates from the Hallidayan model because of his belief that it lacks explicitness in developing "a semology or even a fully worked-out tactic (systematic arrangement) for its upper stratum (lexical hierarchy) or lexis", a problem he also associates with tagmemics. He proposes two main cohesive features: Grammatical Cohesion (anaphora and cataphora) and Lexical Cohesion (repetition of items, synonyms and lexical set/collocations). The purpose of this study is to identify the lexical elements used by the students to establish textual cohesion.

1.1. Lexical Cohesion

Lexical cohesion is created by repeating the same lexeme or general nouns. The role of cohesion in text is creating the unity of the text. If a text is not cohesive, it may result in lack of concentration of the listener or reader. A text can be classified as cohesive, if the combination of different syntactical elements, phrases, clauses and sentences 'stick together'. A sentence can also achieve cohesiveness by various devices such as lexical recurrence, parallelism, lexical proforms, ellipsis, contra-junctions reference (for example, anaphora and exophora), and substitution (Gutwinski 1976; Halliday and Hasan 1976; and Beaugrande and Dressler 1981). McCarthy (1991) as cited in Hung and Thu (2014: 3) states that lexical cohesion involves the repetition of a noun phrase, or the use of another noun phrase which bears a relation to the antecedent noun phrase. It has two main types: reiteration and collocation. Reiteration is either restating an item in a later part of discourse by direct repetition or reasserting its meaning by exploiting lexical relations. Collocation pertains to lexical items that are likely to be found together within the same text or they tend to occur within the same lexical environment (Halliday and Hasan 1976).

Effective writing achieves a central focus which could be argument, a point, a mood, a theme, a question, and so on, that anchors the entire text. Writers achieve cohesion by establishing a focus and returning to that focus throughout the text (Thomas 2008). This can be achieved through paragraph unity and sentence cohesion. A paragraph must have a topic sentence which serves as the focus of attention. Other sentences in the paragraph must give more information on the topic sentence. This type of paragraph is found mainly in essay writing. To achieve sentence cohesion, a sentence must link to the next sentence. This can be achieved through repetition, synonym, antonym, collocation (lexical set), pro-forms and so on. Over the years of reading students essays, it is noticed that most students' essays lack cohesion. Cohesion is glue that holds paragraphs together, hence holds sentences together in writing. Writing that is coherent shows that the ideas in the essay stick together. So, essays that lack cohesion give a challenge to the reader and inhibit comprehension. This lack of cohesion manifests most especially in unnecessary repetition of items.

2. The current study

Many linguists have looked at cohesion as sticking together of items for comprehension and unity in writing. Others have given models of cohesion in their writing. This study has looked at the practical use of lexical cohesion in writing using the model postulated by Gutwinski. This pattern includes: repetition, synonym, and co-occurrence (lexical set).

This study is carried out in order to answer the following research question:

What lexical elements do the sample populations employ to establish textual cohesion that characterizes the writing corpus?

2.1. Scope of the Study

The study population comprised two hundred (200) final year students of the University of Nigeria, Nsukka. Forty (40) students each were purposefully selected from five departments of five Faculties out of the fourteen (14) in the University. Hence, the total number of students selected was 200. The students were selected from five Departments, one department each from the five Faculties. These are Faculty of Arts – Department of English and Literary Studies, Faculty of Biological Sciences – Department of Microbiology, Faculty of Education – Department of Vocational Teacher Education (VTE), Faculty of Physical Sciences – Department of Physics and Astronomy, and Faculty of Social Sciences – Department of Political Science. Therefore, forty students from each of the departments wrote the texts totaling two hundred.

2.2. Research instrument

The instrument that was used to obtain data in this study was a carefully chosen essay topic, which brought out the cohesive elements in the subjects' texts. The researchers chose the topic, "The Problem of Youth Unemployment" as a test in order to elicit the right response. The topic acted as stimulus to excite the students' perception of the issues involved in the topic and basic cues in the areas of content, syntax and cohesive devices in the writing task. In view of this fact, the researchers believed that the choice of topic is justified. A single essay was selected to ensure uniformity and enhance comparability of data. A text in this study is a group of sentences bound together by cohesion elements for communicative functions. These elements contributed to the stability and economy with respect to both materials and processing effort. These include: modality, sequence of tenses, and use of certain adjectives, comparatives and adverbial, repetition of whole clauses or parts of them and of entire paragraphs. However, the study focused on lexical cohesion. Gutwinski (1976: 26) argues that "texts may exhibit strong or weak cohesion, but there will be no text that does not manifest cohesion". In view of this fact, we decided to study written texts of final year university students to ascertain the strong and weak cohesion in them. The study also examined if there is any text that does not manifest cohesion using the text linguistic approach.

2.3. Method

The design that was adopted in this study was descriptive survey design which uses result from samples to generalize the entire population. The study was an attempt to discuss the use of lexical elements in the written essays of final year undergraduates of the University of Nigeria, Nsukka. The researchers looked at two hundred (200) essays and checked how they achieve or not achieve cohesion with respect to Gutwinski's levels of lexical cohesion. The essays were numbered 1-200 for easy identification and analysis. The lexical cohesion elements were identified in each text and the number of occurrence written in columns.

2.3.1. Data Analysis

Gutwinski's levels of lexical cohesion were used in order to answer the research question: what lexical elements do the sample populations employ to establish textual cohesion that characterizes the writing corpus?

The summary of the total lexical elements used by the population in the study can be found in the appendix. The summary is in a tabular form. The table consists of Text number and lexical elements — Repetition, Synonym and Lexical Set. For example, Text number 1has 8 repetitions, 2 synonyms and 0 lexical set giving a total of 10 lexical elements used by the student that wrote it. Text number 2 has 5 repetitions, 2 synonyms and 2 lexical sets giving a total of 09 elements used by that writer. Other texts were analyzed using this pattern (Text 1 – Text 200).

2.4. Results

In the table (with reference to the table in the appendix), there are 1,098 repetitions, 106 synonyms and 29 lexical sets. Altogether, there are 1,233 lexical cohesion elements in the 200 texts used for the study. This demonstrates the extent to which students use lexical cohesion elements in their writing. The sample population used more of repetitions in their writing and made minimal use of synonyms and lexical sets.



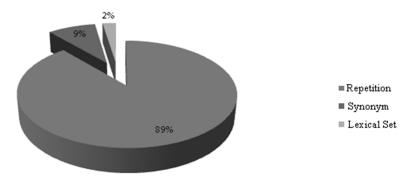


Figure 1.

The results show that there is 89% use of repetitions, 9% use of synonyms, and 2% use of lexical sets in the study essays. Synonyms and lexical sets are minimally used or not used at all in most of the texts. This means that the students have limited knowledge of lexical cohesion, hence, the low use of the synonyms and lexical sets.

3.Discussions

This concept, cohesion, has been applied to different fields such as stylistics, discourse analysis, language teaching and learning, translation studies, psycholinguistics and sociolinguistics (Xi 2010). The field of translation studies has provided a good opportunity for cohesion and has become a fertile area for cohesion theory.

Looking at these, it is clear that cohesion has wide application in different areas. In spite of these, there are still many issues that remain unresolved. This includes how language works at the textual level and other areas which need improvements and explorations in order to better understand and develop cohesion theory (Xi 2010). All these studies only try to expand on the concept of cohesion or propose another kind of cohesion. This is not what our study did. The gap this study filled is the practical use of cohesion by students in order to determine the elements used to achieve cohesion.

Another study that looked at the use of lexical cohesion is the one done by Fatimah and Yunus (2014). Howbeit, their work focused on postgraduate students. They found that the study population made use of mainly repetitions, few synonyms and lexical sets (collocations). Their study also found that repetition was the most dominant in the respondents' essay writing (Fatimah and Yunus 2014). This is in line with what we found out in our study of undergraduate essays. The non-occurrence or low-occurrence of the lexical

cohesion elements shows that the sample population's knowledge of the lexical cohesion: synonyms and lexical set is weak and therefore, such elements are rare in the texts sampled for the study.

4. Conclusion

The study has helped to spotlight the lexical cohesion elements which the students in the study population under-utilized or omitted completely in their composition efforts and in this way, the study has helped to call attention to a vital area where pedagogy will be directed. By identifying the elements of lexical cohesion which the students in our study sample lack or avoid in their writing, the study exposed their inadequacies and provided a dependable platform for students to learn and use these devices for effective writing. The researchers also agree with Gutwinski (1976:26) that texts may exhibit strong or weak cohesion, but there will be no text that does not manifest cohesion. A few of the texts examined showed strong cohesion but most of the texts showed weak cohesion. Hence, each text showed some elements of cohesion, therefore, students need to be taught lexical elements very well in order to write better essays with strong cohesion.

5. Recommendations

Based on the findings of this study, we recommend:

- That lexical cohesion should be emphasized in the teaching of English as a Second Language writing especially the use of synonyms and lexical sets for effective and more cohesive writing. This can be done by teaching students lexis and giving exercises that encourage the use of collocations, synonyms and so on. The teacher will mark these exercises and show students their use or non-use of the elements and ensure that they use them appropriately where they were not used. The teacher can give more exercises. This may be cumbersome for the teacher but to enhance good writing there must be practice.
- That the students make conscious efforts to use lexical cohesion in their writings. This can be done by putting into practice what the teachers have taught them about using lexical elements in writing.
- Other researchers to venture into the field of cohesion in writing in order to expand the writing efficiency.

References

Beaugrande, R. and W. Dressler. 1981. *Introduction to Text Linguistics*. New York: Longman. Crystal, D. 2008. *A Dictionary of Linguistics and Phonetics*. 6th ed. Oxford: Blackwell Publishing.

- Fatimah, S. N. and M. M. Yunus. 2014. The Use of Lexical Cohesion among TESL PostGraduate Students in Academic Writing. Journal of Education and Human Development 3(2). 847-869.
- Gutwinski, W. 1976 Cohesion in Literary Texts: A Study of some Grammatical and Lexical Features of English Discourse. The Hague: Mouton de Gruyter.
- Halliday, M. A. K. 1994. An Introduction to Functional Grammar 2nd edition. London: Edward Arnold.
- Halliday, M. A. K. and H. Ruqaiya. 1976. Cohesion in English. London: Longman.
- "Theoretical Framework for the Study of Cohesion" Available from: http://docs.ksu.edu.sa [Accessed on:] 17 Jul 2009.
- Hung, D. M. and V. T. A. Thu 2014. Vietnamese Learners' Attention and Use of Cohesive Devices in English Essay Writing at Dong Thap University. Asian Journal of Educational Research 2(2). 1-14.
- Kadiri, G. C. 2014. Cohesion, Interlanguage and Emergent Texture in the Written English of University of Nigeria, Nsukka Students. Unpublished PhD Thesis, University of Nigeria, Nsukka.
- Murphy, T. 2001. The Emergence of Texture: An Analysis of the Functions of the Nominal Demonstratives in an English Interlanguage Corpus. Learning Language and Technology 5(3). 152-173.
- Otagburuagu, E. J. et al. 2007. Teaching English Language Skills: A foundation Course in Educational Linguistic. University of Nigeria, Nsukka: Anyi-P & Sons printing press.
- The West African Senior School Certificate Examination November/December 2003 Chief Examiners' Report.
- Widdowson, H. G. and A. Davies. 1975. Reading and Writing. In J. P. B. Allen and S. P. Corder (eds.), *Techniques in Applied Linguistics*. London: O.U.P.
- Xi, Y. 2010. Cohesion Studies in the Past 30 years: Development, Application and Chaos. *The International Journal- Language Society and Culture* 3.1. Available from: www.educ.utas.edu.au/users/tie/JOURNAL [Accessed:] 11 Feb 2013.

Appendix

Summary of Lexical Elements used in the Texts

| | Lexical Cohesion | | | |
|---------|------------------|---------|-------------|-------|
| Text No | Repetition | Synonym | Lexical set | Total |
| 1 | 8 | 2 | 0 | 10 |
| 2 | 5 | 2 | 2 | 09 |
| 3 | 17 | 2 | 0 | 19 |
| 4 | 7 | 6 | 2 | 15 |
| 5 | 8 | 2 | 3 | 13 |
| 6 | 12 | 0 | 0 | 12 |
| 7 | 4 | 1 | 0 | 05 |
| 8 | 5 | 0 | 0 | 05 |
| 9 | 7 | 2 | 0 | 09 |
| 10 | 0 | 2 | 0 | 02 |
| 11 | 3 | 0 | 3 | 06 |

| 12 5 1 0 0 06 13 10 0 0 10 14 13 0 0 02 16 4 0 0 04 17 4 0 0 04 18 2 0 0 0 19 0 0 1 01 20 7 0 0 0 07 21 3 0 0 0 0 22 0 0 0 0 0 21 3 0 0 0 0 22 0 0 0 0 0 23 2 0 0 0 0 24 3 0 0 0 0 25 10 0 0 10 0 26 4 2 0 0 0 27 21 5 1 27 28 12 0 | | | | 1 | |
|---|----|----|---|---|----|
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| 15 2 0 0 0 04 16 4 0 0 04 04 17 4 0 0 04 04 18 2 0 0 0 02 19 0 0 0 0 07 20 7 0 0 0 07 21 3 0 0 0 00 22 0 0 0 00 00 23 2 0 2 04 0 24 3 0 0 0 03 25 10 0 0 10 0 26 4 2 0 06 0 27 21 5 1 27 14 28 12 2 0 06 0 30 9 0 0 0 02 | 13 | 10 | 0 | 0 | 10 |
| 16 4 0 0 04 17 4 0 0 04 18 2 0 0 02 19 0 0 0 07 20 7 0 0 0 07 21 3 0 0 0 03 22 0 0 0 0 00 23 2 0 0 0 0 24 3 0 0 0 03 25 10 0 0 10 0 26 4 2 0 06 0 27 21 5 1 27 2 28 12 2 0 14 0 29 4 2 0 06 0 0 30 9 0 0 0 02 0 31 12 0 0 0 02 33 3 0 0 0 | 14 | 13 | 0 | 0 | 13 |
| 17 4 0 0 04 18 2 0 0 02 19 0 0 1 01 20 7 0 0 0 07 21 3 0 0 0 00 23 2 0 0 0 00 24 3 0 0 0 03 25 10 0 0 0 0 26 4 2 0 06 0 27 21 5 1 27 28 12 2 0 14 29 4 2 0 06 30 9 0 0 0 09 31 12 0 0 02 0 33 3 0 0 0 02 33 3 0 0 0 0 34 4 0 0 0 0 35 9 | 15 | 2 | 0 | 0 | 02 |
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| 20 7 0 0 07 21 3 0 0 0 03 22 0 0 0 0 0 23 2 0 2 04 24 3 0 0 0 03 25 10 0 0 10 0 26 4 2 0 06 06 27 21 5 1 27 28 12 2 0 14 0 29 4 2 0 06 0 09 31 12 0 0 09 0 0 09 31 12 0 0 0 02 0 0 02 33 3 0 </th <th>18</th> <th>2</th> <th>0</th> <th>0</th> <th>02</th> | 18 | 2 | 0 | 0 | 02 |
| 21 3 0 0 0 0 22 0 0 0 0 0 23 2 0 2 04 24 3 0 0 0 03 25 10 0 0 0 10 26 4 2 0 06 27 21 5 1 27 2 28 12 2 0 14 29 4 2 0 06 30 9 0 0 09 31 12 0 0 12 32 2 0 0 0 02 33 3 0 0 0 03 34 4 0 1 05 0 35 9 0 0 0 09 36 16 0 0 16 37 4 2 1 07 38 14 0 0 <th>19</th> <th>0</th> <th>0</th> <th>1</th> <th>01</th> | 19 | 0 | 0 | 1 | 01 |
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| 34 4 0 1 05 35 9 0 0 09 36 16 0 0 16 37 4 2 1 07 38 14 0 0 14 39 2 0 0 02 40 15 0 0 15 41 2 0 0 02 42 7 4 0 11 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 32 | 2 | 0 | 0 | 02 |
| 35 9 0 0 09 36 16 0 0 16 37 4 2 1 07 38 14 0 0 14 39 2 0 0 02 40 15 0 0 15 41 2 0 0 02 42 7 4 0 11 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 33 | 3 | 0 | 0 | 03 |
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| 37 4 2 1 07 38 14 0 0 14 39 2 0 0 02 40 15 0 0 15 41 2 0 0 02 42 7 4 0 11 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 35 | 9 | 0 | 0 | 09 |
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| 41 2 0 0 02 42 7 4 0 11 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 39 | 2 | 0 | 0 | 02 |
| 42 7 4 0 11 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 40 | 15 | 0 | 0 | 15 |
| 43 13 2 0 15 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 41 | 2 | 0 | 0 | 02 |
| 44 5 0 0 05 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 42 | 7 | 4 | 0 | 11 |
| 45 7 3 0 10 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 43 | 13 | 2 | 0 | 15 |
| 46 7 0 0 07 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 44 | 5 | 0 | 0 | 05 |
| 47 5 0 2 07 48 13 2 0 15 49 24 1 0 25 | 45 | 7 | 3 | 0 | 10 |
| 48 13 2 0 15 49 24 1 0 25 | 46 | 7 | 0 | 0 | 07 |
| 49 24 1 0 25 | 47 | 5 | 0 | 2 | 07 |
| | 48 | 13 | 2 | 0 | 15 |
| 50 27 7 0 34 | 49 | 24 | 1 | 0 | 25 |
| | 50 | 27 | 7 | 0 | 34 |

| 51 | 2 | 0 | 1 | 03 |
|----|----|----|---|----|
| 52 | 5 | 3 | 0 | 08 |
| 53 | 7 | 0 | 0 | 07 |
| 54 | 10 | 0 | 0 | 10 |
| 55 | 6 | 0 | 0 | 06 |
| 56 | 7 | 0 | 0 | 07 |
| 57 | 9 | 0 | 0 | 09 |
| 58 | 2 | 0 | 1 | 03 |
| 59 | 3 | 0 | 0 | 03 |
| 60 | 3 | 0 | 0 | 03 |
| 61 | 8 | 0 | 0 | 08 |
| 62 | 0 | 0 | 0 | 00 |
| 63 | 2 | 0 | 0 | 02 |
| 64 | 5 | 0 | 0 | 05 |
| 65 | 16 | 2 | 0 | 18 |
| 66 | 6 | 0 | 0 | 06 |
| 67 | 9 | 0 | 0 | 09 |
| 68 | 5 | 4 | 1 | 10 |
| 69 | 2 | 0 | 0 | 02 |
| 70 | 2 | 0 | 0 | 02 |
| 71 | 6 | 0 | 0 | 06 |
| 72 | 20 | 0 | 0 | 20 |
| 73 | 5 | 0 | 1 | 06 |
| 74 | 6 | 0 | 0 | 06 |
| 75 | 5 | 0 | 0 | 05 |
| 76 | 9 | 0 | 0 | 09 |
| 77 | 7 | 1 | 0 | 08 |
| 78 | 2 | 0 | 0 | 02 |
| 79 | 0 | 0 | 0 | 00 |
| 80 | 6 | 0 | 1 | 07 |
| 81 | 10 | 1 | 0 | 11 |
| 82 | 5 | 12 | 0 | 17 |
| 83 | 14 | 6 | 1 | 21 |
| 84 | 3 | 2 | 0 | 05 |
| 85 | 15 | 8 | 0 | 23 |
| 86 | 7 | 4 | 0 | 11 |
| 87 | 13 | 2 | 0 | 15 |
| 88 | 3 | 2 | 2 | 07 |
| 89 | 4 | 3 | 0 | 07 |

| | | 1 | 1 | |
|-----|----|---|---|----|
| 90 | 8 | 2 | 0 | 10 |
| 91 | 21 | 0 | 1 | 22 |
| 92 | 2 | 0 | 0 | 02 |
| 93 | 21 | 0 | 0 | 21 |
| 94 | 2 | 0 | 0 | 02 |
| 95 | 2 | 0 | 0 | 02 |
| 96 | 2 | 0 | 0 | 02 |
| 97 | 0 | 0 | 1 | 01 |
| 98 | 0 | 0 | 0 | 00 |
| 99 | 4 | 0 | 0 | 04 |
| 100 | 4 | 0 | 0 | 04 |
| 101 | 2 | 0 | 0 | 02 |
| 102 | 7 | 0 | 0 | 07 |
| 103 | 6 | 0 | 0 | 06 |
| 104 | 6 | 0 | 0 | 06 |
| 105 | 2 | 0 | 0 | 02 |
| 106 | 3 | 0 | 0 | 03 |
| 107 | 0 | 0 | 0 | 00 |
| 108 | 7 | 0 | 0 | 07 |
| 109 | 0 | 0 | 0 | 00 |
| 110 | 0 | 0 | 0 | 00 |
| 111 | 2 | 0 | 0 | 02 |
| 112 | 10 | 0 | 0 | 10 |
| 113 | 2 | 0 | 0 | 02 |
| 114 | 3 | 0 | 0 | 03 |
| 115 | 6 | 0 | 0 | 06 |
| 116 | 9 | 0 | 0 | 09 |
| 117 | 0 | 0 | 0 | 00 |
| 118 | 7 | 0 | 0 | 07 |
| 119 | 2 | 0 | 0 | 02 |
| 120 | 8 | 0 | 0 | 08 |
| 121 | 13 | 0 | 0 | 13 |
| 122 | 0 | 0 | 0 | 00 |
| 123 | 5 | 0 | 0 | 05 |
| 124 | 5 | 0 | 0 | 05 |
| 125 | 0 | 0 | 0 | 00 |
| 126 | 6 | 0 | 0 | 06 |
| 127 | 2 | 0 | 0 | 02 |
| 128 | 7 | 1 | 1 | 09 |
| | | | | |

| 129 | 0 | 0 | 0 | 00 |
|-----|----|---|---|----|
| 130 | 0 | 0 | 0 | 00 |
| 131 | 7 | 0 | 0 | 07 |
| 132 | 6 | 0 | 0 | 06 |
| 133 | 9 | 0 | 0 | 09 |
| 134 | 13 | 0 | 0 | 13 |
| 135 | 7 | 0 | 0 | 07 |
| 136 | 4 | 0 | 0 | 04 |
| 137 | 9 | 0 | 0 | 09 |
| 138 | 2 | 0 | 0 | 02 |
| 139 | 3 | 0 | 0 | 03 |
| 140 | 0 | 0 | 0 | 00 |
| 141 | 3 | 0 | 0 | 03 |
| 142 | 0 | 0 | 0 | 00 |
| 143 | 0 | 0 | 0 | 00 |
| 144 | 0 | 0 | 0 | 00 |
| 145 | 0 | 0 | 0 | 00 |
| 146 | 4 | 0 | 0 | 04 |
| 147 | 3 | 0 | 0 | 03 |
| 148 | 1 | 3 | 0 | 04 |
| 149 | 4 | 0 | 0 | 04 |
| 150 | 0 | 0 | 0 | 00 |
| 151 | 0 | 0 | 0 | 00 |
| 152 | 7 | 0 | 0 | 07 |
| 153 | 0 | 0 | 0 | 00 |
| 154 | 0 | 0 | 0 | 00 |
| 155 | 2 | 0 | 0 | 02 |
| 156 | 0 | 0 | 0 | 00 |
| 157 | 6 | 0 | 0 | 06 |
| 158 | 0 | 0 | 0 | 00 |
| 159 | 0 | 0 | 0 | 00 |
| 160 | 2 | 0 | 0 | 02 |
| 161 | 2 | 0 | 0 | 02 |
| 162 | 2 | 0 | 0 | 02 |
| 163 | 13 | 0 | 0 | 13 |
| 164 | 2 | 0 | 0 | 02 |
| 165 | 4 | 0 | 0 | 04 |
| 166 | 4 | 0 | 0 | 04 |
| 167 | 8 | 0 | 0 | 08 |
| | | | | |

| 168 | 6 | 0 | 0 | 06 |
|-------|-------|-----|----|-------|
| 169 | 3 | 0 | 0 | 03 |
| 170 | 7 | 0 | 0 | 07 |
| 171 | 0 | 0 | 0 | 00 |
| 172 | 5 | 0 | 0 | 05 |
| 173 | 0 | 0 | 0 | 00 |
| 174 | 20 | 0 | 0 | 20 |
| 175 | 3 | 0 | 0 | 03 |
| 176 | 2 | 0 | 0 | 02 |
| 177 | 0 | 0 | 0 | 00 |
| 178 | 3 | 0 | 0 | 03 |
| 179 | 0 | 0 | 0 | 00 |
| 180 | 7 | 0 | 0 | 07 |
| 181 | 3 | 0 | 0 | 03 |
| 182 | 5 | 0 | 1 | 06 |
| 183 | 8 | 0 | 0 | 08 |
| 184 | 4 | 0 | 0 | 04 |
| 185 | 9 | 0 | 0 | 09 |
| 186 | 10 | 0 | 0 | 10 |
| 187 | 7 | 0 | 0 | 07 |
| 188 | 8 | 0 | 0 | 08 |
| 189 | 6 | 0 | 0 | 06 |
| 190 | 7 | 0 | 0 | 07 |
| 191 | 4 | 0 | 0 | 04 |
| 192 | 6 | 0 | 0 | 06 |
| 193 | 2 | 0 | 0 | 02 |
| 194 | 2 | 0 | 0 | 02 |
| 195 | 0 | 0 | 0 | 00 |
| 196 | 3 | 0 | 0 | 03 |
| 197 | 0 | 0 | 0 | 00 |
| 198 | 6 | 0 | 0 | 06 |
| 199 | 5 | 0 | 0 | 05 |
| 200 | 5 | 0 | 0 | 05 |
| Total | 1,098 | 106 | 29 | 1,233 |