QUALITY, ETHICS AND PLAGIARISM ISSUES IN DOCUMENTS GENERATED USING WORD SPINNING SOFTWARE

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An enormous number of online resources available on the internet are being used by authors in report writing. Instead of paraphrasing with proper references and citations, some writers opt for shortcuts to generate new documents from documents already published on the internet, by using word spinning software. Some of these word spinning tools are known to be capable of evading plagiarism checks. For this reason, some argue that there would not be any legal obligation related to plagiarism in word spun reports. However, ethical and quality issues of such documents cannot simply be disregarded. Despite an apparent lack of literature published on this issue, this paper includes a comprehensive analysis of different views related to ethicality and plagiarism, from published articles and user forums. The present paper is based upon a study conducted on the assignments submitted by the students at Waiariki Institute of Technology. This research was also focussed on examining both the quality of sentences and the degree of plagiarism of documents created by using a number of word spinners available on the internet. The plagiary of word spun documents was tested using Turnitin software. The quality of each sentence from a number of word spun documents created by a number of word spinners was categorised as 'improved', lowered', or 'distorted' and then analysed using QSR NVivo10 software. The findings of this research indicate significant quality degradation in the word spun documents and total evasion of plagiarism checks.

KEYWORDS: Word Spinning, Plagiarism, Ethics

Introduction

A large number of research papers have been published on issues related to plagiarism. Some literature focuses on the issues in detecting plagiarised materials whereas other researchers focus on the consequences of using them. Bretag (2013) contends that plagiarism must be dealt with as it breaches academic integrity. About two decades ago the difficulty in dealing with plagiarism was the "lack of reliable empirical data on the frequency, nature and extent of plagiarism in student assignments" (Walker, 2010, p.41). It was not only time consuming and costly to detect plagiarised materials used by students in reports, but also tedious to penalise them for such actions (Martin (1992). Further, according to Martin (1992), some plagiarised parts of a report could not be recognised and it was even difficult to prove suspected plagiarised contents.

The technology has changed over the years; most sources of literature are digital and available on the Internet today. Students use massive amounts of these online resources in report writing today (Cyber Plagiarism & Statistics, 2016). According to Bailey (2015), Wikipedia is the source of information most widely used by students in both secondary and higher education sectors. The accepted practice of using such resources is to paraphrase the related readings with proper referencing and citations to avoid plagiarism. This practice is being used by many students in writing reports for their assessments. Unfortunately some students use copy and paste facilities along with electronic editing tools to produce reports from the resources available on the internet (Bailey, 2015). It is timely and vital to examine the ethicality of such actions and also the originality of such reports. This paper uses non-consequentialist ethical theories as a basis for evaluating ethical aspects of the use of word spinning.

Most word processors provide a list of synonyms for a selected word in a sentence and the user can replace the said word with an alternative word to improve the quality of the writing. This feature enables the user to do some word spinning using synonyms. According to Sinha, Singh and Kumar (2009) there is some element of plagiarism in editing an original source document by substituting synonyms for some words; it is a common practice in the educational sector. This research also examines the ethicality of using synonyms in word processors for word spinning when writing reports.

Most higher education institutions use Turnitin software for detecting plagiarised contents of electronically submitted student reports. Turnitin software is capable of detecting the original sources students copied from such as internet pages, published journal articles, books, or even other students'

reports which were previously uploaded on to this software. In addition, Turnitin is capable of determining the legitimacy and the quality of such sources (Bailey, 2015).

In recent years, some staff members at Waiariki Institute of Technology, Rotorua, New Zealand, have encountered many word spun reports submitted by students for their assignments. The WIT staff use Turnitin software for checking the originality of the electronic documents submitted by their students. Unfortunately, Turnitin software highlights only the plagiarised contents and is not capable of identifying documents prepared using word spinning tools. Some tutors found poor quality, meaningless, distorted sentences in word spun documents. Therefore, tutors had to spend more time, reading over a report multiple times to understand the meaning of some sentences. The researcher was inspired to embark on this research project to find answers to the research questions listed in this paper. In order to explore the quality and the effectiveness of word spinners, three freely available word spinning software tools were chosen, experimented with and the results were analysed.

BACKGROUND OF THE STUDY

A definition of the phrase 'Word Spinning' cannot be found in most English dictionaries. The Merriam-Webster online dictionary defines word spinning as "an action or process of expressing one-self in words in a showy or especially verbose manner" (Merriam Webster Dictionary, 2015, p. 1). According to this definition, word spinning may be a useful process to improve the quality of a sentence. Despite a lack of literature written on the legitimacy of using word spinning, there are different views of the legitimacy and ethicality of this expressed in blogs and forums. For example, Hexham (1999) describes legitimate paraphrasing as re-writing of an original text using different words with the acknowledged sources. According to Hexham's (1999) description, word spinning using synonyms in word processors should be legitimate. Chambers (2014) describes word spinning as clear cut plagiarism. According to McClellan (n.d.), word spinning is worse than plagiarism, due to the user's attempt to conceal the originality of the source. Chambers (2014) refers to his first experience of creating a blog article, using word spinning on an already published article, as shocking, stating "it sounds like a clear-cut case of plagiarism to me" (Chambers, 2014, p.1). In addition, Chambers (2014) says that some word changes can alter the meaning of a sentence completely.

The following comments are found on the V7N forum with regard to the practice of word spinning (V7N forum, 2012).

- Word spin tools may be used, but spun content should be reviewed to make sure it makes sense.
- Spinner tools make hundreds of duplicates from one original article.
- · Word spinning could be somewhat a case of machine domination over humans.

Although paraphrasing is similar to word spinning, it has different definitions. A free online dictionary defines paraphrasing as restating a passage using different words, especially to clarify (The Free Dictionary, 2016) whereas the Oxford English Dictionary (online) describes paraphrasing as rewriting something in one's own words expressing the original idea (Oxford Dictionaries, 2016). Pechnick (2001; p.10) argues "Don't plagiarize. Express your own thoughts in your own words.... Note, too, that simply changing a few words here and there, or changing the order of a few words in a sentence or paragraph, is still plagiarism. Plagiarism is one of the most serious crimes in academia".

The meaning of the word "ethics" varies in different contexts. According to the Oxford English Dictionary (online) (2015), ethics are the moral principles that govern a person's behaviour, or govern the conducting of an activity. There are many theories available on ethics. The three main categories of ethical theories are: Consequentialist theories, Non-consequentialist theories, and Agent-centred theories. According to Bonde and Firenze (2013), the duty-based approach of non-consequentialist ethical theories is concerned with the intentions of the individuals' ethical actions.

Currently there are a number of word spinning software tools available on the internet (see Table-1). Some of the free software, such as Spinbot and Free-Article-Spinner, spin a whole article without providing any options of words to choose from. The free word spinning tools such as Best-Free-Spinner provide the user with synonyms to choose from, enabling the user to choose a suitable word without affecting the meaning of the sentence. Word Spinners such as Article Writer suggest synonyms for some words and also allow the user to enter their own word to replace a word (see Table-1). Although most word spinners ignore capitalised words by default, this is optional for the user. Most word spinners are known as article spinning tools and are also described as text rewriting and content creation tools (see Table-1).

Table 1 Popular Word Spinners.

Name of Word Spinner	Description
Spinbot	Article Spinning, Text Rewriting, Content Creation Tool
Article Rewriter	Article Rewriting Tool
Free Article Spinner	Article Spinning Tool
Best Free Spinner	Article Spinning Tool
Paraphrasing Tool	Text Rewriting Tool
Ant Spinner	Article Writing Tool

RESEARCH QUESTIONS AND METHODOLOGY

The research aims to answer the following questions:

- 1. Do the Word Spinning software tools evade plagiarism?
- 2. Does the freely available Word Spinning software improve the quality of the sentences of the documents?
- 3. Is the use of word spinning software tools in creating documents from already published materials ethical?
- 4. Is the use of word spinning an act of plagiarism?

This research explored literature on activities such as: Word Spinning using word spinners, Word Spinning by substituting words using synonyms in word processors, and manual paraphrasing used in electronic text editing. The secondary data from published literature were analysed and the ethicality of the use of word spinning in report writing was explored. The duty-based approach of non-consequentialist ethical theory is concerned with the intentions of the individuals' actions (Bonde & Firenze, 2013). Therefore, this research used the duty-based approach as a basis for discussion on ethicality in this research.

As a part of this research, a document was word spun by three word spinners: Spinbot, Free-Best-Spinner, and Free-Article-Spinner and then the quality and the degree of plagiarism of the generated documents were examined. A published article on the internet containing plain English was chosen as the source document. This source document was copied to each word spinning software and subsequently generated three word spun documents, using the auto spin option. The degree of plagiarism of the three word spun documents was checked using Turnitin software. The quality of each sentence in each word spun document was compared manually with the corresponding

sentence in the original source document. This was done by an English language specialist who is a native English speaker. Comparing the quality of each sentence in the three word spun documents with the corresponding original sentence, each sentence was categorised as 'improved', 'lowered', or 'distorted'. The QSR NVivo10 software was chosen to analyse the data due to its capability in analysing qualitative data. Each word spun document was uploaded to QSR NVivo10 software and each sentence was grouped into one of the following groups: 'improved', 'lowered', 'distorted'. This process was repeated for each word spun document; the data was then analysed.

RESULTS AND DISCUSSION

The more appropriate definition of paraphrasing is "rewriting something in one's own words that expresses the original idea" (Oxford Dictionaries, 2016, p.1). According to this definition, there is a clear need for attribution from the author for their rewritten work and the authenticity of contents is not questionable. But according to some other definitions such as one found on a free online dictionary, paraphrasing is "restating a passage using different words" (The Free Dictionary, 2016, p.1). Based on the second definition, paraphrasing could be legitimate even if an author uses synonyms in a word processor, or any word spinning software in their rewritten work. Most word spinners restate the submitted text using different words without user intervention. Such word spinners could be far away from the first definition as there wouldn't be any effort from the user to improve or individualise paraphrased content as the computer program does this itself.

On the other hand, if word spinning is used by someone with the intention of avoiding plagiarism checks, according to the duty-based approach of nonconsequentialist ethical theory, it becomes a clear unethical act. Some word spinners provide a manual option to the user, listing a number of synonyms for most words of the original document so that the user can choose a suitable one. According to Sinha, Singh and Kumar (2009) there is some plagiarism in using synonyms in a word processor for editing electronic source documents. In addition, this has been reaffirmed by authors such as Pechnick (2001). Some authors describe word spinning as an action or process to improve the quality of paragraphs (Hexham, 1999).

Turnitin software was used to check the originality of the three word spun articles produced by three word spinners. Turnitin was unable to identify the website from which the original article was copied in each of the word spun articles and found zero plagiarism. This research established the fact that most word spinning tools are capable of evading plagiarism checks.

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The quality of the sentences generated by the three word spinners is shown in Figure 1. According to the findings of this study, the Free-Best-Spinner produced the worst results. The quality of 70% of the sentences was lowered. The meaning of 20% of the generated sentences were found to be distorted (see Figure 1). According to this result, Free-Best-Spinner with the automatic spin option is not suitable for word spinning to improve the quality of the contents of an article. Unfortunately, the manual spin option available in this word spinner was not functional at the time of carrying out this research. The other two word spinners: Spinbot and Free-Article-Spinner generated better quality sentences in comparison to the Free-Best-Spinner (see Figure 1). These two word spinners produced similar sentences with moderate quality. Both Spinbot and Free-Article-Spinner improved the quality of the sentences of the original document by 24% (See Figure 1). Both of these word spinners lowered the quality of the sentences of original document by 47%. Although the Spinbot provides no manual option word spinning, Free-Article-Spinner has this feature so that the user can choose the best word from a range of words suggested by the word spinner.

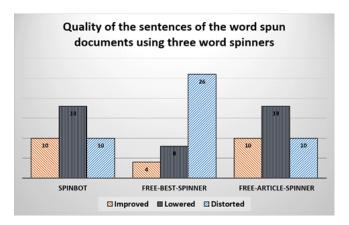


Figure 1. Quality of Word Spun Documents.

Some users use word spinning software with the intention of improving the quality of their own articles whereas some others use it to evade plagiarism checks and/or to generate a document without any or minimal contribution. Therefore, the duty-based approach of non-consequentialist ethical theories was found to be the best option for analysing the ethicality of the word spinning actions (Bonde & Firenze, 2013). According to this theory, the intention of the user when using a word spinner measures the ethicality of the action.

CONCLUSION

It is evident that word spinners are capable of evading plagiarism checks. If an author uses a word spinner using the auto spinning option with no contribution from the author to the generated report, then the user should expect more quality degradation than quality improvements. In addition, it is obviously unethical to claim the authenticity of such reports. Therefore, user intervention to identify improved, low quality and distorted sentences and also the need for rewriting some identified sentences is essential to produce a better-quality document.

Despite some elements of plagiarism, the use of synonyms in a word processor to select better words or using a word spinner with manual spinning which enables the user themselves to select better words, could be slightly preferable as there is some contribution from the author. What is important in this activity is the intention of the user using these software tools. If an author uses a word spinner with the intention of evading plagiarism checks, it should be seen as a clear act of plagiarism and is unethical. Most free word spinners generate poor quality outputs and are not intelligent or capable enough to improve the quality of most sentences; the worst scenario is the distortion of the meaning of some sentences.

The outcomes of this study will be significant for students who use word spinning tools with good intentions. It also provides some insight into the quality and the ethicality of the use of word spinning tools to stakeholders: students, teachers and researchers. This research indicates further research is needed on the use of word spinners on documents with more technical jargon, as this research was limited to the use of word spinners on documents with plain English such as stories.

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