Chapter-IV

Substance and Causality—A Comparison

In the preceding chapters, attempt has been made to give an exposition and critical assessments of material substance and causality in the philosophies of Locke and Kant. This chapter is devoted to present a comparative account of both these concepts viz. substance and causality in their philosophies. Here, we try to show both similarities and differences of their standpoints and in this process to bring out their interrelations.

In the first chapter, while tracing Locke's philosophy from his predecessors, it has been noticed that Locke's thought is guided by the then existing science. Descartes, who was a mathematician, influences Locke immensely. Locke under his influence accepts the dualism between mind and body and combines this dualism with his empiricism. This results to regard mind as the subject of knowledge, sensation and reflection as the two sources of simple ideas, and material substance in its turn, being caused by the ideas as the object of knowledge. It has been also observed how Newton, a close friend of Locke helps him to review the problems of substance scientifically. In fact, it is because of his commitment to science that Locke accepts the independent existence of material substance.
This concept of material substance, which Locke places under complex ideas, are formed, as it has been seen, from simple ideas through the operation of the mind, such as comparing, compounding and abstracting. Locke states: "complex ideas, however, compounded and decompounded, though their number infinite and the variety endless where with they fill and entertain the thoughts of man..."\(^1\) But though there can be endless variety of complex ideas Locke divides them under three heads viz. substance, mode and relation. And the concept of causality falls under the head relation. In fact, the operation of the mind through which these complex ideas are formed are nothing, but the rational capacity of man to acquire knowledge, and knowledge as has been already discussed in the second chapter, is the agreement or disagreement of ideas. So, the idea of substance is formed when the mind observes that certain simple ideas go constantly together and so presuming that they 'belong to one thing' and 'are united in one subject', it call them by a single name. Substance in which, qualities inhere are mainly of two kinds--primary and secondary. But as it has been shown, whereas primary qualities resemble what is in material object themselves, secondary qualities do not. Similarly the concept of causality is formed to explain the causal relations that we observe in nature.

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Accordingly, substance and causality both are necessary to explain knowledge of objective reality.

Like Locke, Kant is also guided by the then existing science. His formulation of substance and causality are the reflections of this trend. Here Newton plays a common bridge between them. But there is a difference too in their interpretation. Whereas Locke interprets Newton materialistically, Kant transforms the ideas of Newton within his phenomenalistic framework and regards substance and causality as the categories of understanding. In case of Locke, Descartes plays the immediate impetus, whereas in case of Kant, it is Hume. Hume's assertion that all our impressions are discrete and unconnected makes any scientific knowledge impossible. For if there is no necessary connection, then no universal laws can be formulated and naturally scientific knowledge will be impossible. Kant realizes this and as his mission is to establish the objectivity of science, he reintroduces the universal element in our experience. The empiricists assert that all knowledge is derived from experience. Kant agrees to this, but asserts at the same time that, though all knowledge begins from experience, it does not follow that they arise all out of experience. According to Kant, the possibility of knowledge depends upon the mind's capacity to synthesize the manifold given in sense, which, without such synthesis can be for consciousness not even a chaotic manifold. Whereas for
Locke, the mind is active in forming the ideas of substance and causality, for Kant, this synthesis is performed by the synthetic unity of apperception. The sources of knowledge which synthesizes this manifold are, according to Kant, understanding and reason. Kant shows that it is an apriori synthesis—one following universal rules of combination inherent in the faculty of apprehension itself. It is this universal element which the empiricists exclude from their account of knowledge. Thus, the empiricism of Locke which culminates in Hume, takes the form of critical method in Kant. Both of them are trying to establish the objectivity of knowledge that are necessary for the advancement of science. And as they come from the same background, that is, Locke started his career as a medical man and Kant, as a geographer, this fact assist them to view the problems scientifically.

These two concepts viz substance and causality, both Locke and Kant formulate for the acquisition of knowledge. And as knowledge is not possible without something permanent and enduring, so both of them conceive substance as a permanent substratum.

For Locke, the concept of substance and causality are the complex ideas, whereas for Kant, these are the categories of understanding. Causality is a kind of relation for Locke, which operates through power, similarly for Kant, substance and causality both are placed under the head relation.
Locke defines causality through power. According to Locke, the real foundation of causation is power through which one material substance acts upon the other and in this way, certain transformations are brought out. Like Locke, Kant too defines causality through power and action. Kant states that causality leads to the concept of action, this in turn to the concept of force and thereby to the concept of substance. Thus, causality brings changes in, through power among substances.

The above similarities regarding substance and causality, as we have dealt in detail in the preceding chapters, are largely due to their commitment to scientific knowledge. And Newton, as it is stated earlier, influences both Locke and Kant. Locke, a close friend of Newton finds his views on natural science quite interesting. And so good their friendship that Newton even wrote in English a simplified version of the proof, that elliptical orbits require an inverse square force. To reemphasize this relation of Locke and Newton, we are quoting one important note. J.T.Desaguliers, a physicist and a member of the Newtonian circle narrates:

The great Mr. Locke was the first who became a Newtonian philosopher without the help of Geometry for having asked Mr. Huygens whether all the mathematical propositions in Sir Issac’s Principia were true, and being told them for granted and carefully examined the Reasoning and Corollaries drawn from them, became
Master of all the Physics, and was fully convinc'd of the great Discoveries contained in that Book.²

With Kant, as we have discussed in the third chapter, Newton's name is inextricably connected. Kant conceives the categories of substance, causality and reciprocity under the influence of Newton's three laws of motion viz, matter, force and reaction.

We have dealt in the second chapter while discussing substance, that, according to Locke, the real essence of natural kinds are not knowable. Almost using the same language, Kant argues that no empirical concept can be strictly defined. He holds that we can explain what the substances gold and water are, but cannot define them since such concepts are always liable to change where new observations and discoveries may add or remove predicates from the concepts of such kinds. Even pure concepts of the understanding like cause and substance, cannot have definitions which we are justified in thinking are complete. These concepts are 'given' to us in a confused form in perceptual experience, and the parts of the definition of such concepts can only be imperfectly appreciated by limited nature of our experience.³

Not only this, regarding the unknowability of real essences of natural kinds, Locke states:

Had we senses acute enough to discern the minute particles of bodies and the real constitution of which their sensible qualities depend, I doubt not but they would produced quite different ideas in us. 4

This limitation of our senses, Kant states in the Critique, but in a different context:

Thus from the perception of the attracted iron filings we know of the existence of a magnetic matter pervading all bodies, although the constitution of our organs cuts us off from all immediate perception of this medium... were our senses more refined, come also in an experience upon the immediate empirical intuition of it. 5

So, both Locke and Kant expresses the inability of our senses to perceive the real constitution of things.

In fact, if we place any philosopher in the historical perspective, it can be seen that the shadow of time always play a crucial role. And as both Locke and Kant want to enquire the capability of human understanding, they both find in their own way of approach to proceed scientifically. It has been shown previously that Kant’s objective is to elevate the position of philosophy to the status of physics. Though it seems to us that he is not very successful in carrying out his project yet this is Kant’s aim as the full title of the

4 Locke, op.cit., p.136.
5 Kant, op.cit, p.243
Prolegomena, i.e. ‘Prolegomena to any Future Metaphysics that will be able to present itself as a Science’ bears evidence to it.

Locke’s doctrine of primary qualities though not conceived in the same spirit, still have some familiarity with Kant when he enunciates:

Thus, if I take away from the representation of a body that which the understanding thinks in regard to it, substance, force, divisibility etc, and likewise what belongs to sensation, impenetrability, hardness, colour, etc, something still remains over from this empirical intuition, namely extension and figure. These belong to pure intuition which, even without any actual object of the senses or of sensation exists in the mind apriori as a mere form of sensibility.  

This ‘pure intuition’ is a kind of idea which exists in the mind.

The ‘cogito’ of Descartes plays a very important role in knowing substance and causality. The idea of material substance can be known by the mind, has an active function to play in forming the concept of substance through abstraction. Similar with that of causality, which operates through power. Similarly, Kant get influenced by Descartes’ ‘Cogito’ and this ‘Cogito’ which takes the form of synthetic unity of apperception helps him to know to the concepts of substance and causality which are derived from reason and are the pure apriori categories of understanding. There can be no enduring substance without ‘cogito’.

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6 Ibid., p.66.
Coming to the differences between Locke and Kant, regarding substance and causality, the following points must be noted. For Locke the primary qualities of substance are knowable and in that sense he is more prone to realism and materialism. This is revealed when Locke states: “It is therefore the actual receiving of ideas from without that gives us notice of the existence of other things and makes us know that something doth exist at that time without us which causes that idea in us...”\(^7\). But Kant’s viewpoint is different. Here the category of substance belongs to ‘pure intuition’ which even without an object can exist as a mere form of sensibility. For Kant, substance and causality are the categories of understanding.

Moreover, according to Locke substance is something where qualities inhere. But Kant even seems to deny that we can rightly speak of a relation between substance and accident; and for this reason he maintains that the category of substance and accident is placed under the head of relation, not because it itself is a concept of relation, but because it is the condition of relations— that is of time relations, namely succession and simultaneity.

Regarding the origination of both substance and causality, there is difference between Locke and Kant. With respect to the idea of substance,

\(^7\) Locke, op.cit, p.339.
Locke states that the general idea of substance may be grounded on plain and evident reason; and yet it will not follow that it is not ultimately grounded on and derived from ideas which come in by sensation and reflection.

Similarly regarding cause and effect Locke states: “....the notion of cause and effect has its rise from ideas received by sensation or reflection, and ...
... terminates at last in them”.

Accordingly, both the idea of substance and causality arises out of experience.

But Kant’s position is not like this. Substance and causality are apriori concepts which cannot be derived from experience. These two are the categories of understanding which are derived from reason. In Locke, experience is the result of the correspondence between the external reality and thought. But Kant holds that the facts of experience are determined by the laws of thought. Kant’s whole system rests on the establishment of this principle and it is here that he diverges not only from Locke but from the whole philosophical tradition in general. It is with reference to this procedure that Kant compares the revolution, he effects in metaphysics to the revolution effected by Copernicus in astronomy.

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8 Ibid., p. 156.
While dealing with causation Locke makes a distinction between power and motion. He says "...motion is rather a passion than an action".\textsuperscript{9} Thus, when a ball obeys the stroke of a billiard stick, "it is not any action of the ball, but bare passion".\textsuperscript{10} Motion is not something which is inherent in a material substance, but it is produced to a material substance through something outside to it. Thus, the power which brings changes to a material substance is not something inherent. The actual force which gives rise to causation is due to God.

But unlike Locke, Kant holds that the necessary causal connection belong to the phenomenal world. Locke ascribes the origin of causation to God, Kant ascribes it to the very constitution of Mind. Kant states:

Neither bodies nor motions are anything, outside us, both alike are mere representations in us; and it is not, therefore, the motion of matter that produces representation in us; the motion itself is representation only, as also is the matter which makes itself known in this way.\textsuperscript{11}

According to Kant, motion is representation through which a thing, given in sensible intuition can be known.

In case of Kant, the categories viz. substance and causality, though derived apriori from the forms of thought, yet have their application within the

\textsuperscript{9} Ibid., p.107. 
\textsuperscript{10} Ibid. 
\textsuperscript{11} Kant, op.cit., p.356
world of experience. These pure forms of thought are schematized through time. And these schematized categories find application through experience. And here time plays a vital role both in substance and causality. But in Locke, the concept of substance and causality, which are the complex ideas are given in experience through the intervention of ideas. And the knowledge that we receive through various interactions are real. Lockean theory of reality is not like Kantian theory of reality of the phenomenal object as involving constituents drawn from experience and determined by the categories.

In causality, Locke attempts to establish the empirical foundations of the idea of cause and effect in terms of power. But he does not give any real analysis of the necessary causal connections. He defines clearly the necessary connection between ideas, but in case of causality, there is no explicit statement. This results, as it has been shown in the second chapter, due to his inability to know the real essences of substance. Just as in case of substance, it is not possible to know the real essence similarly in the field of causality, Locke holds though necessary causal connections are there, we cannot observe them. But Kant analyses necessary causal connections explicitly. For Kant objective succession cannot be understood without the presupposition of the principle of causality. And necessary causal connections are there, without which we cannot distinguish between succession in our apprehension. Kant
states: "Everything that happens, that is, begins to be, presupposes something which it follows according to a rule".\textsuperscript{12} Kant argues that the above is the rule of causality without which our experience is not possible hence its validity cannot be doubted. Admitting that we are necessitated to 'cogitate' the ontological realities, the German philosopher deny that we are able to "cognize" them; our thought never can be verified. He makes the sphere of faith totally separate from knowledge. In Kantian system, within the sphere of experience, reason anticipates and experience confirms, but when reason transcends the sphere of all possible experience, antinomy results.

But in Locke's philosophy whatever we are necessitated to think we may be said to know. And it is for this reason, he proclaims that we have a knowledge of matter. So Locke makes rational certainty co-extensive with the domain of thought, while Kant restrict rational certainty to the domain of actual experience.

After comparing substance and causality in Locke and Kant, here we are giving a general comparison of their philosophical outlook.

The common objective of Locke and Kant is to demonstrate that all rational certainty depends on the laws of reason. The system of each is a fabric

\textsuperscript{12} Ibid., p.218.
of intellectualism based upon an empirical basis. But as it has been already noticed that the development of every philosophy depends upon not only by the spirit of the philosopher but by the spirit of the age; and while Kant draws his inspiration directly from Hume, Locke derives from the Cartesian. In case of Kant, we find that he is more prone to the analysis of intellect, whereas Locke, the analysis of the senses; the logical element predominates in one; the esthetic element in the other. and this different proneness determines every step in the progress of the two philosophers. Both agrees in the repudiation of innate ideas; and in the recognition of innate forms of thought; but while Kant lays emphasis on the forms of thought, Locke is anxious to dispel the illusion of innate ideas. Both acknowledge the origins of ideas in sense, and the genesis of ideas by the understanding; but while Locke devotes himself to the question of the origin, Kant gives priority to the question of genesis. They both recognize two species of knowledge, the one universal and the product of reason; the other particular and the product from experience; but while Locke is constantly upholding that our experimental knowledge cannot possibly be the product of reason, Kant is constantly upholding with equal emphasis that our rational knowledge cannot possibly be produced from experience.

In conclusion, it may be said, though Locke states that reality is independent of the knowing mind, to be found in material substance,
characterized by the primary qualities, he is in the end drawn to a conclusion very similar to that of Kant. For behind the perceptible substance there is the unknown real essence upon which all the perceptible qualities depend. This, like the Kantian thing-in-itself, represents the empty reference to a reality conceived as wholly disparate from our experience.