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# Objectivity, Social Sciences, and the Charge of Inferiority

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## Abstract

*This paper challenges the charge of inferiority, on the basis of objectivity, against the social sciences. The idea of objectivity is that facts about the state of the world and entities in it are observed or studied without a taint of personal bias, value judgement or particular perspective. The social sciences are accused of falling short of the requirements of objectivity hence they are considered inferior to the natural sciences which are claimed to merit the requirements. This paper argues that the idea of objectivity has been misleadingly conceived as a method exclusive only to the natural sciences. The paper maintains that if the concept of objectivity is conceptually analysed and conceived in a strict sense, the ideals and requirements of objectivity would be outside the ken of both the natural sciences and the social sciences. However, if the concept of objectivity is conceived in a moderate sense, the social sciences would merit being called objective as much as the natural sciences. Thus, a conceptual analysis will show that both the natural sciences and social sciences are at par on the threshold of objectivity. Thus, the paper submits that the social sciences are not inferior to the natural sciences on the basis of objectivity.*

**Keywords:** *fact; humanism; naturalism; natural science; objectivity; scientific method; social science; value judgement*

## I. Introduction

Every discipline or field of knowledge has its own objects of study. The objects of study of each discipline define the nature, method and characterisation of such discipline. Generally, most, if not all, fields of knowledge are termed the “science of” their subject matters. Hence, there are the sciences of natural phenomena such as physics,

chemistry, geology, biology and so on and there are also the sciences of social phenomena such as history, sociology, economics and so on. However, the term “science” has assumed a skewed definition and tag so as to refer only to those disciplines that are concerned with the study of natural phenomena. “Science is a process of assembling an interconnected structure of descriptive claims about nature.”<sup>1</sup> Science is the study of the physical and natural world based on a systematic method that rely on facts obtainable through experimentation and empirical observation. It would be noticed that these definitions of the term “science” already give leverage to the study of the natural phenomena. It already pronounces the fields of knowledge concerned with natural phenomena as the “sciences.” In this sense, any field of knowledge that is not concerned with natural phenomena is not considered “science.” It may, however, not be surprising that many scholars, philosophers and natural scientists, have considered physics, a field of knowledge concerned with natural phenomena, as the science par excellence.<sup>2</sup>

Every field of knowledge has the methods it applies in the study of its subject matter. A method is a way to achieve an end. Historically, the methods adopted by fields of knowledge concerned with natural phenomena have yielded positive results and advancement such that these methods are considered as the yardsticks for academic and research success. The methods of the fields of knowledge concerned with natural phenomena include observations, measurements, tests and experimentation. These methods are background and procedures for knowledge claim in these fields of knowledge. Given the relative success of the fields of knowledge concerned with natural phenomena, these fields of knowledge are termed the “sciences” and the method they adopt “scientific method.” Any other field of study devoid of these methods is deemed unscientific. The field of knowledge concerned with social phenomena is, in this light, termed unscientific. Objectivity – the freedom from personal bias, value judgement and perspective – is a characteristic of scientific methods and results and it is seen as an enviable virtue instantiated by the field of knowledge concerned with natural phenomena but lacking in the field of knowledge concerned with social phenomena.

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<sup>1</sup> Peter Kosso, *A Summary of Scientific Method* (London: Springer, 2011), 39.

<sup>2</sup> Christopher Hitchcock, “Introduction: What is the Philosophy of Science,” in *Contemporary Debates in Philosophy of Science*, ed. Christopher Hitchcock, 1-19 (Malden, MA: Blackwell, 2004), 10.

On this note, the field of knowledge concerned with social phenomena is deemed inferior to that concerned with natural phenomena. For ease of understanding, by ‘field of knowledge concerned with social phenomena,’ I mean the social sciences. Also, by ‘field of knowledge concerned with natural phenomena,’ I mean the natural sciences. The aim of this paper is to challenge the charge of inferiority against the social sciences. To achieve this, this paper is divided into two major sections. In the first section, I examine the ideal of objectivity and consider its desirability. On this point, it is important to note that some humanist scholars have maintained that the aim and goal of the social sciences is distinct from that of the natural sciences, hence, objectivity is not a character that the social sciences must necessarily have. However, I shall argue for the desirability of objectivity as a characteristic of enquiry. In the second section (and the subsections that follow), I shall engage in a conceptual analysis of objectivity in connection with how the natural sciences and the social sciences plausibly fit into this analysis. Here, I present arguments to show that the ideals and requirements of objectivity, in the strict sense, are too strong for the natural sciences to merit being exclusively tagged objective. I also argue that the social sciences satisfy the grounds upon which the natural sciences are tagged as objective.

## II. Why Objectivity is Desirable

The basic idea of the concept of objectivity is that facts about the state of the world and its entities are evaluated independent of the preferences, prejudices and perspective of the evaluator. Objectivity implies realism – the idea that the world exists independently of the observer’s mind or action. Two implications, both metaphysical and epistemological, follow from this. One, the idea of independent existence implies that the facts about the state of the world and its entities exist whether we know them or not. Second, these facts can be known and one can find out the truth about the laws that govern them.<sup>3</sup> If this is the case then it becomes an epistemic virtue to observe facts about the state of the world independent of personal or group bias and present the truth value of these facts as they actually are.

Some scholars attribute the gulf between objectivity in the natural sciences and objectivity in the social sciences to the differences in

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<sup>3</sup> Arthur Fine, “Scientific Realism and Antirealism,” in *The Shorter Routledge Encyclopedia of Philosophy*, ed. Edward Craig, 950-953 (New York: Routledge, 2005), 950.

the objects of study. Natural phenomena are such that are factually presented and physically accessible. They exist independent of what we think of them. The task of the natural sciences is to discover the natural laws that govern these phenomena so as to produce results that are backed by the fundamentals of these laws. In this sense, it is assumed that the natural scientist can be objective about his/her object of study since his/her research is underlay by scientific methods. On the other hand, the social sciences seek to understand social phenomena which are complex, contingent and value-laden. It is assumed that the characteristics of the objects of study in the social sciences cannot give room for an objective observation. The nature of the object of study of the social sciences, it is argued, cannot be divorced from value judgement, hence the lack of objectivity. As earlier stated, some humanists maintain that attaining objectivity is not necessarily the business of the social sciences. The social sciences are conceived as a different field of knowledge both in method and subject matter from the natural sciences. As a result, the characteristics of the methods of the social sciences need not be similar to that of the natural sciences. However, naturalists argue that the ideals of objectivity are attainable and must be pursued by the social sciences too.

It is, thus, important to address the issue of the desirability of objectivity. Is objectivity worthy of being pursued in a field of knowledge? An affirmative answer is in order here. One reason for the desirability of objectivity in the study of facts about the world is trust. Trust is both a moral and epistemic virtue. Morally, people are inclined to have faith in a scientist whose stock-in-trade is objectivity in the study of natural phenomena. Epistemically, people would justifiably believe in the findings that result from objective research. For instance, the results of the research in the natural sciences are held as true and the recommendations are considered reliable because of the character of objectivity involved in the research. The same does not apply to the results from the researches in the social sciences where it is assumed that the researcher's bias colour his/her findings. Some people may likely disagree with the results of a research in the social sciences if they observe a difference in religious or racial affiliation with the researcher. This may render the results and recommendations from the researches in the social sciences useless and the question of the importance of embarking on such researches is likely to arise. If trust is a virtue and it is derivable from objectivity in research, then objectivity is desirable.

Since the natural sciences and social sciences are fields of knowledge which offer us knowledge about the world, then it is

important to make our study about the world independent of our opinions and prejudices. Objectivity helps to substantiate evidence and organise theories that challenge our beliefs. Objectivity helps in providing the true nature of the world which in turn underlies our sense of justification for actions. Objectivity allows for intellectual criticism and rational debate in decision making which informs empirical success in the field of knowledge it is characteristic of. Objectivity also serves as a ground for epistemic authority. In the business of producing knowledge, a field of knowledge that is objective assumes a position of authority with regards to the knowledge it produces in terms of reliability and also applicability. On a larger scale, it is believed that objectivity provides the ground for a basic distinction between fact and value. This distinction between fact and value “has proven its utility for enlightenment and emancipation by providing a powerful tool for exposing ideological distortion and political manipulation.”<sup>4</sup>

These reasons, among others, define why objectivity is a worthy and desirable characteristic of research. The presence of objectivity signifies scientism while the lack of it implies unscientificness. Eleonora Montuschi has this in mind when she says:

A paradigm of objective knowledge is fixed – i.e. natural science – and by claiming that there is only one way to be objective (the way of natural science), social scientific knowledge then becomes objective only if it follows the method and procedures of natural science. ‘Being scientific’ according to the model of science purportedly instantiated by natural science – is treated as the ideal to be emulated by any discipline that seeks to produce reliable information about its object of inquiry. ‘Scientific knowledge,’ on this view, is considered to be the highest ranked type of knowledge which a field of inquiry should aim at.<sup>5</sup>

The social sciences are, on the basis of this understanding of objectivity, considered inferior to the natural science. I intend to challenge this claim by embarking on a conceptual analysis of the concept of objectivity to argue that the social sciences are not inferior to the natural science.

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<sup>4</sup> Gerald Doppelt, “The Value Ladenness of Scientific Knowledge,” in *Value-Free Science? Ideals or Illusions*, eds. Harold Kincaid, John Dupré, and Alison Wylie, 188-217 (Oxford: Oxford University Press, 2007), 188.

<sup>5</sup> Eleonora Montuschi, *The Objects of Social Science* (London: Continuum, 2003), 1.

### III. Conceptualising Objectivity

As the term “science” has been restricted in application to the natural sciences, so also is the idea of objectivity. Objectivity is assessed based on its scientific application. This, alongside other reasons, is why the natural sciences are considered objective and superior to the social sciences. In what follows, I shall try to engage some conceptualisations of the term, “objectivity.”

#### a. Helen Longino on the Conception of Objectivity

According to Helen Longino, objectivity is conceived in two ways. First, it is conceived in relation to scientific realism. Second, it is conceived in relation to mode of inquiry. In the first conception, any field of knowledge that provides an accurate description of the facts about the state of the world as they are is termed objective. In the second conception, a field of knowledge is termed objective when the view provided by it “is achieved by reliance upon nonarbitrary and non-subjective criteria for developing, accepting, and rejecting hypotheses and theories that make up the view.”<sup>6</sup> On these two conceptions, the tag of objectivity fits the natural sciences. Longino maintains that criticisms from alternative point of view and the subjection of hypothesis to critical scrutiny are required for objectivity.<sup>7</sup> These two seem to be incompatible in understanding objectivity. Longino, however, argues that they must be seen as two poles of a continuum that are engaged in constant dialogue. She therefore conceives objectivity as a matter of degree.

On this account, Longino states that “a method of inquiry is objective to the degree that it permits *transformative* criticism.”<sup>8</sup> She lists four criteria that are necessary for the achievement of transformative criticism. They are: recognised avenue for criticism, shared standards by critics, community response to such criticism and equality of intellectual authority.<sup>9</sup> If one agrees with Longino on the conception of objectivity as a matter of degree based on those criteria, then the social sciences are in no way inferior to the natural sciences. Social findings are subjected to criticism in public forums such as peer-review journal and conferences. Critics in the social sciences have shared standards such as empirical adequacy and relevance to social needs that inform the formulation of

<sup>6</sup> Helen E. Longino, *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry* (Princeton, NJ: Princeton University Press, 1990), 62.

<sup>7</sup> Ibid., 76.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 76-79.

their criticisms. The social community develops trust in the social findings that have undergone thorough critique. Alternative views possess equal intellectual authority and are allowed to thrive. These criteria can be found, for instance, in the social inquiry into the phenomenon of segregation.

I consider Longino's conception of objectivity inadequate because it conceives objectivity by what it does and how it works and not by what it actually is. Longino's position that to be objective is to be permissive of transformative criticism implies that objectivity is to be understood by what it does in a method of inquiry. This does not give a true account of what objectivity actually is that makes it desirable and a yardstick of apportioning the superiority-inferiority tag to fields of knowledge.

#### b. Lorraine Daston on the Conception of Objectivity

For Lorraine Daston, the concept of objectivity is neither monolithic nor immutable.<sup>10</sup> This is because the meaning of objectivity is a combination of different understandings. Daston maintains that there are historical conceptions of objectivity which are linked to the history of scientific practices and ideals. This is to say that the conception of objectivity changes with development in the sciences. In the late eighteenth century, the conception of objectivity is ontological, and it concerns the ultimate structure of reality. Citing examples from writings on ontology by philosophers such as Rene Descartes and George Berkeley, Daston argues that the idea of objectivity is conceived as it concerns a fit between theory and the world.<sup>11</sup> Talking about perception, Berkeley states that the real and objective nature are the same where objective refers to what is perceived.<sup>12</sup> Descartes also talks about objective reality in arguing for an indubitable knowledge.<sup>13</sup> Thus, the conception of the term is related to ontological concerns.<sup>14</sup> Secondly, there is the mechanical conception of objectivity which is about suppressing the universal human propensity to judge. This "forbids interpretation in reporting and picturing scientific results."<sup>15</sup>

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<sup>10</sup> Lorraine Daston, "Objectivity and the Escape from Perspective," *Social Studies of Science* 22, no. 4 (1992): 597.

<sup>11</sup> *Ibid.*, 600-601.

<sup>12</sup> George Berkeley, *Siris*, Section 292, quoted in the *Oxford English Dictionary* article "Objective" as quoted in Daston, "Objectivity and the Escape from Perspective," 601.

<sup>13</sup> Rene Descartes, "Meditation III," *Meditationes de prima philosophia* (1641), quoted in Daston, 600.

<sup>14</sup> Daston, 600-602.

<sup>15</sup> *Ibid.*, 597.



For Daston, the third historical conception is aperspectival which is imported into the sciences as a result of interdisciplinary communication among disciplines. It is concerned with the elimination of individual or group idiosyncrasies. It is conceived as a means of de-individualising research to achieve a universal sort of knowledge – a knowledge devoid of personal bias colouration.<sup>16</sup> For her, this third conception of objectivity does not constitute the whole of objectivity but it has become dominant in current usage of the term. How well do the social sciences fit into the aperspectival conception of objectivity, that is, the idea of eliminating individual or group idiosyncrasies?

To answer this question, I would like to rephrase it thus: how well do the natural sciences and the social sciences fit into aperspectival conception of objectivity? In other words, do researches in the natural sciences and the social sciences depend on personal preferences and idiosyncratic experiences? I think there are two ways of addressing the question. With the view of eliminating individual or group idiosyncrasies in research, one must consider the choice of what to research in and the outcome or result of the research. Considering the choice of what to research, no science is completely free from the peculiarity and distinctiveness of its object of study. In carrying out research on a particular phenomenon, a physicist is conditioned, as much as an economist is, by the peculiarities of his/her field of knowledge. Considering the outcome or result of the research, the social sciences are as objective as the natural sciences in de-individualising research with the aim of achieving a universal sort of knowledge. One concern that may be raised with regards to findings in the social sciences is that the findings are contingent and value-laden. But the contingency of social findings is not a result of personal colouration but that of the nature of the social phenomena. Hence, it still goes to say that social scientists report the findings of their research as they are presented. On this basis then, the social sciences are not inferior to the natural sciences.

### c. Heather Douglas on the Conception of Objectivity

The aperspectival conception of objectivity is rejected by Heather Douglas in the sense that it does not suit an operationalisable definition of objectivity “that can be applied to deciding whether something is actually objective.”<sup>17</sup> Douglas states that the aperspectival conception

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<sup>16</sup> Ibid., 613.

<sup>17</sup> Heather Douglas, “Rejecting the Ideal of Value-Free Science,” in *Value-Free Science? Ideals*

is a metaphysical notion of objectivity and it does not play a helpful role in evaluating the objectivity of the fields of knowledge.<sup>18</sup> Douglas' rejection of the aperspectival conception of objectivity is based on his conviction that the conception entails the notion of value-freedom. The idea of value-freedom is the freedom of scientific (or social science) claims and practices from political, moral and social values. For him, it is possible to conceive objectivity in a sense separable from the idea of value freedom and this can be done in seven different ways.

The first two conceptions of objectivity, according to Douglas, are focused on human interaction with the world. One is manipulable objectivity and the second is convergent objectivity. In the first conception, a case where the findings of a field of knowledge can be used to intervene in the world and such intervention proves successful, such field of knowledge is manipulably objective. In the second conception, when different and independent studies are carried out with regards to a particular phenomenon and the same results occur in all studies, then such results are reliably objective in a convergent sense.<sup>19</sup>

The third and fourth conceptions focus on individual thought process. Douglas states that the value-free conception of objectivity is mistaken to be a conception under this category but it is to be rejected and replaced with detached objectivity and value-neutrality objectivity. Detached objectivity is the sense in which the use of value in place of evidence is prohibited. A researcher's value judgement should not becloud the true nature of his/her findings. Value-neutrality objectivity implies a mid-range position in any debate without taking a strong stance in influencing judgement. Douglas, however, states that the value-neutrality sense of objectivity has limited applicability and is not always desirable.<sup>20</sup>

Douglas' last three conceptions of objectivity are related to social processes, namely *procedural*, *concordant*, and *interactive* conceptions of objectivity. Procedural objectivity "occurs when a process is set up such that regardless of who is performing that process, the same outcome is always produced."<sup>21</sup> Concordant objectivity "occurs when a group of people all agree on an outcome, be it a description of an

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or *Illusions*, eds. Harold Kincaid, John Dupré, and Alison Wylie, 120-139 (Oxford: Oxford University Press, 2007), 131.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid., 132-133.

<sup>20</sup> Ibid., 133-134.

<sup>21</sup> Ibid., 134.

observation or a judgment of an event.”<sup>22</sup> The agreement here is not arrived at through a rigid process but by the mere nature of the fact agreed upon. Interactive objectivity “occurs when an appropriately constituted group of people meet and discuss what the outcome should be.”<sup>23</sup> On the last conception of objectivity, Douglas raises questions that may prove problematic for interactive objectivity. They include,

What is an appropriately constituted group? How diverse and with what expertise? How are the discussions to be framed? And what counts as agreement reached among the members of the group?<sup>24</sup>

These questions are problematic and they bear on the concept of objectivity itself. The questions demand for the *objective* criteria for setting standards for objectivity. In other words, we want to assess objectivity by some standards but we need these standards to be objective in their own right too. More so, I find the interactive conception of objectivity as rather begging the question. Are natural scientists and social scientists to meet and discuss what the outcome of a study should be or discuss what the outcome is? If objectivity implies realism, then objectivity requires that we report findings about the state of the world as they are not as we think they should be.

The concordant conception of objectivity recognises this distinction and is in line with the fact that objectivity is about being true-to-nature, that is, finding the truth about the state of the world as it actually is. I doubt the general applicability of the procedural conception of objectivity. It requires that objectivity obtains when the same result is always produced from a performing a process regardless of who is performing it. It is evident in the history of the natural sciences that previously held positions give way for a superior position with regards to study of a particular phenomenon. In astronomy for instance, heliocentrism replaced geocentrism when it was discovered that a different outcome was produced in the process of studying the solar system. The procedural conception of objectivity is too strong for the natural sciences to always merit and the contingent nature of social phenomena makes it difficult for the social sciences to merit the conception too. However, if concordant objectivity is to be loosely conceived to mean having the same outcome until a major change occurs then the social sciences as well as the natural sciences can count as objective.

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<sup>22</sup> Ibid.

<sup>23</sup> Ibid., 135.

<sup>24</sup> Ibid.

Contrary to Douglas' claim that an aperspectival conception of objectivity connotes value-freedom and should be rejected,<sup>25</sup> I think an aperspectival conception of objectivity shares similarity with detached objectivity which he claims is devoid of the notion of value-freedom. Detached objectivity prohibits using values in the place of evidence. It requires that value-judgement should not becloud the outcome of result. This is in no way different from the idea of eliminating personal idiosyncrasies from research and its outcome. These two conceptions of objectivity involve "distancing" the researcher from the results of research. In this case, I maintain that the same line of reasoning that affects the aperspectival conception of objectivity also applies to the detached conception of objectivity.

Findings in some fields of the social sciences have been used to predict future occurrences and intervene in solving problems in the world. In economics, the forces of demand and supply can be used to control prices of commodity. Although, this is not with a complete dose of accuracy. But if objectivity is based on the sense of manipulability, where objects are sufficiently understood to be applied in intervening in states of the world, then the social sciences share the same success and failure rates as the natural sciences. This is so especially if one connects this understanding of objectivity with another basis of comparison between the social sciences and the natural sciences, that is, predictability of future events. According to Fritz Machlup, the only advantage that the natural sciences have over the social sciences is that predictability in the natural sciences is mostly controlled and derivable from laboratory experiments. When it comes to issues in the real world, the manipulable objectivity of the natural sciences is called to question.<sup>26</sup> The demand of manipulable objectivity is therefore too high for the natural sciences to meet or understood to accommodate some token of failure rate. On the latter consideration, both the social sciences and the natural sciences can be tagged as objective in the manipulable sense.

#### d. Julian Reiss and Jan Sprenger on the Conception of Objectivity

For Julian Reiss and Jan Sprenger, there are two broad categories of understanding the concept of objectivity.<sup>27</sup> One is product objectivity

<sup>25</sup> Ibid., 131.

<sup>26</sup> Fritz Machlup, "Are the Social Sciences Really Inferior?" in *Readings in the Philosophy of Social Science*, eds. Michael Martin, and Lee C. McIntyre, 5-19 (Cambridge, MA: The MIT Press, 1994), 13-14.

<sup>27</sup> Julian Reiss, and Jan Sprenger, "Scientific Objectivity," *The Stanford Encyclopedia of Philosophy* (Winter 2017 Edition), ed. Edward N. Zalta, <https://plato.stanford.edu/archives/win2017/entries/scientific-objectivity>.

which states that a field of knowledge is objective in that its products – theories, laws, experimental results and observations – constitute accurate representations of the world. The second is process objectivity which states that a field of knowledge is objective in that the processes and methods that characterise it neither depend on contingent social and ethical values nor on the individual bias of a researcher.<sup>28</sup> It is important to state that Reiss and Sprenger define objectivity with relation to the term “science” and the term as it is used refers to the natural sciences. Since my aim in this paper to argue that objectivity is not an exclusive characteristic of the natural sciences, I reformulated the definitions in a more general way to include any field of study. Another important thing to note about these broad categories of understanding objectivity is that they overlap with Douglas’ conceptions of objectivity and the aperspectival conception.<sup>29</sup>

Under the two broad categories of understanding objectivity, Reiss and Sprenger further classify objectivity into three conceptions. These are; objectivity as faithfulness to facts, objectivity as absence of normative commitment and value-freedom, and objectivity as absence of personal bias.<sup>30</sup> To begin with, the conception of objectivity as faithfulness to facts implies scientific realism. It implies that facts exist independent of human mind.<sup>31</sup> Thus, the field of knowledge that faithfully describes these facts the way they are is objective. Put differently, a field of knowledge that successfully describes facts about the state of the world merits the ideal of objectivity. In this regard, the natural sciences are assumed to record more success than the social sciences.

For one, the natural sciences are believed to postulate that the properties of things in the world exist independent of our perceptions and this suggests that there is a true nature of things. Secondly, the natural sciences are believed to postulate, analyse, systematise and theorise the true nature of these things or facts. The social sciences, by nature of the objects of their study, are believed to be disadvantaged because of the value ladenness of the objects of their study. The social scientists’ study is mostly hitched to morality, religion and other social phenomena that are value-laden. Hence, the social sciences are considered not faithful to fact and consequently not objective. The

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<sup>28</sup> Ibid.

<sup>29</sup> These broad categories of understanding objectivity share some common features with Douglas’ six conceptions of objectivity and also the aperspectival conception of objectivity.

<sup>30</sup> Reiss, and Sprenger.

<sup>31</sup> Ibid.

questions one should ask in analysing this conception of objectivity are: What are facts? What are values? Are values completely separable from facts? Simply and loosely defined, fact means being the case, being truly in existence.<sup>32</sup> Value, on the other hand, means the quality that renders something desirable. “Facts are often taken as something objective, values as subjective.”<sup>33</sup> The natural sciences take pride in dealing with facts hence objective, while the social sciences which are value-laden are termed subjective.

However, the distinction between fact and value is not crystal clear. Some scholars have maintained that facts and values are social constructs which depend on the subjective interests or needs of people rather than being independent of the world of nature or morality.<sup>34</sup> This point of view is antirealism. It implies, contrary to realism, that nothing exists independent of the human mind. This view holds that human beings or societies bring into existence, through the use of language and other social apparatuses, natural and social objects for various human purposes. The basis of what these objects express or embody is the dictate of the people or society. This antirealist point of view surely provides another angle of assessing the fact-value distinction but its plausibility is easily called to question with the realisation of the existence of real objects. The objects depend on language not for their reality but for their description.

For Ernest Nagel, a preliminary distinction in the nature of value/value-judgement is important in drawing a distinction between facts and values. There is appraising value judgement which expresses approval or disapproval in a thing. This is normative and is not in tandem with factuality. There is also characterising value judgement which assesses whether entities possess certain properties. This is descriptive and a part of factual claims. For Nagel, these two views of value judgement are subsumable but it is not impossible to separate them in our expression about entities in the world.<sup>35</sup> Thus, there is a sense of value judgement which is in line with making factual claims, a pointer to the fact that there is no complete separability between facts and values. On the conception of objectivity as faithfulness to facts, it is intelligible to

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<sup>32</sup> A conceptual discussion of the term “fact” will yield more contested definitions and critical characterisation.

<sup>33</sup> Ray Lepley, “The Verifiability of Facts and Values,” *Philosophy of Science* 5, no. 3 (1938): 310.

<sup>34</sup> Doppelt, 188-189.

<sup>35</sup> Ernest Nagel, *The Structure of Science: Problems in the Logic of Scientific Explanation* (New York: Harcourt, Brace and World, 1961), 490-494.

argue that the value-ladenness of the social sciences is not an aversion to making factual claims. If the natural sciences can be termed as objective on this ground, I hold that the social sciences too merit being termed as objective.

The discussion so far has been on the adherence of a field of knowledge to fact as opposed to value. On a converse note, there is a manner in which the sciences, especially natural sciences are also conceived as value-laden. The natural sciences are not completely value-free as some scholars would want us to believe. According to Helen Longino, the idea of value-freedom in the natural sciences is misconstrued due to a conflation between two conceptions of values, namely constitutive and contextual values. For her, “scientific practice is governed by norms and values generated from an understanding of the goals of scientific inquiry.”<sup>36</sup> These values are generated from the satisfaction of the criteria of truth, accuracy, simplicity and predictability. These are constitutive values which determine what constitutes acceptable scientific practice. These values are inseparable from any science and they are to be distinguished from contextual values which are personal, social and cultural oriented values that influence research. Contextual values are what any field of knowledge that is to be properly called objective must be independent from.<sup>37</sup>

From the foregoing, it is clear that to conceive objectivity as faithfulness to fact raises conceptual concerns that suggest that facts and values are not completely separable and that the social sciences are not averse to making factual claims or describing facts in or about the world as they are. Conversely, if objectivity is conceived as avoidance of value, then the natural sciences would be devoid of objectivity. But if the idea of value is clearly distinguished, as done by Longino,<sup>38</sup> it becomes clear that the natural sciences, just like the social sciences, are not completely value-free. It is, thus, important to state that the natural sciences are *constitutive value-laden* as much as the social sciences and the social sciences are *contextual value-free* as much as the natural sciences.

The second conception of objectivity as classified by Reiss and Sprenger is objectivity as absence of normative commitment and the value-free ideal.<sup>39</sup> Objectivity requires that a field of knowledge should

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<sup>36</sup> Longino, 4.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid., 4-7.

<sup>39</sup> Reiss, and Sprenger.



be value-free. But as observed earlier, it is almost impossible to have a completely value-free field of knowledge. As argued by Longino, there are two conceptions of values and it is the contextual values that an objective field of knowledge must be free from.<sup>40</sup>

Some natural scientists agree that values affect some stages of research in the natural sciences such as in the choice of a scientific research problem and the application of scientific research results. For instance, a natural scientist or a funding group or a government make the choice of a research problem and decide on the application of its result. This is usually underlined by normative commitments. Whether it is research into the cure of Ebola, Lassa Fever or COVID- 19, the choice depends on the agent of research which in turn is informed by other factors. These factors may be personal for an individual (maybe a family member of such individual is suffering from a disease). It may be for financial reward in the case a funding group and it may be for the political reason to remain in power for a sponsoring government. However, there are core stages of research in the natural sciences which natural scientists claim the factor of value cannot penetrate. These are the stages of gathering evidence and accepting scientific theories. These stages, as claimed by the natural scientists, are part of what makes the natural sciences merit objectivity and the social sciences do not.

There are two ways to respond to this claim. One is by upholding a strict adherence to the idea of objectivity in gathering evidence and accepting scientific or social theories. Another way is maintaining a moderate adherence to the idea of objectivity. By strict adherence, I mean a total commitment to the idea of value-freedom in those stages of research. How possible is this total commitment in the natural sciences? This invokes a consideration of the relationship between evidence and theory. A body of evidence often informs the theoretical account of a research problem. However, there are cases of missing gaps in using evidence to determine theory. In such cases, values set in.

Let us consider the case of pain and the scientific research into the cure of pain. A group of scientists (pharmacists) who wants to produce a medicine for the cure of pain, say heartburn, cannot correctly ascertain if the medication produced will yield positive result if they had not experienced heartburn themselves before or encountered someone who has. Pain is relative and what pain is like for an individual is different from what it is like for another individual even if the descriptions are similar. It is almost impossible for the natural scientists to refrain

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<sup>40</sup> Longino, 4.



completely from using their own personal experiences in collecting data to substantiate or refute their hypotheses. Personal preferences for scientific goals such as accuracy or simplicity set in. Simplicity may not imply accuracy and vice versa. Thus, maintaining a strict adherence to value-freedom in the core stages of research in the natural sciences seems impossible. In this sense, the ideals of objectivity would prove too strong for the natural sciences to merit.

Moderate adherence to value-freedom in the core stages of research is permissive of values in the case of a gap between evidence and theory, but these values must be scientific values which are not opposed to the goals of science. Here, the social sciences would merit the requirements of objectivity as much as the natural sciences. The impossibility of having a total commitment to the idea of value-freedom might have influenced Heather Douglas to hold that objectivity can be understood in a sense separable from the idea of value-freedom.<sup>41</sup> An understanding of objectivity delinked from value-freedom, as espoused by Douglas and as earlier discussed, still shows that the social sciences merit the ideals of objectivity.

The third conception of objectivity as classified by Reiss and Sprenger is “the idea of absence of personal bias.”<sup>42</sup> That is, personal biases are absent from scientific reasoning. This does not apply to the choice of scientific research or the application of scientific results but to results, outcomes of scientific research. The natural sciences are claimed to trump the social sciences in this regard because of the nature of the object of study of the social sciences. For instance, the study of human actions or other social phenomena that are products of human actions such as rape, racism or political apathy are such that a social scientist’s views tend to influence the result of the research into such phenomena. A social scientist’s moral or religious leanings or political views are said to affect outcome of research into cases of rape or political apathy. Hence, value in the social sciences taints evidence.

I think this is not always the case in the social sciences. For instance, John Dupré argues that the separation of evidence from values is deeply ingrained in economics. He states that there are two branches of economics, namely normative economics and positive economics. Normative economics is the aspect of economics that deals with the evaluation of the benefits of economic factors to the society. Positive economics, which he claims is the more prestigious branch, is the aspect that maintains that there is a set of economic facts and laws that

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<sup>41</sup> Douglas, 121.

<sup>42</sup> Reiss, and Sprenger.

economists are concerned in discovering and studying. These facts and laws are out there independent of an economist's bias.<sup>43</sup> Max Weber, who holds that the social sciences are value-laden, posits that the role of value in the social sciences need not extend to the outcomes of the research.<sup>44</sup> Thus, conceiving objectivity as an absence of personal bias, the social sciences ticked the box of objectivity since a researcher's bias is separated from his/her research outcomes. It is important to note that all the conceptions of objectivity are not exhausted here. But it is instructive to also state that most conceptions of objectivity are largely subsumable in one another, thereby indicative of the fact that most conceptions of objectivity overlap.

#### IV. Conclusion

In the discussion above, I have tried to examine different ways in which objectivity has been conceived with relation to how the social sciences fare on the scale of objectivity assessment. As argued, a conceptual analysis of the concept of objectivity shows that the social sciences also merited the ideals of objectivity just like the natural sciences. Contrary to the charge of inferiority against the social sciences based on the basis of objectivity, I submitted that the social sciences are not inferior to the natural sciences. There is another dimension to the argument that deserves a significant mention. It is the humanist-naturalist debate. "The 'naturalist' view which holds that social science involves no essential differences from the natural sciences, and the 'humanist' view which holds that social life cannot adequately be studied 'scientifically.'"<sup>45</sup>

Naturalism as an approach in the social sciences is informed by two things. First and majorly is its position that all entities in the universe are natural or can be understood as part of nature. In understanding nature, there are the principles of unity, regularity and wholeness which all signify objective laws. Second is the idea of unity of science. The idea that all the natural sciences, and by extension the social sciences, must be unified into a unified science of singular enquiry about nature. More so, the evident success of the natural sciences, especially physics, in understanding the world and producing theories for solving many

<sup>43</sup> John Dupré, "Fact and Value," in *Value-Free Science? Ideals or Illusions*, eds. Harold Kincaid, John Dupré, and Alison Wylie, 27-41 (Oxford: Oxford University Press, 2007), 35.

<sup>44</sup> Max Weber, *The Methodology of the Social Sciences*, trans. and eds. Edward Shils, and Henry Finch (New York: Free Press, 1968).

<sup>45</sup> Brian Fay, and Donald J. Moon, "What Would an Adequate Philosophy of Social Science Look Like?" *Philosophy of Social Science* 7, no. 3 (1977): 209.

problems has also informed the attempt to incorporate into the social sciences the methods of the natural sciences. Thus, the crux of the naturalist approach in the social sciences is that social phenomena are natural and can be explained and understood using the methods of the natural sciences.

Some of the problems associated with the naturalist position (which I do not intend to engage here) include the question of whether it is everything in nature that is empirically accessible or understood in a “physicalist” manner. Also, what is the nature of the unity of science to be? Is it to be one of collaboration (among all natural sciences and social sciences), logical inference (of issues in the sciences) or reduction of one science into the other? As regard these questions, some have argued that the objects of study in some particular sciences are uniquely different and deserve a unique approach different from that of the natural sciences. This view is shared by the humanists in the social sciences. It is believed that social phenomena such as human actions and behaviours are uniquely different from natural phenomena and cannot be studied the same way the natural phenomena are studied. Humanism in the social sciences is given to interpreting the meanings of aspects of the social life, understanding them within their own terms.<sup>46</sup> The concern of the social sciences is conceivably different from that of the natural sciences and this is enough reason that the method of enquiry does not necessarily have to be the same.

This debate on the approach to the enquiry into social phenomena has a connection to the idea of objectivity. As earlier observed, the natural sciences are held as the Paradigm for objective knowledge and the claim that the only way to be objective is to follow the methods and procedures of the natural sciences indicates that the naturalist approach in the social sciences is geared towards objectivity while the humanist approach steers away from it.<sup>47</sup> Is this actually the case? Given the arguments I have examined so far, my answer is in the negative. The notion of objectivity is skewedly defined in a way that is exclusively instantiated by the natural sciences. A conceptual analysis of objectivity, as done above, has shown that the natural sciences do not necessarily and exclusively instantiate objectivity. In different ways in which objectivity can be conceived, the social sciences are shown to merit it as much as the natural sciences do. The concern here is not about which is more adequate approach between humanism and naturalism in the social sciences. The concern is about how these

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<sup>46</sup> Ibid., 226.

<sup>47</sup> Montuschi, 1.

two approaches to the enquiry of social phenomena can actually be constructed in a way as to merit the ideals of objectivity as much as the natural sciences. Hence, the social sciences are not inferior to the natural sciences on the basis of objectivity.

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