THE METAPHYSICS OF CHANGE: A PHILOSOPHICAL ANALYSIS

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Abstract

All things are subject to change and nothing abides or remains the same forever, says Heraclitus. Change is inherent in every aspect of reality or being. It is the most pervasive element in nature and an important inevitable denominator in all material being. In fact, change occurs in every sphere of human life and activity. The understanding of change is very important for an adequate or proper understanding of the world we live in as well as how to adapt in it. Many disciplines – science, religion, psychology, etc. – study and address change, but it is important we understand the metaphysics of change and its principles from a philosophical perspective, which critically examines the “spirit” of change. Here, we need to understand, in the first place, why things must change, that is, why it is in the nature of all material beings to experience change. How and when things change, and to what they change into are not the primary concern or focus of this paper. This research seeks to understand the metaphysical reason why things undergo change. This, the paper argues, is defined in the fact that change is a natural principle and part of the being-ness of all beings. It is in the nature of all things to undergo change. God, for instance, does not change because it is not in his nature to change. The question – why change – is largely neglected by scholars, and to understand it implies to come to grips with the reason and metaphysics of change, which will enable one to always embrace change rather than shy away from it whenever it comes, and learn to change alongside with change itself.

Keywords: Change, metaphysics, philosophy, material being, science, religion, psychology.

Introduction

The understanding to change is very important for an adequate understanding of the world we live in and how best to adapt in it. Change is in every aspect of reality; it is the most pervasive element in nature. When there is no change there is no continuity and when there is no continuity there is no change. Continuity presupposes change. Change has it basis in nature independent of the thoughts and perceptions of many. It is the internal or intrinsic properties of a thing which
is extrinsically related to external objects. Change is an important denominator in human life and activity. It is good and valuable, hence, we need to change our attitudes to things and people around us in order to lead a good and happy life. According to Ogungbure,

Change is the spice of life and life is spiced by change. In the same way, change is also the spice of philosophy and its diverse concerns and formulations. One cannot fully comprehend the present flow of ideas without some degree of recourse to the reflections of the past; and the projection into the future is often a composite reflection on the past and the present circumstances and ideological preoccupation (2020).

Change is the only unique phenomenon amid others that cannot but remain unchanged. It is a very important metaphysical concept that has provoked a lot of philosophical and scientific reflections. In fact, the problem of change is one of the oldest controversial philosophical problems that the early or pre-Socratic philosophers tried to grapple with. But their inability to contend with and solve this problem is one of the factors that weakened pre-Socratic philosophy. In the view of Onyeocha,

If all reality is constantly changing, then nothing can ever be identifiable either in its form or in its aspects, or in its nature or in its purpose. As a result all discourse would be impossible. True knowledge itself would be impossible, since everything would be fleeting perception. There would really be nothing to know, since genuine knowledge and discourse must be about what is, and not what is not (1995: 108-109).

The pre-Socratics attempted a rational understanding of the world with the philosophical notion that things change into one another. Therefore, there must be some common substratum, some ultimate principle, and some unity underlying diversity. They were faced with the fact of the many, of the multiplicity, of diversity, and attempted a theoretical reconciliation of this evident plurality with the postulated unity. Their philosophy centred around the external world, the object, the not-self, man, etc, but their ultimate concern or interest was in the not-self. Their various attempts to account for the causes of these changes marked a transition from polytheistic mythology to a self-moving monism (Smith 1934: 5). They queried about the material element or urstoff out of which the world was made. They wanted to know if actually the material universe was brought about by means of transformation or changes, thus, making the problem of change: the problem of the one and the many a
fundamental concern in philosophy till date. In trying to understand the change of things around them, their originality, destruction and transmutation into one being and another, they objectively expressed their thoughts. They attempted to account for both the persistent and changing features by portraying the world in terms of certain stable, constant element or elements such as water, air, fire, earth, et cetera, which constitute the real and permanent aspect while the rest were in flux in the world of appearance (Madu 1997: 26). Thales, Anaximander, and Anaximenes recognized water, the unlimited Apeiron and air respectively as a single underlying principle. Pythagoras maintained his numbers, Heraclitus maintained fire, but insists on his panta-rei in contradiction to Parmenides who insisted that reality is one, permanent and unchanging. This opposing view between Heraclitus and Parmenides is therefore the baseline of our research: the problem of change in philosophy. Milvic Capek rightly observed that:

Change indeed is so pervasive that only after the antithetical concept of changelessness or immutability was developed in the earliest period of Greek philosophy did change become a problem (1967: 75).

The problem which emanates from the concept of change is how things can change and still remain what they previously are, and how one and the same being can become another being. Based on this controversial philosophical problem of change, Aristotle posited his doctrine of act and potency as a solution, which proves the reality of change and multiplicity of beings. Our concern in this paper is to explain the inevitability of change, that is, why change, and show its importance in human life and existence.

Concept of Change: An Overview

The word change is etymologically derived from the Latin word mutalia, which means to become something else or to pass from one state to another. Everything given in human experience is subject to change. Everyone experiences change, and at least, has a vague implicit knowledge of what it means to change. Change is so profound that without it nothing can be said to exist or even attain perfection as such. The word change designates one of the most conspicuous and most pervasive features of our sensory and introspective experience. The objects of sense perception are not stable, they are not always remain the same; they are constantly changing. All the things in the world are unstable and in a state of constant change.
Basic to the material universe as we known it is the fact of change and destruction, while certain elements in it remain constant denominators e.g. air, water and light, others like living beings die and disintegrate. Generally, all continue to undergo displacements and mutability either in combinations or disintegrations (Iroegbu 1995: 76).

Although the study of change calls forth a variety of problems, our immediate concern at the moment has to do with the nature of change, that is, that things are subject to change. By change, we do not merely mean a change from one place to another; our understanding of change is comprehensive. For a thing to change, it means that the thing has become different from what it was before. In the words of Robert Kreyche “Whenever a thing changes it always becomes (in some sense) other than that it was before. To change, then, mean, of course, “to be different”, - never completely different, but always “somehow the same” (1959: 30). The fundamental significance of change is that it involves both sameness and difference. Nothing that changes are completely the same or completely different as Kreyche tries to explain. Change is the development of the new out of the old; something becoming what it was not.

Change is a gradual and continuous process whereby something passes from one state or phase to another especially between states before and after some events. When a thing or being differs from its original nature, when it gradually passes into another condition, takes on a specific property or attributes; becomes; when it assumes a different shape or form or undergoes a transformation or alteration in position or action, then one can say that change has taken place. Merriam Webster’s Collegiate Dictionary (Tenth Edition) records that “change implies making either an essential difference often amounting to a loss of original identity or a substitution of one thing for another”. This, however, implies that any person who passes from one state of being in which he lacks a particular perfection to another state of being in which he possesses such perfection has experienced change – transitus ex uno modo se habendi ad alimum, or put in another way – exterminus aquo ad terminus ad quem (the passing or passage from one point to another). Thus, any being that changes has definitely acquired what it previously or formally lacked.

The technical name for change is mutation, which is the passing from one state or condition to another. Change in the strict sense is a transition from one positive state of being to another. It is by way of nature that the sameness and difference is in the being, which changes. It occurs at all times and in all states. Therefore,
change is the principle of actual determination; it may be extended to include a coming to be and not out of any pre-existing subject (John, et al 1956: 64).

Change is a primary datum of consciousness. To say, then, that change is a primary datum, is to assert that it is a self-evident fact – the existence of which can neither be proved nor denied. Change occurs both in thinking or reasoning, in understanding, in size, in growth, in ideas, attitudes and opinions, in government, economy and policy, in religion, in weather and virtually in all things. In civil society or government for instance, there is what is known as “Regime change”; it is an overthrow of government or regime considered illegitimate by an external force (usually military) and its replacement with a new government according to the concept of political regime legitimacy promoted by that force. In weather, as mentioned above, there is what is called climate change. It is used to refer to changes in the earth’s climate or changes in temperature through other climatic variables like precipitation, clouds, etc. Change also occurs in the field of science, as we shall see shortly.

**Scientific Notion of Change**

Change is a universal phenomenon that can be seen or experienced in both living and non-living things. It can be noticed or experienced scientifically through series of chemical reactions, developments, compositions and decompositions as well as transformations. Water when cooled turns into ice – consisting of concepts of water, cooling, and ice; metals melt when heated; leaves fall off from the branch of its tree when old and people attribute it as due to the activity of plant hormones. These are all immanent evidences of change.

During the development of an animal from the zygote (fertilized egg) to the adult stage in metamorphosis, there are series of gradual changes that take place. For instance, in complete metamorphosis the fertilized egg hatches into a larva, the larva in turn undergoes developmental changes to pupa (a resting stage) and pupa changes to adult. Houseflies, butterflies and mosquitoes are typical examples. Plants also undergo changes through pollination, which is the transfer of pollen grains from the anthers of the flower to the stigma of another flower of the same species. In germination, changes occur; it has to do with all the changes that take place from the time the dry seed is planted until the resulting young plant establishes itself. However, before the seed germination, the starch in the seed is broken down into sugar by chemical elements known as ferments or enzymes. The sugar is then moved to the growing regions. This process is known as translocation. Changes also occur in blood compositions, as the blood passes...
through the lungs, small intestines, urea and liver. There are also changes in human body form and proportion during pre and post natal life as well as during digestion and breathing as a result of glandular action. This type of change is known as chemical change where human beings absorb foreign substances into their body and they are changed into compounds necessary for their live processes.

Chemical changes are designated as fermentation and putrefaction. Fermentation in a general usage refers to the microbial decomposition of plant materials, which contains mostly carbohydrates, leading to the formation of alcohols or organic acids. Putrefaction refers to the formation of unpleasant products by the decomposition of high protein materials such as meat and egg. Meanwhile, changes that occur when substance undergoes chemical changes cause the release of chemical energy. In chemistry, certain physical changes (matter) interest the chemist, while certain chemical changes (energy) interest the physicist in physics, that is, the change of one chemical element into another (as by nuclear decay or radioactive bombardment). While the physicist deals with mechanical changes and energy, the chemist examines the changes undergone by matter.

Scientifically, there are series of chemical reactions that bring about sustenance and construction of new protoplasm as well as the breaking down and release of materials of old protoplasm; properties of parent cell are transferred to the daughter cell. This can also be seen in the transmission of traits (genetics) to the offspring from both parents, one from each body part unite in sexual reproduction to form a new individual which can resemble in particular ways their parents and siblings. Even puppies always grow to become dogs and usually have features of their breed. This form of change is sequel to any alteration in the inherited nucleic acid sequence of the genotype of an organism.

Nature as the Principle of Change

The study of nature is basically the study of change and the things that are subject to change. The idea of nature as used by Aristotle is such that identifies final end or cause of a thing. It is what a thing becomes when perfected or in a state of completion. Everything moves towards the accomplishment of a natural end. We can identify a things nature by seeing what it is when fully developed and what changes it undergoes in that movement. For instance a tree or frog that grows will still remain the same tree or frog; the adult mature man is still the same human being that was a baby, a child, a young man. Thus, for Aristotle,
what has changed must have been changing, and what is changing must have
changed; changing is preceded by having changed, and having changed is
preceded by changing (Copleston 1946:50). Nature, according to Aristotle,
therefore, is an inner principle of change and motion. He identifies the nature of
a thing with the end towards which such things moves (Ross 1964: 236).

Those things are natural which, by a continuous movement originated from
an internal principle, arrive at some completion; the same completion is not
reached from every principle, nor any chance completion, but always the
tendency in each is towards the same end, if there is no impediment (Ross
1964: 116).

Nature is an organic system of things whose forms make it possible to arrange
them into classes comprising species and genera. It is thought of not as a
transcendental principle but as a collective term for all natures of all things
working harmoniously together (Ross 1964:68). As a matter of clarity, Aristotle
regards nature as the totality of objects which are capable of initiating change
and bringing it to an end (Copleston 1946: 320).

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1964:166).

From the analysis above, everything naturally undergoes change. Nature is the
principle and causes of change. The word nature is used in its narrow sense to
mean the world, that is, the whole and totality of material objects external to us
as existents.

The Metaphysics of Change: A Philosophical Analysis

Change is for Heraclitus, the primary feature of all reality. Everything according
to him is in state of flux. For Heraclitus, nature exists in two forms: everything is
born of strive, and everything is in constant flux or changing. This is because fire
lives by consuming and constantly changing its material (Onigbinde 1999: 265).
According to Heraclitus, “Everything is in flux and nothing abides everything
flows and nothing stays fixed everything is constantly changing and stays the
same” (Stroke 1968). He continued “Into the same rivers we step and yet we do
nor step … after all, one does not step into the same water twice, waters disperse
and come together again … they keep flowing on and flowing away” (Norman et al. 1980). With these statements, Heraclitus equates reality with a river which flows or changes at all times. Change, for him, is the coming into being and passing away of things in the universe. With the above it can be concluded that Heraclitus’ philosophy is Panta Rei, meaning that everything is changing.

Aristotle, a philosopher of nature and change strongly believes in the cause of nature and change. He developed his entire metaphysics on the basis of change and nature. Change is both a physical and metaphysical attributes or features such that the passage from joy to sorrow, ignorance to knowledge, life to death, youth to adult depict change. Every being which changes and every being, which is capable of changing, has with it a real metaphysical component. Thus, according to Aristotle, change is real and intelligible. It is an evidence of both consciousness and unconsciousness that comes from external sensation. There are therefore two extremes or conditions necessary for change, which are known as Terminus ad quo, and Terminus ad quem. The former means starting point, which implies that in every change there must be a starting point required by such change, while the latter means end point (which indicates that there is a final state of being in change which is actual with a newly acquired and final state of being, and also actual with a newly acquired state of act. “Therefore change is the principle whereby the principle is determined to a particular mode of reality” (Sheed et al. 1955:39).

For Aristotle, the word change means many things, including motion, growth, decay, generation and corruption. Some of these changes are natural, whereas others are products of human art. Aristotle’s account of change is designed to explain both how change in general is possible, and how coming into existence is possible. He indicates that change does not involve bringing together formless matter and matter-less form. On the contrary, change occurs always in and to something that is already a combination of form and matter and that which is on its way to becoming something new and different. He argues that forms are powerless to explain changes of things and a things ultimate extinction. He agrees with Heraclitus that change is the sense of a passage from terminus a quo to a terminus ad quem. According to Aristotle, for change to take place there must be a substratum which changes, which receives a new determination.

Aristotle thus defines change with his concept of potentiality and actuality. Change, he tells us, is “the actuality of what is potentially, qua such.” (Aristotle Physics, Bk. 3, Chapter 1). Change is an actualization of a potentiality; but a
potentiality involves an actual being, what is not yet that which it would be. Aristotle saw that every being that is capable of change must be composed of two distinct but though mutually interrelated principles called act and potency. Thus, for him, reality is neither a mere flux nor stagnant but is evident in the universe. Hence, “to be means to be potentially or actually” (Nelson 1954: 35). Aristotle insists that in every case of change there must be three basic ingredients namely, matter, form and privation or exigency. Matter is the particular subject that underlines the substance, that is, the substance comes into being from it. Form is what the matter acquires when a first substance comes into being. Privation is the necessity presupposed by change. It is not a positive element in the sense that matter and form are positive elements.

Karl Marx has a notion of change. Central to his idea of change is the concept of Dialectics or Dialectical Materialism. Change for him means the emergence of new structures, novel forms. What causes change according to Marx is simply the quantitatively alteration of things, which leads to something qualitatively new (Ogungbure 2020). This means that even ideas change. One thing constant in nature as well as in philosophy is change. Change is a constant variable in philosophy upon which philosophical ideas thrive. Marx believes that materialism is an economic law of motion which elicits change in the society. This further explains why change is known as a universal law of nature. Everything, from small to big, from humans to nonhumans undergoes ceaseless and rigorous law of change. Stumpf records it thus:

Materialism meant to Marx that the world as we see it is all that there is, that the materialist outlook on the world is simply the conception of nature as it is, without any reservations. Moreover, with Engels he agreed that all of nature, from the smallest thing to the biggest, from a grain to sand to the sun, to man, is in a ceaseless state of change from one epoch to another in accordance with the rigorous and inexorable laws of historical motion (1986: 228).

In fact, modern and contemporary science and philosophy owe a lot to the metaphysics of change, especially to Aristotle and his doctrine of act and potency, which he used to explain the metaphysics of change. Contemporary philosophical issues such as Whitehead’s theory of “Process and Reality”, Darwin’s “theory of Evolution”, which were later re-examined by Henry Bergson. The metaphysics of change still flourishes in various philosophical and scientific deliberations till date.
Conclusion

Change is evitable in all things. It is the anchor on which any development can be propelled, hence, philosophical developments are the consequences of change in the social, historical, cultural and even scientific facts (Fadahunsi 2002:164). Change is therefore the spice of life; it makes life and living meaningful, exciting and quite interesting. Many people try to shy away from change without knowing that humans are beings-to-change, that is, change is a necessary integral part of our being and development, and that we must readily embrace always. We must therefore stop resisting change since it is the only constant in life. How would life be without change; change brings forth new beginning and gives insights about things. It makes us flexible and enables us to adapt to new situations. Human beings change activities like other animals (eating, sleeping, moving about), and they also change in their thoughts and desires. They grow in knowledge and acquire virtues and vices. Each one of beings undergoes a real change within its being. The tree or frog, for example, that grows will still be the same tree or frog. The adult mature man is still the same human person who was a baby, a child, a young man. Thus, what has changed must have been changing, and what is changing must have changed; changing is preceded by changing. Change is both a physical and metaphysical attributes and features, such that the passage from joy to sorrow, ignorance to knowledge, youth and adult depicts change. Change is an evidence of both consciousness and unconsciousness that comes from external sensation. Every being which changes and every being, which is capable of changing, has with it a real metaphysical component. Change is there real and intelligible. To deny change would in fact be to deny the world of reality, which would perhaps amount to an illusion. Change is a universal natural law.

Works Cited


