UNIT 2 BEING AND CAUSALITY

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2.0 OBJECTIVES

The Principle of causality states: 'whatever happens or becomes must have a cause for its happening or becoming'. The expression 'whatever happens' means 'whatever begins to be or to exist'; 'becomes' means 'whatever passes from potentiality to actuality'. Hence the principle can be reformulated as follows: Whatever passes from a state of non-existence into a state of existence must have an efficient cause for its existence. This Unit is designed to explain:

- The essential nature of cause
- Main divisions of cause
- Cause in its relation to effect
- Cause in its relation to condition, occasion, sufficient reason, and chance

2.1 INTRODUCTION

Action always implies a change and change implies causality. The agent is the 'cause' and the action of the agent producing the change is the 'causality.' The change produced in the patient as reaction is the 'effect'. Cause is that which produces an effect. In the traditional view, cause is an ontological principle which exercises a positive influence in the production of something else. There are three factors that enter into the concept 'production': that which produces, or the cause; that which is produced, or the effect; and the positive influence of the cause in the production of the effect, or the causality. Everything depends upon this positive influence in the production in order that a thing may be called a 'cause.' For this influence to be really causal, it must affect the being of a thing in its production (positive and ontological). Production means the bringing of a substantial or accidental thing from a state of potentiality to a state of actuality. Such a production evidently affects the 'being' or entity of a thing in some productive manner. This positive productive ontological (real) influence on the being of a thing is the most important factor in causality. Mere external sequence or connection on the part of two things is not sufficient to bring them into the relation of cause and effect. For example, the fact that one train follows another along the tracks establishes no causal relation between them; for the connection between them is purely extrinsic. Cause cannot be a purely logical principle; for

a purely logical influence of one thing on another is insufficient to constitute causality. For instance, the principle of non-contradiction exerts a tremendous influence upon all our thinking. Its influence is 'logical' and not 'ontological'. This principle does *not produce* our thinking, nor does it confer anything toward the production of the *entity* of our thought. For in fact it is the intellect which actually produces our thought and as such is its 'cause'. The influence of the cause may be either corporeal (e.g., seed producing a plant) or spiritual (e.g., the intellect producing thought). But in order that such an influence partakes of the nature of causality it must be *ontologically and positively productive of being* in some manner.

Cause and Principle: As we have already seen, a principle is that from which something proceeds in any way whatsoever. It implies two factors: every principle is prior to that which proceeds from it, and that this priority is grounded in the things themselves because of some special connection existing between them. 'Principle' is also distinct from 'cause'. Every cause is a principle, but not every principle is a cause. A cause is always a 'principle', because it is a thing from which another (effect) proceeds. A cause is that which exerts a positive influence in the *production* of a thing; whereas there are principles which do not produce anything. The concept of 'principle' is thus wider than that of 'cause'. For something to be a real cause three conditions must be fulfilled. First of all, the cause must be a real and positive entity. A negation or privation is never given the name of a 'cause'. A negation or privation is the absence of entity and as such is actually nothing. But what is actually nothing cannot exert a positive influence in the production of anything. Thus the cause must really contribute some *influence* in the production of the effect. For cause is conceived as a principle of production. The effect is the result of a production originated in the cause. If the cause exerted no positive influence, this production could never originate, and hence the effect would never come into being. Therefore, a mere precedence in time or place is not sufficient to be a cause. Finally, the effect must be really distinct from the producing cause. The cause 'produces' the effect. Thus it must produce something distinct from itself. If the effect were not distinct from the producing cause, the cause would of necessity produce itself, although such a production is quite absurd and impossible. Hence the effect and the producing principle must be distinct.

2.2 MAIN KINDS OF CAUSE

Two main theories have attempted to give an adequate explanation of the facts of change in the universe: *mechanism* and *naturalism*. The theory of materialistic mechanism maintains that the ultimate constituent particles of matter are homogeneous in character, actuated by purely mechanical forces which produce only local motion. According to this explanation the only causes existing in nature are efficient causes. The theory of *naturalism*, as advocated by Aristotle and the scholastics, maintains that the beings possess a 'nature,' in virtue of which they are specifically distinct substances with specific properties and activities. Each material nature is a compound consisting of a 'material' and a 'formal' element as its constituent causes. By means of their powers and actions they change other beings? either in an accidental or substantial manner? thereby acting as 'efficient' causes. Such changes do not occur in an entirely haphazard manner. On the contrary, the hierarchical arrangement of natural beings according to a definite

plan by physical laws, seems to show clearly that all things in the universe follow certain tendencies and ends. According to the theory of naturalism, thus, four types of causes account for the 'how' and 'why' of all beings: *material*, *formal*, *efficient*, *and final*.

Aristotle, the first to attempt a thorough analysis of causes, gives the following explanation of the number and character of the four causes just mentioned. "We aim at understanding, and since we never reckon that we understand a thing till we can give an account of its 'how and why,' it is clear that we must look into the 'how and why' of things coming into existence and passing out of it, or more generally into the essential constituents of physical change, in order to trace back any object of our study to the principles so ascertained... Well, then (1) the existence of *material* for the generating process to start from (whether specifically or generically considered) is one of the essential factors we are looking for. Such is the bronze for the statue, or the silver for the phial (material causes). Then, naturally (2) the thing in question cannot be there unless the material has actually received the form or characteristics of the type, conformity to which brings it within the definition of the thing we say it is, whether specifically or generically. Thus the interval between two notes is not an octave unless the notes are in the ratio of 2 to 1; nor do they stand at a musical interval at all unless they conform to one or other of the recognized ratios (formal causes). Then, again (3) there must be something to initiate the process of the change or its cessation when the process is completed, such as the act of a voluntary agent of the smith, (for instance, making a bronze statue, as mentioned in Bk. II, Ch. II), or the father who begets a child, or more generally the prime? conscious or unconscious? agent that produces the effect and starts the material on its way to the product, changing it from what it was to what it is to be (efficient causes). And lastly, (4) there is the *end* or *purpose*, for the sake of which the process is initiated, as when a human takes exercise for the sake of his health. 'Why does he take exercise?' We ask. And the answer 'Because he thinks it good for his health' satisfies us. (Final causes). Then there are all the intermediary agents, which are set in motion by the prime agent and make for the goal, as means to the goal. Such are the reduction of superfluous flesh and purgation, or drugs and surgical instruments, as means to health. For both actions and tools may be means, or 'media' through which the efficient cause reaches the end aimed at. This is a rough classification of the causal determinants of things."

If we want to determine why there are just *four causes*, no more and no less, the *necessity* lies in the following reasons: A cause is that on which the production of a being depends. This caused being can be considered in a twofold way. If we consider it absolutely, the cause of the being?making it to be actually what it is?is its *form* (*formal* cause). If we consider it as a potential being becoming an actual being, two factors are necessary to reduce it from potency to act. There must be the material factor, or *matter* which is reduced from potency to act (*material* cause); and there must be the *agent* which reduces it from potency to act (*efficient* cause). Since an agent can act only according to the tendency of its own determined nature which implies a definite direction or end; this *end* also determines the production of the caused being (*final* cause). To put it in a different way: There are four questions which can be asked of a thing, in order to explain the 'how and why' of its being. If we ask '*by what* is it made?' the answer is 'by the efficient cause.' If we ask '*out of what* is it made?' the answer is 'out of its material, its material cause.' If we ask '*through what* is it made?' the answer is

'through its form, its formal cause.' And if we ask 'on account of what is it made?' the answer is 'on account of the end or purpose which induced the agent to act.' By answering these questions we obtain the various determining factors which explain the production of the thing and make it to be what it is. Since these answers explain the whole thing in its being and production, we have all the causes which account for its 'how and why', and these causes are just four in number.

We will study these four causes further grouping them into two: intrinsic cause and extrinsic cause. An intrinsic cause is that which is inadequately distinct from the effect. The intrinsic causes are material cause and formal cause. Matter and form are constitutive principles of things entering into the very composition of their being. This is especially the case with material beings where prime matter (substantial matter) and substantial form are the essential constitutive principles which combine to constitute the material compound. An extrinsic cause is that which is adequately distinct from the effect. The two extrinsic causes are efficient cause and final cause. They do not enter into the composition of the being of things, but act upon them 'from without'. These two types of causes (efficient and final causes) are found in material as well as in spiritual beings. Their nature is more of a metaphysical character.

2.3 INTRINSIC CAUSES: MATERIAL CAUSE AND FORMAL CAUSE

Material cause: When things change, there is always a substratum (an underlying principle) which persists throughout the process of change. This substratum is something indifferent, potential, receptive, passive, determinable, and actualisable. It is that which is changed, determined, actualized. This substratum is that out of which something becomes or is made. This is called the *matter* or material cause. In an accidental change this matter or material cause is the complete substance which acquires some accidental act or form. For example, a block of marble has the potentiality of receiving the shape of a statue, a column, an urn, a fountain, a bench, a table, etc. It is the matter or material out of which any of these things can be fashioned. In a substantial change, there is the change of one substance into another as when non-living substance is changed into living substance. This substratum is the *prime matter*. It is present in all organic and non-organic elements. It is present when the elements are changed into the living substance of the plant. It is also present when the plant substance is digested by the animal and becomes animal substance. Hence prime matter is the principle of the capacity, or potentiality, of being changed from one kind of substance into another. Hence prime matter is a true cause (material cause) out of which something is made. It is the inner principle of potentiality and limitation. Formal cause: Formal cause is the correlative of the material cause. Matter and form always go together since they are related to each other as act and potency. Matter is indefinite, whereas form is definite. Matter is passive, whereas form is active. Matter is receptive, whereas form is the received. Matter is potentiality, whereas form is act. Matter is determinable, whereas form determines. Matter is actualisable, whereas form actualizes. Matter is that 'out of which' something is made, whereas form is that 'through which' a thing is made to be what it is.

Since changes are accidental or substantial, the form acquired in the change will also be accidental or substantial. An accidental form is some quality determining the complete substance, such as quality or quantity, or a modification of quality or quantity. When a drop of water freezes, the crystalline structure is an accidental form. When the mind thinks, these thoughts are accidental forms or acts perfecting the perfectible mind. In all these cases, the substance as such remains intact throughout the change. But in substantial changes, the nature or substance is transformed into a new nature or substance through the acquiring of a new substantial form. The substantial form united with prime matter constitutes a specific nature. It is that essential and constitutive principle which makes a human to be specifically a human, a lion to be specifically a lion, a dog to be specifically a dog, and so forth. Prime matter is common to all these beings. If matter were the only essential principle present in them, there would be no specific difference between them. What makes them specifically different among themselves is the specifically different substantial form present in them, determining the indifferent prime matter to be just this kind of being and no other. When the substantial form changes, the species changes. The substantial form is intrinsically united to prime matter and takes away all its indifference and indeterminateness from the latter. The substantial form is truly a cause as it assists intrinsically in the production of a being by means of a positive influence. For, together with prime matter it is a constitutive principle of the composite substance, determining it essentially in the line of substantiality and specific perfection. It actualizes the potentiality of prime matter and makes it to be a definite substance of a definite species. All material beings are thus essentially composed of prime matter and substantial form, called hylomorphic theory.

2.4 EXTRINSIC CAUSES: EFFICIENT CAUSE, FINAL CAUSE AND EXEMPLARY CAUSE

Efficient cause is that by which something is produced. A being of one kind is changed into a being of another kind by means of the action of the agent or efficient cause. Of all the causes which assist in the production of an effect by means of a positive influence, the efficient cause is recognized as a true cause which has an unmistakable influence on an effect. When a mason builds a brick wall, one's action certainly influences its making, and the mason is the efficient cause of the wall. When the expansive power of electricity drives a train along the rails, its action produces the motion and it is the efficient cause of the motion. When hydrogen and oxygen are brought together under proper conditions, their action upon each other results in the formation of water. They are the efficient cause of the new compound. And so is it with other agencies in nature. Whenever a real production takes place, the agent responsible for it is an efficient cause.

Efficient cause may be viewed from a variety of standpoints which gives rise to a number of classifications. First cause and second cause: *First cause* is the one whose causality is *absolutely independent* of any other cause or being, and on which all other causality depends. This is God who is absolutely independent of all other causes. God is the uncaused cause of all other causes. *Second cause* is the one whose causality is dependent on some other cause or being. All creatures are second causes as they depend on the First Cause. *Physical and moral cause*: A 'physical' cause is one which produces an effect by its own *direct action*. For example: the carpenter who makes a table, the boxer who defeats his opponent

by knocking him unconscious, the boy who throws a snowball through a window, the violinist who draws his bow across the strings, the philosopher who thinks. A 'moral' cause is one which induces a free agent to act. This may be done by an appeal, by a threat, by a promise, etc. For instance, a politician is a moral cause, when one induces an official to give him/her a position by paying a sum of money. A criminal, who extracts money from a victim by means of blackmail, is a moral cause. Principal and instrumental cause: A 'principal' cause is an efficient cause which produces an effect in virtue of its own power. An 'instrumental' cause is an efficient cause which produces an effect in virtue of the power of another cause. Principal and instrumental causes are correlatives; the one implies the other. A carpenter uses a saw to cut a piece of wood; the saw is the instrumental cause, the carpenter is the principal cause. A hunter kills a deer by shooting it with a rifle; the rifle is the instrumental cause performing its action under the direction and control of the hunter. It should be noted that both causes exert their own distinct causality. The saw cuts and the rifle shoots; but they would not act at all and not in this particular manner, were it not for the direction and control of the principal cause. Cause per se and cause per accidents: A cause is said to be a cause per se, if it has the natural tendency to produce a particular effect or if it is a free agent that intends freely to produce it. It is a cause per accidents, if it produces an effect toward which it has no natural tendency and without a free intention. When I take a hammer and deliberately drive a nail into a board, I am the cause per se that the nail enters the wood; but if I thereby hit my finger, I am the cause per accidents for that, because I did not intend that particular effect as the result of my hammering. Proximate and remote causes: A 'proximate' cause is one which produces its effect directly, in virtue of its own action, without using the action of some intermediate cause. When I walk, eat, push a cart, swing a stick, catch a ball, etc., I am the proximate cause of these effects, because they are the results of my own direct action. A 'remote' cause is one which produces an effect through the direct action of some intermediary cause or causes. When my finger pulls the trigger of a rifle and explodes the charge of the cartridge, a bullet is ejected which travels through the air and kills a deer at a considerable distance; the bullet is the proximate cause of the death of the deer, while the exploding charge, the action of my hand and arm, and the deciding influence of my will are the remote causes of the killing. Naturally, the ultimate cause in this particular chain of causes is myself. Total and partial cause: A cause is said to be 'total', when the *entire* effect is produced by its action; if only a *part* of the entire effect is attributed to a particular cause, it is a 'partial' cause. The masons, carpenters, plumbers, plasterers, etc., who assist in the construction of a building, are all part-causes of the construction. But when I lift a plank, push a table, walk a mile, dig a hole, throw a ball, etc., I am the total cause of these effects. Coordinated and subordinated causes: Coordinated cause is the same as partial cause and thus accounts for only part of the effect; whereas subordinated cause is a cause which depends upon another cause. If such a cause depends upon another cause for the exercise of its causality, it is called an essentially subordinated cause. Such a cause produces the whole effect, but in dependence upon the other cause. For instance, the chisel of a sculptor is a cause which exercises influence upon the whole statue, but is dependent upon the sculptor in the very exercise of its causality. If a cause depends upon another cause, but not in the exercise of its causality, it is said to be accidentally subordinated to this cause. For example, a son depends upon his father for his existence as upon a superior cause, but in the act of generating a son the latter does not depend upon

his father. Hence the son is only accidentally subordinated to his father in so far as the act of generating a son is concerned. Univocal and equivocal cause: A 'univocal' cause is one which produces an effect similar to itself in nature. For instance, coconut produces a coconut, dog a dog, human a human. Living beings, therefore, which reproduce their own kind, are univocal causes in this respect, because these effects are similar to themselves in nature. An 'equivocal' cause is one which produces an effect dissimilar to itself in nature. A painter is the equivocal cause of paintings, a writer of writings, a builder of buildings, because the effects are different in nature from oneself as their cause. Necessary and free cause: A 'necessary' cause is a cause which is determined by its nature to produce a certain effect when the required conditions are present. If I throw a stone into the air, gravity must pull it back to the earth, because gravity is a necessary cause and is determined to a definite time of action without choice. A 'free' cause is a cause which is not compelled or determined to act, even though all the required conditions for action are present. For example, a human is free in very many of one's actions, like walking, eating, smoking, playing etc. One can perform them or omit them, as one chooses.

Final cause is that for the sake of which an efficient cause acts. It is the end or intention which determines the action of the efficient cause in the production of something else. This intention or end *induces* the agent to act, and determines the *kind* and the *manner* of action so that the end or purpose may be achieved. For example, when a carpenter intends to make a chair, he selects the wood, cuts it into proper lengths, and nails them together according to a plan determined by the particular kind of chair one desires.

Exemplary cause is that in imitation of which something comes into being from the intention of an agent that determines its end for itself, e.g., drawing the picture of a flower on the board. The flower is the exemplary cause and the picture is the effect. In this definition the words a form in imitation of which indicate the idea which serves as a model, since the idea is the same as the form which a thing imitates. According to the intention of an agent - excludes the possibility that the likeness comes about by accident. That determines its end for itself - indicates that there can be question of exemplary causality only if the agent determines the end for itself and not if the end is determined by another. In other words, only in the case of rational agents who are directed in their action by their ideas is there the question of exemplary causality. The exemplary cause is a *true cause*; for it exercises a positive influence upon the being of the effect inasmuch as it influences the intellectual agent to act in a definite way. It is not an efficient cause; for it is not of itself the first principle of movement in the order of execution, but merely the form in imitation of which something comes to be. Hence it belongs to the order of intention rather than to the order of execution. It is also not formally the same as the final cause. For, formally speaking, the final cause moves the agent to act insofar as it is a purpose to be achieved; whereas the exemplary cause specifies the effect to be produced since it is the form to be imitated in the effect. However, *materially* speaking, the final and the exemplary causes are the same. For it is the specific form which, insofar as apprehended as good, moves the agent as the final cause. Insofar as it specifies the action of the agent, it directs the agent as its exemplary cause. Now we know the reason why exemplary cause is called a *formal extrinsic* cause. It is formal because it specifies the effect; it is extrinsic because it specifies the effect not from within but from without.

Effect: Effect is that which proceeds from another, totally or partially. The effects depend upon their causes ontologically and are similar to them. *Ontologically* means according to the order of Being. *Depend* means to proceed from another in some way according to its being. *Similarity* means partial *correspondence* between distinct beings. They are two kinds: positive and negative. Positive similarity is correspondence according to a perfection, e.g., two persons who have equal height. Negative similarity is correspondence according to a defect, e.g., two persons who are blind.

2.5 ALLIED CONCEPTS: CONDITION, OCCASION, SUFFICIENT REASON, AND CHANCE

Cause is an ontological principle which exercises a *positive* influence in the production of something else. In this way, cause is distinct from condition, which does not exercise a positive influence in the production of something. A condition is only a prerequisite for the action of the cause. *Condition is that which is required in order that an efficient cause can act*, but it does not contribute any positive influence toward the production of the effect itself. The distinction between cause and condition may be illustrated by the following example. A stone of fifty kilogram is firmly held in place by the suction of mud in a swamp. The effort of a single person to lift it up is in vain. Another person comes to the person's help. They then lift the stone together. Both of them exercise positive influence upon the effect, viz., the change in the position of the stone. However, if one of them limits oneself to the removing of mud around the stone and leaves the rest to the other, the one would not exercise any positive influence upon the change of position. But one's action would remove the obstacle which prevents one from lifting the stone. Here, one's role is only *dispositive* and not positive.

An *occasion* exercises positive influence insofar as it helps to induce a free agent to produce an effect. *It is a circumstance or combination of circumstances which provide a favourable opportunity for the free exercise of a cause*, e.g., a crowd is an occasion for a pickpocket to ply his trade. However, a free cause can exercise its causality even when there is no favourable opportunity. Hence occasion differs from condition insofar as its influence is positive. Occasion also differs from cause insofar as its influence is not necessary for the production of the effect.

The sufficient reason is also distinct from cause. Sufficient reason provides an adequate explanation for the 'being' of a thing. It does not have to be really distinct from the thing whose 'being' is explained by it; whereas the cause of a thing is always really distinct from it. Otherwise the thing would be the cause of itself. Hence, we can say that every being has a sufficient reason of being, but not every being is caused. If the essence of a thing is really identical with its 'being', this essence is the sufficient reason for its 'being'. But if an essence is really distinct from its 'being', the sufficient reason for its 'being' must be found outside the essence. Hence a cause is a sufficient reason for the 'being' of something else.

Chance is an effect produced by the concurrence of two or more causes which operate independently and thus produce an effect which is *unforeseen* by anyone who does not know that several causes are at work or how these causes operate. If the activity of all the causes involved is foreseen, the effect cannot be attributed

to chance. For instance, if one considers that a pirate buried the chest in a particular spot, and someone else later starts digging in exactly the same place, the treasure trove is not the effect of chance with respect to that person. But if one does not consider the effect produced by one of these causes, the pirate, the finding of the treasure happens 'by chance'. Therefore, chance exists only in the mind of one who does not know all the causes which exercise influence upon the effect.

Check Your Progress	
Note: use the space provided for your Answers	
1)	What are the main divisions of cause?
2)	Explain the relation between cause and its allied concepts such as condition, occasion, chance, and sufficient reason.

2.6 LET US SUM UP

Cause is a real principle which positively brings about an effect. A cause is always a real principle from which effect proceeds. Traditionally, cause has been identified as material, formal, efficient, and final, following the teaching of Aristotle. Later philosophers have further grouped them into two: intrinsic cause and extrinsic cause. An intrinsic cause is that which is inadequately distinct from the effect. The intrinsic causes are material cause and formal cause. Matter and form are constitutive principles of things entering into the very composition of their being. An extrinsic cause is that which is adequately distinct from the effect. The two extrinsic causes are efficient cause and final cause. They do not enter into the composition of the being of things, but act upon them 'from without.' Cause, as an ontological principle, is distinct from condition which does not exercise a positive influence in the production of something, but is only a prerequisite for the action of the cause. Cause is also distinct from occasion which provides a favourable opportunity for the free exercise of a cause. Condition is distinct from sufficient reason, which is adequate explanation for something. Sufficient reason challenges the possibility of chance, which is an effect produced by the concurrence of two or more causes operating independently and thus produce an effect which is *unforeseen* by anyone.

2.7 FURTHER READINGS AND REFERENCES

Aristotle. *Physics*. BK.II, Ch. III. Translated by P.H. Wicksteed and F.M.Cornford London: Harvard University Press, 1929.

Bittle, Celestine. *The Domain of Being*. Milwaukee: Bruce Publishing Company, 1950.

Celestine N. Bittle, *God and his Creatures*. Milwaukee: Bruce Publishing Company, 1953.

Koren, Henry J. *An Introduction to the Science of Metaphysics*. Milwaukee: Bruce Publishing Company, 1963.

Owens, Joseph. *An Elementary Christian Metaphysics*. Houston, Texas: Center for Thomistic Studies, 1985.

Panthanmackel, George. "Causality." In: *ACPI Encyclopedia of Philosophy*, Vol. I. Edited by Johnson Puthenpurackal and George Panthanmackel. Bangalore: Asian Trading Corporation, 2010.

Panthanmackel, George. Coming and Going: An Introduction to Metaphysics from Western Perspectives. Bangalore: ATC, 1999.