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# HEURISTIC GOVERNANCE AND REDUCING PLAGIARISM IN THE SOCIAL SCIENCES: FROM THE QUANTITY TO THE QUALITY OF DISSERTATIONS IN THE EDUCATIONAL SCIENCE<sup>i</sup>

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### Abstract:

Considered a crime, plagiarism has taken on significant proportions in recent years in research at the university in Cameroon. Based on the observation that a great deal of research has been plagiarised in Cameroonian universities. It is interesting to examine the reasons which motivate students and researchers in the disciplines of the social sciences, in general, and education in particular. The study is qualitative in nature based on discourse analysis. This study's sample was drawn from 100 Education majors students from the Ecole Normale Supérieure (ENS) and the Department of Education Management of the Faculty of Education of the University of Yaoundé I. Results from the study show that plagiarism in these two institutions is a result of a methodology that structures the scientific dissertation in parts: one of it called theoretical, numerically dense in pages, which favours "pasted copy", source of plagiarism and the other, less voluminous practice.

Keywords: plagiarism, heuristic governance, research quality, research ethics

# Résumé :

Considéré comme un délit, le plagiat prend ces dernières années, des proportions importantes dans les travaux de recherche au sein de l'université au Cameroun. Partant du constat selon lequel de nombreuses recherches ont fait l'objet de plagiat dans les universités camerounaises, il est intéressant de s'interroger sur les raisons qui incitent les étudiants et les chercheurs dans les disciplines des sciences sociales, en général, et surtout dans celles des sciences de l'éducation qui sont au centre de notre recherche en particulier. La présente étude est une dissertation qualitative fondée sur l'analyse du discours. Elle prend appui sur 100 travaux d'étudiants du département des sciences de l'éducation de l'Ecole normale supérieure (ENS) et ceux de la filière management de

<sup>&</sup>lt;sup>1</sup> GOUVERNANCE HEURISTIQUE ET RÉDUCTION DU PLAGIAT EN SCIENCES SOCIALES : DE LA QUANTITÉ À LA QUALITÉ DES MÉMOIRES EN SCIENCES DE L'ÉDUCATION <sup>11</sup> Correspondence: email <u>emmanuel.ndjebakal@univ-yaounde1.cm</u>; <u>bakary8033@gmail.com</u>

l'éducation de la Faculté des Sciences de l'Education de l'Université de Yaoundé I (FSE). Les principaux résultats de l'analyse des mémoires montrent que le plagiat dans ces deux établissements est le fait d'une méthodologie qui structure la dissertation scientifique en parties : l'une d'elle dite théorique, numériquement dense en pages, favorise « le copie collé », source de plagiat et l'autre pratique, moins volumineuse.

Mots clés : plagiat, gouvernance heuristique, qualité de la recherche, éthique de la recherche

# 1. Introduction

Competitiveness is one of the hallmarks of modern universities (Farrukh, Javed, Raza, & Lee, 2021). The challenge and the leadership race motivate the quality and mass of published work. To become a renowned institution, each university should define itself by the finesse and relevance of the research it offers to the scientific community (Heavy, Simsek, Kyprianou, & Risius, 2020). To achieve this ideal, academic institutions provide themselves with means of building and disseminating knowledge and tools of demarcation and notoriety for researchers (Bergadàa, 2012). Only, the means of accession to this consecration are not always orthodox. In search of visibility for their career, some slip, consciously or unconsciously, on the slope of plagiarism. In a context marked by academic ethics, plagiarism constitutes an obstacle to ethics; one of the consequences is the loss of credibility of the plagiarist and the system from which he comes.

Several Cameroonian university institutions, including the Faculty of Economics and Management (FSEG) of the University of Yaoundé II, have set up conservative, repressive and deterrent mechanisms to curb the evil. This involves, for example, having theses and dissertations analysed using plagiarism detection software. The latter searches for the dissertation or thesis's similarities with other documents accessible on the Internet submitted for analysis, and those present in the reference database specific to the academic institution.

The Dean of the Faculty of Economics and Management of the University of Yaoundé II has made public the anti-plagiarism control results of 20 theses deposited in his faculty. The news relayed by the media surprised many, which led to the public appreciating the officials of this state establishment's work (Sala-Burbaré, A., Peltonen, J., Pyhältö, K., et Castelló, M. (2018). The practice is recurrent, gangrening the Cameroonian academic milieu whose institutions have difficulty growing among the continent's best.

Since the implementation of this software, retrieved and put into service by all state universities and the Catholic University of Central Africa (UCAC), the hunt for plagiarism in our country's academic institutions is thus indeed launched. In addition to this software, think tanks are set up in state universities to make concrete proposals. The latter aim to restore the image of the national university institution and regain its aura of yesteryear.

Researchers procrastinate between two modalities, quantity and quality. In the logic of plagiarism, they give in to quantity (Abalkina, & Libman, 2020). The classical authors, of which Aristotle is a member, had elaborated on these categories. In the Organon and precisely the section entitled «the categories», the Greek philosopher theorizes the principles of logic and research perspectives. In reality, it presents the nuances between interpretation, the logic of the predicates and the history of philosophy (understood epistemology). A distinction is made between the qualitative approach and the quantitative approach. Other authors also clarify the nuances between the two methods. According to Cipriani (2009:3), despite these premises and Aristotelian logic's influence on the subsequent developments of thought, the present situation has rather favoured solutions of a quantitative nature. A brief inventory of the most recent scientific results will suffice to reveal that the dominant is within the scope of quantification.

In other words, recent developments in science are more oriented towards the quantitative option. However, the quantity is not the best of all the allocation possibilities, especially since anything quantitative is not always useful, necessary, and relevant. Any excess is harmful. As a result, it is necessary to consider the stakes of this accumulation of data in the memoirs to the FSE and the ENS of the University of Yaoundé I. This logic most often contributes to plagiarism in the work. Several questions are therefore raised. What is plagiarism, its causes and its different ways of expression?

How is plagiarism perceived in students' work in education at the Faculty of Education and the ENS of the University of Yaounde 1? How can we fix it? An attempt to answer these questions implies that we make a statement of the question, the study's methodology, the focus of the work on the quantity, the results achieved and a sketch of remediation to the phenomenon of plagiarism.

# 1.1 Status of plagiarism question

The state of the question below concerns terminology precision, the causes of plagiarism and the forms of expression of this phenomenon. The guide of the National Centre for Scientific Research CNRS (2016) defines plagiarism as "the appropriation of an idea, content (text, tables, images, graphics, etc.) in whole or in part without the consent of its author or without citing its sources appropriately". For Guglielmi and Koubi (2012), plagiarism in research is "a deception to colleagues and the public" because, they believe, plagiarism is "a usurpation of the role of researcher, it reveals an imposture. It is not falsification; it is confiscation of the substance of the creative idea of the one who delivered it; it is not deformation; it is a capture of the innovative thought of the one who advanced it".

Fraud is an action that uses unfair means to achieve an objective. Cheating, on the other hand, is the fraudulent use of means to achieve a goal. In view of these three concepts' content, it can be observed that they express a breach of the rules. They are, therefore, an infringement of intellectual property law, ethics and research ethics.

### 1.2 Plagiarism: typology, causes and regulatory provisions

Plagiarism is a complex phenomenon that is expressed in several ways. Larrivée (1995) presents nine forms of plagiarism ranging from classical plagiarism to unconscious plagiarism, paraphrase, self-plagiarism and oral plagiarism, among others. In its most common sense, classical plagiarism refers to the appropriation of publications, in whole or in part, without indicating their origin. It is characterised by a lack of quotation marks and reference. This representation is the one that comes directly to mind when we talk about plagiarism. Second, plagiarism materialises through abusive paraphrase. It consists of a semblance of changing the words of an original idea to give the impression that it has been paraphrased and that the use of quotation marks can be dispensed with. The third form of plagiarism is translation plagiarism. This appropriation is achieved by reformulating an idea from one language to another and making it his own. The fourth form of plagiarism is paternity theft. This is a usurpation of research results whereby the plagiarist, in the course of an evaluation, appropriates either the research intent or the research results. This type of plagiarism usually takes place between colleagues or between teachers and students.

Plagiarism may also be an omission of secondary references. This type of plagiarism results from the use of an idea cited by an author other than the owner without mentioning the author who uses it. In addition to the omission of references, plagiarism can be an omission of quotation. Also called "quotation amnesia", this plagiarism occurs when the plagiarist expresses an idea by omitting the quotation marks and thus the real source of the idea which he asserts. Self-plagiarism is another expression of plagiarism. The author presented his own works as new works when they had already been published or existed long before (without publication).

Even if one does not steal oneself in this form of plagiarism, this quotation is timeconsuming and induces a debauch of energy on the part of the proofreaders. Finally, there is oral plagiarism and another unconscious. The first occurs when plagiarism usurps ideas in lectures, speeches, lectures or teachings. This type shows that plagiarism is not just about writing, as ideas can be expressed either in writing or orally. Unconscious plagiarism occurs when a researcher produces an idea that is identical in origin or paraphrased without knowing that it already exists or that it was presented by someone else before him.

# 1.3 One might wonder what is behind the plagiarism?

The scientific literature mentions two major causes of plagiarism. The first is related to the personality of the researcher. These are the researcher's personality disorders, which can be related to the researcher's mentality, the lack of talent and the lack of selfconfidence. Plagiarism can also result from the nature of the scientific activity. This cause expresses the degree of requirement, which is that of the profession of the researcher. The harassing character of the researcher's expected (publication of original works) consistently on the one hand. Hence the expression "publish or perish". On the other hand, we find his professional career conditioning by his publications' quantity and quality. In addition to this, research as an activity operates by analogy with a sports team or a music orchestra. As a result, researchers, representatives of the team, must produce results within the time limits prescribed to them by effectively playing their roles. Because the life of the laboratory, the research organisation or the research group depends on it. Alongside these two causes, we can add another mentioned by Larivée (1995).

This other cause is what he calls the "culture of falsehood". The great competition that characterises the current world has increased the lie's strength to make a name for itself and make a passage in its field. The degree of competitiveness, the rigour in terms of skills, knowledge and know-how make the research work harassing so that the lie becomes the last bulwark. The proof of this is the co-signature by the professors of the articles in which they did not participate.

There are two main ways to identify plagiarism. The first of these is the work of scientific and computer instruments, and the second the expertise of research professionals through blind evaluation. Anti-plagiarism software, analyses that are carried out outside the scientific tradition of the discipline and the evaluation of work by specialists in the field can make it possible to lay real accusations on plagiarism issues. At the same time, these elements constitute control mechanisms by which the absence of plagiarism is guaranteed. This form of identification is, therefore, a real charge.

In Cameroon, the fight against plagiarism, fraud and cheating is regulated by two main regulatory texts. Decree No 93/027 of 19 January 1993 lays down provisions common to universities, in Chapter IV, relating to students' disciplinary offences, and Decree No. 08/0249 of 11 September 2008 on the common status of students of university institutions in Cameroon. These texts provide for the competent authorities, procedures and penalties applicable in the event of fraud. Within each university, an ethics committee has been set up to ensure that the research complies with the ethical framework defined by each university institution.

# 2. Methodology

This section emphasises the collection of data, the evaluation of the submissions of the various proven institutions. We are talking about presenting the target, the proportion of plagiarism, the plagiarism methods, and their impact on scientific information quality.

# 2.1 Data collection and study population

As mentioned earlier, there are two main ways to identify plagiarism. The first of these is the work of scientific and computer instruments, and the second the expertise of research professionals through blind evaluation, a method that we have retained for the analysis of our data.

This article is not intended to present a methodological guide in education science, let alone a denunciation or an institutional reorganisation, far from seeking to undermine

the reputation and considerable scientific activity of the institutions mentioned and of the University of Yaoundé 1. We analyse a precise population and a sample whose results can give rise to extensible conclusions. The work questions the methodology applied in the writing of research in the institutions convened as a source of student plagiarism. The objective of the analysis is to present the influence of the writing method proposed to the students in their participation in plagiarism and, consequently, to the quality of the heuristic governance of these institutions.

On the one hand, it was necessary to guarantee anonymity and to exclude any face-to-face investigation (Ogien 1999). On the other hand, to reach a critical size in order to assess the influence of the methodology on plagiarism observed in certain works convened. One hundred memories were analysed (50% of the population in the ESF and particularly in the education management sector and 50% in the ENS in the Department of Education Sciences (now SCED). The social characteristics (age, sex and social origin) and educational characteristics (degree programme, university subjects, level of study) of the sample are not significantly chosen as criteria for the choice of dissertations and the living conditions, cultural practices of authors.

The probability-free, reasoned-choice method with the possibility of a design desirability bias should not be denied. This is an exploratory empirical study that looked at the observation and experience of students' writing practices, relying on an exploration, understood as an examination of the body parts of a dissertation. We were inspired by the problems of the work, which clearly evoke the same understanding. The latter is supported by the study of their variables, giving rise to definitions of similar operating concepts.

# **2.2 Evaluation of Memoranda to the EU ESDP Department of ENS Yaoundé I and MED** (Education Management)

of submissions analysed: for an average of 100 pages											
Parties du	Titres	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	
mémoire	Introduction	Х									
First	Chapter I				Х						
part	Chapter II								Х		
Second	Chapter III			Х							
part	Chapter IV			Х							
	Chapter V			Х							
	Conclusion	X									

**Table 1:** Average number of pages per part f submissions analysed: for an average of 100 page

The general observation of the data transcribed in Table I allows several observations. The methodology used by the students in their dissertations presents an imbalance both within the parts and in the volume distributed in the various chapters. The first part consists of two chapters and the second part consists of three. For most of the work analysed, it appears that the Introduction section is between 1 and 5 pages at most for 5%

of submissions. Chapter 1, generally titled Problematic, has between 15 and 20 pages, representing nearly 20% of the brief. Chapter 2, with a volume of 30 to 40 pages, is the densest. It represents 40% of the paper devoted to literature review. Chapter 3 is generally reserved. Most of the briefs have between 5 and 15 pages, representing 10% of the brief. Chapter 4 on the analysis of the results covers between 5 and 15 pages. It, therefore, covers barely 10% of the brief. Chapter 5, reserved for discussion of the results, remains between 5 and 15 pages and represents nearly 10% of the brief. The conclusion occupies almost 2% of the memory. From these results, it seems that the brief is based on the first two chapters and much more on the second.

Partie du mémoire		0-5	5-20	20-50	50-plus
	Introduction	X			
Première	Chapter I		Х		
partie	Chapter II				Х
Deuxième	Chapter III	X			
partie	Chapter IV	X			
	Chapter V	Х			
	Conclusion	Х			

**Table 2:** Borrowing recurrence rate or copy-paste

The SCED memoranda to the ENS and those of the management function of the ESF curriculum and evaluation department have a similar structure. After a comparative analysis of the various briefs, it appears that the introduction, chapters 3, 4, 5, and the conclusion section each have about 5% of the borrowing rate. The entire brief has a total of 25% borrowing. While Chapter 1 occupies 5-20% of the brief, Chapter 2 alone has more than 50% borrowing. The rise of digital technology seems to be one of the causes of the increase in academic plagiarism cases.

# 2.3 ENS and ESF CESD memories: the primacy of quantitative

According to Lindsay Waters (2004), "the role of knowledge is appreciated in terms of depth, duration, not extent, surface area."

The analysis of the hundred memoirs presents works that focus on the quantitative. In reality, the race for the number of pages, the volume of the dissertation or thesis that outweigh the quality of the information. This does not take into account the criteria for assessing the quality of scientific information. The movement towards the volume often leads to inflating the research work, hence the drift of copy and paste.

# 2.4 A theoretical part of dense, strong memories and a mass of data

The theoretical part of the work analysed is the largest. It occupies 2/3 of the work. In fact, researchers are actively collecting information. To present the study population and context, long theoretical details are often used that could be abbreviated. The briefs are almost identical, as the procedure, quotations and presentation of the study frameworks are the same.

Moreover, the presentation on theoretical and methodological framing seems to be a reproduction of the same objects and the same tools. Adopting the logic of filling in, it mainly contains a mass of important data related to psychological theories and didactic approaches. Socio-constructivism, constructivism, interactionism is the subject of long developments on dozens of pages. However, they can be abbreviated. Qualitative and quantitative approaches are deployed through paragraphs. The empirical-inductive and hypothetico-deductive approaches are returned in full.

Moreover, the problem and the problem of studies are often the subjects of prior theoretical presentations. There are statements such as According to Michel Beaud, Mendo If we need to know what the problem and the problem of a study are, it is expected that, as a matter of priority, they will be rigorously and precisely applied. We wonder why they should be developed over half a dozen or ten pages because of the theoretical paragraphs that define the concepts.

The most curious is the intertext, the resemblance that one perceives between the problems of memories dealing with a related theme. The problems of the analysed memories seem very close, and it is not exaggerated to see an identity of the time when the work is close. Thus, some are inspired, draw from the others by preserving the problems as they are or by clouding them.

The review of the literature or the state of the matter is no less reprehensible. The work analysed makes it a duplication. The literature review is found in the already voluminous general introduction and in chapter one or two. Generally, texts and authors summoned are poorly referenced. Either the citations are without pages, or the books and articles cited are second or third-hand. This polyphony ends up discrediting the source and the information. The most surprising is that there is frequently appear information without sources. This set of information refers to many forms of plagiarism presented above. What counts globally in the work is the volume, the number of pages, the filling.

#### 2.5 Impact on qualitative criteria for assessing scientific information

According to Soung (2017:36-49), there are several criteria for evaluating and validating scientific information quality. These include the relevance of the information, the reliability of the sources, the author's reputation, the quality of the content and the timeliness of the information. Therefore, for a thesis, an article or a work to be of quality, they would have to meet several of these criteria. Plagiarism affects the quality of scientific information. It does not contribute to the researcher's influence or to the reputation of the university institution. The state of the memory methodology described above makes it possible to establish, in the light of the primacy of the quantity of information, that the quality is attenuated. The manner of quoting, referencing and reliability of sources and authors are questionable. The timeliness of the information is rare, as the cited works have grown old. The works cite unreliable and unreliable sources. In short, MED's ENS SCED memoranda to the ESF seem to place greater emphasis on the quality of information. References are generally omitted. Their sources are often unreliable, and the authors' reputations are not well established. Therefore, the work is

characterised by the research of the volume of work, the filling. The methodology, identical and reproduced throughout.

What should we fight between crime and the criminal? It is by no means a question of bringing the perpetrators to trial. In criminology, the criminal can sometimes act unconsciously and benefit from mitigating circumstances. It is sometimes possible that he is the victim of contextual hazards that impose a conduct on him. In this case, it may be thought that the current methodology, by which and to which subjects are exposed, exerts within them a pressure to which they yield.

Plagiarism may be intentional or unintentional, conscious or unconscious on the part of the author. Each crime being driven by a goal to be achieved, their plagiarism in our target population seems motivated by a gain, a goal, generally that of "having a memory, supporting at all costs, and leaving school even by caesarean section." It is the end that justifies the means. The end being to have a memory whatever it is, the young researchers in our sample use plagiarism, resort to filling, appropriate ideas and authorship of developments that are not theirs.

The question then arises as to how to get them to make good memories and to get out of school, that is to say to build research without the obsession of copying and pasting, filling, work that can be dedicated and authoritative locally and internationally. The role of this research in global competitiveness could be questioned. Can their invoice contribute to the influence of these institutions and their authors? While the answer to all these questions remains difficult within the narrow framework of this communication, defined by economy and measurement, it is nevertheless important to consider how to resolve this methodological crisis, on ways and opportunities to improve these practices.

# 3. Towards an improvement strategy

For an organisation to guard against deviant behaviour, it is necessary to have a set of tools and software that define the licence and prohibit it. These normative and deterrent measures must be able to remove any intention of plagiarism. To this end, the establishment of a preventive and curative framework for plagiarism is essential. To standardise the behaviour of researchers, it is necessary to design a set of ethical benchmarks. This remediation task involves establishing a set of standards and values that define the conduct of research. These instruments generally take the form of ethical charters.

So, the question of standardisation can also be dealt with by using another framework, namely that of ethics. Less broad and more applied than ethics, ethics is a standard that defines duty within a specific profession. As far as the scientific universe is concerned, it will be said that ethics formally defines the duty with regard to a discipline. The implementation of an ethical framework may result in the establishment of a regulatory body. The latter defines a set of behaviours while suppressing those that are contrary to the values and principles of research.

Collective responsibility is also a means of regulating against plagiarism. It is for the scientific community to assume its power of regulation and sanction. It also seeks to answer for acts of plagiarism when they are real or unfounded. It is a question of refusing to be indifferent to these acts when they are proven or just suspected, by suffocating them for example. Because the credibility of the institution depends on it. It thus concerns all the actors of (researchers, publishers and consultants). At the individual level, all teachers must remind their doctoral students of the fundamental ethical values that must guide their thinking and actions.

# 4. Conclusion

Plagiarism is part of a continuum of bad scientific practices that reverse the functions of integrity and ethics and the weakness of the actors to review the methodological schemes. The latter favour the excessive borrowing that ends up gangring research and runs counter to good heuristic governance principles. This qualitative research is based on the theories of rationality and fraud centered on pressure indicators, the act's rationality, and the opportunity. It dissolves in the principle of scientific integrity to be related to the organisation, management and evaluation of research activity. Since the behaviour of the actors of an academic institution must follow a collective logic, it is important to establish principles, laws and regulations that govern the actions of individuals.

This rigour prescribed by the scientific community is applicable to all research work. It calls for respect for these precepts and academic ethics. Plagiarism in this logic takes the reverse of heuristic and fattened governance according to the synthesis report of the state of university research governance in West and Central Africa (2009). It is therefore important to look at:

- the weakness of the exploitation of research results, which remains a brake on university research;
- the creation of business incubators from or linked to research for commercial and technological exploitation;
- the development of the Rules of Procedure for the protection and exploitation of research results in each university;
- and the creation of an Intellectual Property Division in the Ministry of Higher Education under the direction of Standard and Quality.

The exercise of plagiarism is a real detriment to the quality of the work analysed and the quality of training in universities. As the ethics of research are tainted by such multiform plagiarism practices, it is up to the scientific community to give a new direction to the methodological content of writing scientific work. A questioning of the criteria for evaluating good research work is essential. A researcher must make an original and meaningful contribution to the advancement of knowledge in a field of research, creation or intervention, and demonstrate the ability to research in a stand-alone manner. Until now, this criterion has been associated with that of the quantity in terms of the number of pages prescribed by certain scientific communities and with a methodological orientation especially in the social sciences that excites fraud.

Particular emphasis should therefore be placed on the quality of scientific work through the practical or experimental part of contingent research. The particularity of each study will be noticed by a certain authenticity of the research related to innovative issues, centered on the development of geographical and scientific territories, with a strong involvement of doctoral training units and departments in the monitoring and writing of research work. All these parameters will make it possible to curb the phenomenon of plagiarism in our universities considerably.

### **Conflict of Interest Statement**

The author declares no conflicts of interests.

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