## The Law of Causality

The second nonnegotiable assumption for apologetics is the law of causality. We will deal in an expanded way with this principle in part 2, as it relates to the theistic proofs. In the meantime we will make some basic, preliminary observations about the types of cause, the abuse of causal analysis, and about necessary and sufficient conditions of causation.

Causal thinking is an integral part of all scientific examination. It involves a temporal element in that it concerns the quality of motion we call change. It observes the before and after of contiguous actions, events, or states. A person becomes ill; a change in the state of health takes place and the diagnostician seeks to isolate the factor which induced the change. Medicine, economics, botany, physics, and other disciplines seek to understand the reason or cause for observable changes.

Since causality functions in a practical way in the empirical world, philosophies have sought to establish the law of causality on empirical grounds as a conclusion drawn from sense perception. This method is vulnerable to the devastating critique of David Hume who rightly observed that cause itself is never directly or immediately perceived or that at least we cannot know for certain through the senses that the perceived cause is the actual cause.<sup>22</sup> Hume's critique does not

destroy causality per se but casts a shadow on a particular method of

establishing it.

Causality is established on a more firm foundation if it is seen as an axiomatic corollary of the law of noncontradiction. In a sense the law of causality is merely an extension of the law of noncontradiction; it is a formal principle which is analytically true. Its definition is tautological: every effect must have a cause. The term effect carries within itself the notion of cause. Because we use the principle of causality to examine and evaluate observable phenomena does not mean that causality itself is a derivative of sense perception. It is a logically prior supposition necessary for the very discrimination of phenomena. Thus we follow the procedure of asserting causality as a first or self-evident principle. Like the law of noncontradiction, it is something which all in fact believe because all must believe it in order to function as human beings. It is a universal presupposition necessary for life and for the ordering of knowledge. Questions may be raised about particular causes for particular effects (an inductive question), but not about the necessity of some cause for an event.

The aspects of change which we call effects may vary according to Aristotle's classifications of motion. Two primary types of cause must be isolated at this point—causes in fieri and causes in esse. A cause in fieri is a factor which brings or helps to bring an effect to pass, that which induces change. A cause in esse is a factor which "sustains or helps to sustain the effect in being." Both types of cause are concerned with the factor of power—one is necessary to explain the power of being and the other power of change.

Though the principle of causality is formal, it has vital ramifications for the existent material world. It is not enough to say that things exist in contiguous or customary relationships as Hume supposed. We must deal with the question of the *power* for such customary relationships. Questions may be raised about *which* power is causing being and change, but *that* some power is involved is logically necessary. One can choose to call it by a name other than cause (Hume resorted to the term *production*) but some concept of power must be used.<sup>24</sup>

Of course, logical errors occur in the application of the law of causality. The fallacies of faulty causal generalization and of false cause are perils to the application of the law. False cause can be attributed either by the non causa pro causa fallacy which is to mistake what is not the cause of a given effect for its real cause, or by the post hoc ergo propter hoc fallacy which is the inference that one event

is the cause of another from the bare fact that the first occurs earlier than the second.<sup>25</sup>

Further, we must be careful to distinguish between the category of the necessary condition and the category of the sufficient condition. A necessary condition may be defined as the circumstance or factor in whose absence the event cannot occur. It is the sine qua non of the effect. A sufficient condition is a circumstance in whose presence the event must occur. Irving Copi offers the example of the relationship of oxygen to combustion. The presence of oxygen, though necessary for combustion, is not a sufficient condition for combustion because oxygen can be present without combustion occurring.<sup>26</sup>

The assumption of the law of causality, like that of the law of noncontradiction, is neither arbitrary nor subjective. It too may be denied by the mouth but not by the life. Denials of this law are as forced and temporary as denials of the law of noncontradiction. We point once more to John Cage's avocation to illustrate. Aware that if he approached mushrooms in the spirit of chance operations he would shortly die, Cage was assuming not only the law of noncontradiction but the law of causality. He assumed not only that poisonous mushrooms could not be poisonous and not poisonous at the same time and in the same relationship, but he assumed some causal nexus in which the toxic mushrooms would have a deleterious effect upon his health.

The assumption of causality was also operative in Descartes's cogito ergo sum. The "I think therefore I am" which came out of his rigorous doubt process by which he found he could doubt everything except that he was doubting, included the assumption that doubt requires a necessary condition, namely, a doubter. Thus causality operated along with the law of noncontradiction as a necessary assumption for Descartes's self-consciousness.

Again, as with the law of noncontradiction, the law of causality is not only assumed in science and philosophy but is everywhere assumed by Scripture. The Bible offers no theory of causality but assumes its validity at numerous points. Just as the Bible uses the rationally loaded word therefore, so it also uses the causally loaded word because. Consider the reasoning process of Nicodemus in his nocturnal visit to Jesus: "Rabbi, we know that you are a teacher come from God; for [ $\gamma\alpha\varrho$ , "because"<sup>27</sup>] no one can do these signs that you do, unless God is with him" (John 3:2 Rsv). Nicodemus was engaged in causal thinking, seeing the imprimatur of God as a necessary condition for Jesus' ability to perform miracles. His mode of reasoning received

New Testament use of the word sign. The signs which John records would have no significance apart from the assumption of causality. The term sign (σημεῖον) occurs seventy-three times in the New Testament and is frequently related to two other causally loaded terms, δυνάμεις (power) and ἔργον (work). These words concern the signifi-

cance of manifestations or workings of power in the visible world. The

the implicit endorsement of Jesus and the explicit endorsement of the

signs demanded from Jesus by his contemporaries were demands to show that "God, in whose name He works, has unequivocally authorized Him. This authentication will take place when God does something or *causes* something to happen in relation to Jesus which will prove that any doubt concerning His divine authority is wrong."<sup>28</sup> Here the Pharisees were looking not only for a necessary causal condition but also for a sufficient causal condition, which the New Testament indeed attaches to the miracles of Christ. The Old Testament

usage of the Hebrew counterpart to อานะเอง, กาส, carries the same

import.29