

***The term 'social science' is a misnomer which masks the necessarily different epistemic methods and ontological realities consistent with natural and social realms respectively".  
Critically appraise this claim***

In this essay I intend to dispute the notion that the term social science is a misnomer. Firstly, I will define social science, and then focus on the differences between rationalism and empiricism without whose existence there would be no epistemology. Empiricism will receive more attention due to the fact that it has become the dominant epistemic approach, systematically and rigorously expressed through its offspring, ie ,materialism, sensism, positivism and naturalism. Second, I intend to allow ontological realities to manifest themselves through Kant's articulation as both an empiricist and a rationalist. This will dispel uninteresting dichotomies and allow one to "stand back", as it were, from one's own analysis of the topic.

#### EPISTEMIC APPROACHES WITHIN THE NATURAL AND SOCIAL SCIENCES:Rationalism and Empiricism.

According to Marshall social science is "a general label applied to the study of society and human relationships...The designation of an area of study as a social science usually carries the implication that it is comparable in many ways to a natural science" (1994 :493). The implication here is that natural and social reality can be studied in the same way because both realities consist of relationships between facts, eg, cause and effect.

Note should be taken of the fact that rationalists and empiricists, despite their different approaches in their quest for knowledge, have both contributed immensely to the "birth" of different academic disciplines to which even modern day intellectuals subscribe. More interesting is that each of the two epistemic approaches claims their method of enquiry gives birth to valid information or certainty. According to Hamlyn rationalism ,whose founder is Descartes' is an epistemological doctrine that "puts weight on reason or understanding, as distinct from the senses or sense perception"(1987:134).On the other hand empiricists believe the only source of knowledge is experience. John Locke held the view that "the scope of our knowledge is limited to, and by, our experience"(Stumpf,1983:254).

#### **RATIONALISM**

##### (i)Descartes':

This philosophical movement was initiated by Descartes' and "carried on with varying degrees of thoroughness by Spinoza and Leibniz...(Hamlyn, 1987:134). A rationalist relies on logic and principles of reasonableness in order to arrive at a conclusion. One would clarify this by giving an example popularized by Rene Descartes' that "it is only in relation to thinking that I am certain that I exist"(Hamlyn,1987:138).Descartes' continues to maintain that existence must be a property of a being who is conceived of as possessing all attributes in perfection (Hamlyn,1987:141).Kant opposed this view citing experience was not a property of a thing in the way that Descartes' supposes.

Leibniz went further by maintaining that "existence depends on whether that conception is coherent or involves a contradiction" (Hamlyn, 1987:140). One can partly agree with Descartes' view that existence is a property of a being, but to say that its creator is perfect is a product of human imagination. Perfection, by the way, remains an imaginary construct when taking into account the context in which Descartes' states his case. For example, in order for one to be declared perfect, one has to adhere to the standard guidelines which should be followed in order to create a particular thing or use a previous model as a yardstick or even improve on it. It is one's belief that rationalism has not been a dominant epistemic approach. Kant and Locke, for example, have imbibed both epistemic approaches. To take it further most modern day individuals employ both approaches in their daily activities.

#### (ii) Spinoza

There was also another rationalist called Spinoza in whose views rationalism received its most systematic and rigorous expression. His main work was called ethics. According to Stumpf "ethics is concerned with actions that can be labeled right or wrong, good or bad, desirable or undesirable, worthy or unworthy. Also, ethics, is concerned with one's personal responsibility, duty, or obligation for his behaviour" (1983:1). His concern with ethics should be understood in its proper context in that both the means and goals of social science investigation are intrinsically bound up with ethical considerations, especially when conducting research involving human subjects, eg., protection of privacy through informed consent.

According to Hamlyn Spinoza provides "...a striking contrast with Descartes' ,who had little concern with things ethical" (1987:149). Spinoza felt that there are three kinds of knowledge, ie, knowledge of vague experience- when we generalize from casual and confused experience. The second kind is identified with reason, and the third one is intuition (Hamlyn, 1987:152). The second and third kinds of knowledge reflect a rationalist view in that they are necessarily true, and reason regards things as necessary

#### (iii) Leibniz

According to Stumpf "Leibniz was dissatisfied with the way Descartes and Spinoza had described the nature of substance because he felt they had distorted our understanding of human nature" (1983:246). Spinoza defines substance as "that which is in itself: I mean that the conception of which does not depend on the conception of another thing from which it must be formed" (Stumpf, 1983:241). Leibniz on the other hand takes it that substance as a basic form of existence must be absolutely simple ,for if it were complex it would be secondary to whatever it is composed of (Hamlyn, 1987:159). This means that Leibniz and Spinoza somehow agree that substance should not depend on anything other than itself to exist. But one would argue that

their view has defied logic in that every entity or substance is an "offspring" or a product of a particular "thing". It is interesting that Leibniz, despite being a rationalist, sought empirical evidence to defend his principle that no two substances can differ *solo numero* (Hamlyn, 1987:162-163). He pointed to considerations that tree leaves are all different, and subscribed to similar evidence which was assessed through the newly invented microscope.

### **EMPIRICISM**

According to Comte, empiricism is an "epistemological doctrine that all knowledge proper must be subject to canons of verification in terms of experience" (Hamlyn, 1987:275). Marshall (1994:149) defines empiricism as a term "often used, loosely, to describe an orientation to research which emphasizes the collection of facts and observations, at the expense of conceptual reflection and theoretical enquiry". This implies that knowledge must undergo rigorous interrogation so as to be sure that it has not defied science.

Empiricism presents itself in four ways: Materialism, sensism, positivism, and naturalism.

#### (i)Materialism:

According to Marshall materialism means "a range of metaphysical positions (philosophical views about the fundamental nature of reality)...Whereas in classical times matter had been opposed to form, the dominant early modern contrast was between matter and spirit or mind" (1994:315). Thinking of societies in terms of physical or material properties may be called materialism. We must also explain nature in terms of materialism.

#### (ii)Sensism

According to Knight "all materialists are of course sensists...Locke as one the empiricists, derives all simple ideas from external experience (sensations), all compound ideas modes, substances) from internal experience (reflection)" (1999:1-see bibl.12 ). One can argue that sensism is problematic in that perceptions and judgements may differ with different individuals, leading to incessant speculation.

#### (iii)Positivism

The acknowledged founder of positivism was the French philosopher and social scientist Auguste Comte. He also came up with the invention of the term 'Sociology'. "In the context of positivism, 'positive' facts are things that can be observed or measured. Positivists argue that only that which can be observed and measured can be studied..." (Le Roux et al, 1986:174). This means that positivists regard grounding as very important in positive facts. An example would be Durkheim's statement that there is a "relationship between social integration and suicide" (Haralambos, 1980:496). This is real in that integration of people from various backgrounds, with different cultures can cause tension, alienation and personality disorganization

According to Keat and Urry "several conventionalist philosophers of science have been influenced by the later writings of Wittgenstein, and realist philosophy of science has partly been developed from the standpoint of scientific realism, a position which is opposed both to logical positivism and also to the movement of analytical philosophy inspired by Wittgenstein, Ryle and Austin"(1980:6).It must be understood that although the realist and the positivist share amongst others a conception of science as an "empirically-based, rational and objective enterprise", there is an important difference between explanation and prediction. Keat and Urry say that, for the realist, a scientific theory is a description of structures and mechanisms which causally generate the observable phenomena, a description which enables us to explain them(1980:5) It is worth mentioning how these varying accounts of positivism and realism expose knowledge as an elusive concept. After one's acceptance of positivism as irrefutable conception of the natural science, realism demands that we discover the necessary connections between phenomena, by deconstructing the observable phenomena. According to Keat and Urry..."we must get beyond the mere appearances of things, to their natures and essences"(1980:5).In a nutshell one can say that we have to peel away layers of constructed meaning to reveal the underlying layers of meaning that were suppressed or assumed in order for the phenomenon to take its actual form.

Focus will be on three empiricists:

**(i)John Locke:(1632-1704)**

According to Hamlyn, the purpose of Locke is "to enquire into the original, certainty, and extent of human knowledge, together with the grounds and degrees of belief, opinion and assent, without meddling with the physical consideration of the mind"(1987:168-169).This implies that he is concerned with the limits of human understanding and one is bound to believe that Locke does not want any kind of social construct to be attached to this process, so as to give it independence.

According to Kenny, "Locke is forever talking about ideas"(1994:129).This is evident in his first book entitled 'Of Innate Notions' which contains a sharp attack on the notion of innate ideas. Hamlyn says "Locke is concerned with two things: (i)whether there is innate knowledge of principles; and (ii)whether what he sometimes calls the materials of that knowledge; the ideas on which the knowledge is based, are innate. That distinction between knowledge and ideas affects the whole Essay"(1987:169).One might assume that Locke's preoccupation or obsession with ideas was prompted by his intellectual rival, Descartes', who according to Kenny wrote that "an infant in its mother's womb has in itself the ideas of God, itself, and all truths which are said to be self-evident, it has these ideas no less than adults have when they are not paying attention to them, and it does not acquire them afterwards when it grows up"(1994:128).

One can argue that innate ideas do exist, and they mature with time because exposure to externalities. The outside world will decide on their validity. Marshall says that Peter Berger and Thomas Luckman, in "The Social Construction Of Reality"(1966), view social processes as a dialectic of externalization and internalization"(1994:167).According to Stumpf, Lockes's fellow empiricists "Bacon and Hobbes had urged that knowledge should be built upon observation" (1983:254).This means that knowledge should be a product of scientific enquiry. Locke discarded the notion that we all came here with a standard stock of ideas built into the mind(Stumpf,1983:257).He said the origin of his ideas is experience, and experience takes two forms, sensation and reflection. What he elucidated was that we cannot have the experience of reflection (mind taking note of its operations) until we have had the experience of the sensation (ideas).

(ii)**George Berkeley: (1685-1752)**

Berkeley was influenced by Locke although according to Kenny, his importance in philosophy is largely as a critic of Locke(1994:140).His principal criticisms focus on three heads: the notion of abstract general ideas, the distinction between primary and secondary qualities, and the concept of material substance"(1994:140).Because of Berkeley's criticism, Locke's empiricism is reduced into a unique form of idealism.

**1. ABSTRACT IDEAS**

Locke's view that words represent ideas and general words correspond to abstract general ideas has come under attack from Berkeley. Locke says in his Essay, that "according to the representational theory, a general idea is a particular idea which has been made general by being made for all of a kind, in the way in which a geometry teacher draws a particular triangle to represent all triangles"(Kenny,1994:140).There is also what Kenny calls the 'eliminative theory', according to whom the general idea is a particular idea which contains only what is common to all particulars of the same kind.

Berkeley is interested in how Locke combines features of the two theories. According to Kenny, Berkeley says it "takes pains and skill to form the general idea of a triangle-for it must be neither oblique nor rectangle, neither equilateral, equicrural nor scalenon, but all and none of these at once"(1994:140).One can say that eliminative theory and representational theory are two sides of the same coin in that in eliminative theory, the idea becomes a general idea when the unwanted group is eliminated. With regard to the representational theory, an idea becomes a general idea when all subscribe to it. Kenny accuses both Locke and Berkeley of using the word 'idea' to mean to mean indifferently a sense-experience, an image, a secondary quality, or a concept(1994:140).

**IDEAS AND QUALITIES**

We must move from the premise that one of Berkeley's views is that distance is not something immediately perceived but

something constructed from certain orderly relations of the ideas of different senses in the mind. According to Shand, "the equating of ideas with sensible things, which thereby makes sensible things mind-dependent, eliminates each of the following forms of skepticism produced by materialism and Cartesianism" (1993:132):

(a) "The existence of sensible things. The problem is solved because the skeptic cannot drive a wedge between ideas if the objects of sense are ideas.

(b) "The nature of sensible things. Science aspires only to map the regular correlations between ideas, that is between phenomena.

(c) "The existence and nature of God. The problem is eliminated by making God indispensable. God's existence is seen as the real cause of those ideas that are not caused by our imaginations and as the sustainer of those ideas we do not actually perceive, the supposition that God does not exist is refuted by almost every experience we have.

(d) "How matter and spirit can interact. This problem is eliminated by denying the existence of material substance; then the problem of interaction between spirit and matter simply does not arise" (1993:132-133)

The implication here is that Berkeley believes that 'anything' that can be sensed actually exists.

#### **THE CONCEPT OF MATERIAL SUBSTANCE**

(i) One should also note that Berkeley is an opponent of materialism. According to Shand, Berkeley it is impossible for matter to have only primary qualities such as extension, solidity, movement. He believes that we cannot conceive of a shape which is no colour, and therefore the conception of matter required for materialism is impossible. He instead suggests that all matter should have all secondary qualities, from which primary qualities cannot be separated (1993:133). One can assume that he is referring to qualities such as weight, sound, taste and identity. To say that every matter must be able to move is not accurately correct in that not all matter is a living organism;

(ii) Berkeley says that what exists has got to be a product of something. In his own words he argues that "it is a logical contradiction to talk of conceiving of a thing which exists unconceived" (Shand, 1993:133). But Shand sees this as a fallacious argument in that it is not possible for 'A' to be conceived of, and at the same time both exist and be a thing unconceived, but that does not mean at some other time 'A' could not exist as an unconceived-of 'A', thus there is nothing contradictory in 'A' existing unthought about (1993:133). This means that 'A' does not necessarily have to be thought about in order to exist.

(iii) Berkeley argues that if secondary qualities (colour, taste, heat, sound, etc.) are ideas in the mind, as Locke does, then the same applies to primary qualities (shape, size, motion, solidity), for these two vary with the observer (Shand,

1993:133). Colour is arguably not an idea in the mind because one can see it. It is not clear whether, according to Berkeley, secondary qualities also include things that one cannot touch.

(iv) This argument pertains to pain and heat. Berkeley holds the view that when we are close to the, heat is felt as pain in the mind, and when we are a distance away the heat is merely felt as warmth (Shand, 1993:133-134). The argument here is that since the pain is not in the fire, then it must be in the mind.

(v) Berkeley compares the notion of matter with what Locke has to say about substance in general. Locke suggests that substance is characterized by being the 'support' of all qualities, the qualities cannot subsist alone. But Berkeley argues that an attempt to give substance a positive characterization is impossible, since to do so would attribute qualities to it. This would render substance a qualityless 'something'. Although Berkeley sees this as a perfectly flawless argument, he believes that no materialist would suggest that matter is qualityless (Kenny, 1994:134). This would mean that substance and qualities cannot exist in the absence of the other.

DAVID HUME (1711-1776) He is said to "have carried empiricism to its fullest expression. He believed the scientific method could lead us to a clear understanding of human nature and in particular the workings of the human mind" (Stumpf, 1983:270-271). Some commentators find it difficult the precise position of Hume.

The difference with Hume was that if we used the scientific method to determine truth, we must according to Stumpf, "accept the limits of knowledge" (1983:272). Probably he was expressing doubt about the efficacy of scientific enquiry in clarifying pertinent issues. According to Hamlyn, the doctrine that every simple idea is derived from simple impression is the center-point of Hume's empiricism, and that it is crucial for his philosophy" (1987:190). Both Hume and Locke opine that impressions are of sensation but disagree on reflection because Hume's account seems different from Locke's. He (Hume) holds the view that impressions are distinguishable from ideas by their "superior force and vivacity" (Hamlyn, 1987:190). This might be the case because of the complexity of impressions. Hamlyn sees this as a very important principle, and one which Hume inherited from Berkeley which is: "one cannot distinguish between impressions and ideas by reference to anything outside them, only by internal properties such as their liveliness" (1987:190). One can simplify this by making reference to pain. The only person who feels the pain is the one who is hurt and nobody else. One cannot for example, merely look at the husband and confirm that the wife is feeling pain, nor can the husband know how much pain is felt by the wife.

#### **NATURALISM**

According to Knight, naturalism "consists essentially in looking upon nature as the one original and fundamental source of all that exists, and in attempting to explain everything in terms of

nature"(1999:1). What this means is that all events find their satisfactory experience within nature itself. There are two traditions that claim to understand the problem of naturalism. These are the naturalist and anti-naturalist traditions. The former claims that "the sciences are (actually or ideally) unified with positivist principles. For the latter the subject matter of the social sciences consists essentially of meaningful objects, and their aim is the elucidation of the meaning of these objects"(Bhaskar, 1979:241). A naturalist tradition's association with positivist principles means that it relies on measurement and observation in order to study a phenomenon. The anti-naturalist tradition, one would argue, looks beyond observable phenomena by enquiring as to what the object is made of.

Bhaskar argues that the two disputants ironically share a common error in accepting an essentially positivist account of natural science, or at least an empiricist ontology. One would argue that there is nothing wrong in adopting a positivist approach when interrogating natural science, because essentially positivism deals with things that can be observed and measured. It must be understood that there is a fundamental contrast between social and natural science. With regard to the latter the "discovery of intelligible connections in its subject matter is not equally the goal of natural scientific explanation"(Bhaskar,1979:2). Instead this applies to social science.

It is argued that the recent developments in the philosophy of science permit a reconsideration of the problem of naturalism(Bhaskar, 1979:3). These could be the varying views brought about by the naturalists and anti-naturalists. For example, Winch's anti-naturalism depends on empiricist theories of existence and causality. Now Bhaskar argues that if science employs a causal criterion for ascribing reality and causal laws are tendencies, his contrast collapses(1979:3). This means that if causal laws apply to science, then it applies top both natural and social science, and more important is it has become a tendency;

Bhaskar defines naturalism as the thesis that there is (or can be) an essential unity of method between the natural and social services. It has two species: reductionism which asserts that there is an actual identity of subject matter as well, and scientism, which denies that there are any significant differences in the methods appropriate to studying social and natural objects, whether or not they are actually (as in reductionism) identified (1979:3).What is noteworthy is that these factions of naturalism talk in universals almost to a point of denying an opposite view the right to existence. In a nutshell, science is just whatever scientists do, and it is expected of them to differ in the way they solicit knowledge.

#### **ONTOLOGICAL REALITIES**

Marshall defines ontology as "anyway of understanding the world, or some part of it, must make assumptions(which may be implicit

or explicit) about what kinds of things do or can exist in that domain, and what might be their conditions of existence, relations of dependency, and so on(1994:367).He goes on to say the core of the philosophical project of metaphysics is to provide an ontology of the world as a whole. One will note that by focusing on the "world as a whole", there will be a systematic arrangement of the relations between the social and natural sciences. Focus will be on Kant because he is both an empiricist and rationalist.

## **KANT**

We must move from the premise that Kant is both an empiricist and a rationalist, in that he "tried to reconcile rationalism empiricism by arguing that while knowledge itself comes from experience, the mind uses reason to structure knowledge"(Prof. McLeary, see bibliography-No.11).Kant is described as a person who was more interested in science than philosophy, with the aim of making it truly scientific(Kenny, 1994:167).This shows that he really is both an empiricist and a rationalist in that he felt philosophy should also undergo the same rigorous interrogation as other academic disciplines, including the natural sciences.

According to Kenny "the distinction between 'a priori' and 'a posteriori' is central to Kant's undertaking. 'A priori' knowledge which is independent of all experience...In addition to 'a priori' knowledge there is also empirical knowledge, knowledge derived from experience which Kant calls knowledge 'a posteriori'(1994:167).With regard to a priori knowledge, one can cite space as an example because yet one knows it exists. 'A posteriori' refers to things we have seen, or touched or even felt. According to Shand, "knowledge for Kant, as for Leibniz, had to be necessary and universally valid"(1993:161).We are tempted to believe that if information was not universally accepted as fact, then it would not be regarded as knowledge. Kenny says Kant regarded all of mathematics as belonging to this realm: "arithmetic and geometry were synthetic, since they extended our knowledge widely beyond pure logic, and yet they were a priori, deriving not from experience but from intuition"(1994:168).This is an interesting philosophical statement in that two contradictory phenomena are combined to produce something qualitatively new, independent of experience, an understanding of which does not require one to be taught or even think hard.coeb ebr seebew oreb ebk ineb foeb eb!

Kant says "there are two pure forms of sensible intuition, serving as principles of a priori knowledge, namely space and time"(1994:169).It must be noted that both time and space can never be touched. After having asked himself what time and space were, he then came up with the answers. "He made a distinction between a metaphysical exposition of an a priori concept and a transcendental exposition. Marshall defines metaphysics as a philosophical project which devises theory of the nature or structure of reality, or of the whole world. Transcendentalism

is the belief that God stands outside and independent of the universe of which he is a creator"(1994:325&538). Kant says that the metaphysical exposition of space and time tells us that space and time are presupposed by, not derived from, experience; that we can imagine space and time without objects, but not objects without space and time, and that there is a single space and a single time, infinite in each case"(Kenny, 1994:169). We are bound to believe that objects would not exist if space was non-existent, and that they have time within which they can exist. 'The transcendental exposition of the concepts of space and time shows how we can know truths about space and time which are not analytic and yet are a priori"(Kenny, 1994:169). The implication here is that we do not necessarily have to experience a thing in order to know that it exists.

### **CONCLUSION**

It has become apparent that social enquirers happen to tamper with the supposed objective enquiry by allowing their personal values to feed into their conclusions. Accepting that matters of value are matters of fact, their values must be 'correct'. "The mushrooming of social study over the last 100 or 150 years was partly inspired by the notion that social study was a matter of searching for general laws"(Pratt, 1978:72). General laws, one would argue, are rather required by the natural sciences. With regard to social science, a particular kind of human behaviour cannot always be attributed to a particular kind of a problem. Suicide, for example, is not seen by every person as a solution to marital problems. Also, capital punishment does not necessarily deter potential murderers. Within natural science it is usually possible to use rigorous investigative techniques by bringing the objects under study into the laboratory. It is not as easy with humans, because one has to get approval from eg, the individuals themselves or the ethics committee. In a nutshell, we cannot employ the methods of the natural sciences in understanding the social world.

This is evident in Winch's statement that "...whereas the scientist investigates the nature, causes and effects of particular real things and processes, the philosopher is concerned with the nature of reality as such and in general"(Hindess, 1977:3). The two methods are inextricably intertwined despite their different approaches in their quest for valid knowledge and ability to predict. To declare social science a misnomer is arguably inaccurate in that both epistemic and ontological enquiries are social products employed in pursuit of knowledge for the benefit of society.

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