Object Information Repository in a Christian Theory of Technology

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Introduction

The formulation of a stable Christian theory of technology is undoubtedly formidable. Harnessing an agreeable formulation language is even more daunting. Nonetheless, some ideas and Christian theories of technology have been fielded by a handful of distinguished Christian scientists and technology experts. Some of these ideas and theories substantively conflict while others have sizeable common base to proceed in both theory and language. Notably, there is a seeming agreement in visualizing technology as an object with embedded value and information. This study, therefore, attempts to provoke the consideration of a possible synthesis and agreement on the foundational essence of Christian theory of technology through the minimization of language disparities. It also attempts to emphasize the formulation of the Christian theory of technology in the context of biblical hermeneutics.

The three-pronged motivation for this study is, firstly, the relevance of the words of Abraham Kuyper that "there is not a square inch in the whole domain of our human existence over which Christ, who is Sovereign over all, does not cry: 'Mine!'"; secondly, the lack of clarity of Bruno Latour's distinction of "quasi-object" from "object", and his consequent attributions to the "quasi-object"; and thirdly, the imperativeness of provoking the consideration of the Christian theory of technology in the context of biblical hermeneutics. The complex intra- and inter-relationships of objects and their interpretive inherencies are explained, as well as the non-neutrality of objects. Without a doubt, a synthesis and harmony of the three dimensions highlighted above are possible because their essences are complementary. How does Kuyper's statement in the light of Latour's theory affect the technological world in general and computers in particular? Are the "quasi-objects" really different from "objects"? Are quasi-objects or objects indeed neutral? These questions will be addressed in this study. Obviously, the words of Kuyper echo the biblical truth: "The earth is the Lord's and all that is in it, the world and those who dwell therein. For, it was he who founded it upon the seas and planted it firm upon the water beneath."[1] To ensure an effective communication, it may be necessary to familiarize ourselves with critical terminologies used in the study.

Definitions of some terms

Without spending time attempting a definition of a technological thing, as previous writers have reminded us, reference is made to the nascent field Philosophy of Technology which is already replete with literature that attempts to do just that. Nonetheless, for effective

communication, it becomes imperative to define some critical terms in use in this study. This definition effort is even more compelling in the light of the fact that there are numerous and varied dictionary and clinical definitions afloat for these same terms. Therefore, throughout this paper, the term "object" is used to imply a "thing", which may be physical, spiritual or both. Obviously, this definition may differ from the use of that term in the works of Bruno Latour, Lambert Van Poolen, and other distinguished writers. The term "nature" is used to mean "physical" as in a stone, or the union of both "physical" and "spiritual" as in man. So, "nature" is not used to mean "spiritual" as in God or angel. The term "technology" is used to imply "machine" as in automobile or computer. Bruno Latour, a French academician specializing in science-studies in several investigations (Latour 1987(1); Latour 1987(2); Latour 1993(1); Latour 1993(2); Latour 1999) of science (or technology) from cultural or societal perspective, calls into question the objectivity of science and its related objects in nature and laws. Latour suggests that "Nature and Society are not two distinct poles, but one and the same production of successive states of societies-natures of collectives. The importance of this is the nonseparability of "quasi-objects" and "quasi-subjects" (Latour 1993(2)). Nonetheless, these sorts of distinctions are useful in understanding the nature of the technological thing. Descriptively, he suggests the existence of unity between Nature and Society. Also, he states that neither nature nor society can exclusively provide explanation for phenomena observed in this world of objects. Additionally, he suggests that there is no clear dichotomy between nature and culture, hence his phraseology, *quasi-object*. Finally, each *quasi-object* has its own shape and form when made and each has its own influence (Adams, 2001) on society and nature. An example of a quasi-object for Latour is the microbe. The main reason to take on the quasi-object as representative of things technological is its emphasis on relationships. Latour's idea that things are neither naturally objects in nature nor subjects of culture nor even mixtures of the two, implies perhaps that it is essential to understand these things he calls quasi-objects *as relationship.* He suggests, for example, that they are "social links" or relationships that link and bond the natural and the cultural into a cohesive, related whole -society *en large.* Because of these real relationships within and between the natural and cultural in our technology, the technological thing seems a good candidate for Latour's quasi-object. The argument made is that we influence the shape of our machines while they in turn shape us. An example is how we make computers, and computers in turn influence how we behave. For instance, a man without money in his pocket, buys (with credit card) the type of food he can easily microwave for breakfast. He does not border wearing his winter coat in the car because the heating system in his car has been set at a convenient temperature. As he drives to work, he consciously or not, obeys the signaling of the traffic lights that command him as to when to stop, when to go and when to turn. His awareness of this influence may not be as relevant as the truth that the computers he made are controlling his lifestyle.

Numerous scholars have attempted to define technology. For Ferré, technology stands for all practical implementations of intelligence (Ferré 1991, 220; 1995, 26). Ferré is talking about technology as matter *and* activities, beliefs, and attitudes. He likens technology to science, religion and education in this way. Technology can be discussed in terms of *tangible* things as well as *intangible* belief systems, attitudes, and ways of thinking. French sociologist and critic of societal use of technology, Jacques Ellul, makes a distinction between "technology" and "technique." While "technology" is the mechanical invention of man to better his lot in life, "technique" refers to "the varied phenomena of advertising, propaganda, psychological coercion,

and the design of organizational structures which are purposed for efficiency, economic and social control" (Hopper 1991, 11).

Literature

Important contributions to theory of technology have been made by many, including members of the Frankfurt school such as Adorno (Adorno 1972), Horkheimer, Marcuse and Habermas (Habermas 1973). Unsurprisingly, their ideas have been criticized by postmodernists and constructivists for their anti-technological views. However, recent views in the philosophy of technology (Feenberg 2005) attempt to appropriately combine theoretical and normative perspectives with socio-technical practices.

Bogan,T. and Hartman,R., in their paper titled "Faith and Technology: Toward Integration for Christian Higher Education", presented at a Council of Christian Colleges and Universities' New Faculty Workshop, stated that for Lambert Van Poolen and Bruno Latour, a technological thing is "a relational quasi-object fully physical and fully cultural". Machines (and computers) are technological things. They possess physical and relational characteristics. Notably, Van Poolen indeed acknowledges that the idea of quasi-object as a relational social-link is somewhat elusive, although, he adds that it does draw away from seeing the technological things, such as computers, in a narrow, reductionistic way. Latour defines quasi-object as not fully object, implying that it has the qualities of both nature (physical) and culture (societal). So quasi-objects are neutral, he says. But are they indeed neutral? Granted that neither nature nor society can fully and exclusively explain all the information embodied in an object or quasi-object, simply because that information is neither altogether natural nor altogether cultural (not even simply a mixture of both as Latour projects). If that is the case, all objects are neutral because they are neither altogether natural nor altogether cultural. Consequently, our objects and Latour's quasi-objects are one and the same. Undoubtedly, if all objects are quasi-objects (and of course quasi-objects are objects), then will the two be either objects or quasi-objects, but not both, since the one is different from the other. Therefore, if we assume the existence of objects, then quasi-objects (by that definition) do not exist. But, perhaps, we should first enlighten ourselves on what theory is all about.

What is theory?

There exists quite an eclectic assortment of theories, formal and informal, quantitative and qualitative, simple and complex, personal and shared. Nonetheless, there are certain common threads and characteristics of theories. Three such common threads are that: 1) Theories are generally purposed to explain phenomena. All related concepts may not be precisely defined, and usually key concepts are not operationally defined, in order to retain some flexibility for a variety of applications. 2) Theories are usually linked to rules that establish acceptable evidence, good reasoning and theorizing (Suppe, 1977). Donald Schön (1987) contrasts how we think while performing a task with how we reflect on it afterwards. Both of these kinds of reflection rely on people's personal theories of the way the world is. The pioneer cognitive psychotherapist George Kelly (1957) founded his personal construct theory on the idea that people essentially carry around with them their own personal theories which guide their perceptions and actions in what otherwise would be an impossibly confusing world. So, indeed like other forms of human activity, theories may be a product of our best crafting, and a

reflection of ourselves--our yearnings, our biases, our weaknesses, and our inward character. Theories play important roles such as: a) helping us visualize the world in new ways, (.g., Polya, 1957); b) helping us critique on practice, to suggest a need for change. Wedman and Tessmer (1993). Braden (1996); and c) guiding us in the design of alternatives.

Philosophical and theological dimensions

One important issue associated with technology is its value-ladenness. Toulmin argues (Toulmin 1982) that science is in a postmodern phase, which means that it recognizes itself as a personal, value-laden quest for an integral knowledge of nature. The integral view of nature makes nature (cosmos) the proper context for understanding human nature and human life, and opens science to a comprehensive view of the universe (cosmology).   Questions of beneficence and maleficence abound when technology is discussed. The fact that such questions surround technology prove the fact that it is value-laden. When considering the implications of technology in Christian higher education, it is helpful to begin with this basic issue since the value judgments one makes regarding technology will ultimately influence all other decisions made toward its creation and use. The contemplation of the value of technology requires a familiarity with two typical views toward technology (optimistic and pessimistic). Both of these views are being addressed here from a Christian worldview, that is to say, one that depends on God's nature and purposes as the norm, as well as setting goals and guidelines by Scripture and a faith in the Living God (Beahm 1985, 20). Not surprisingly, a broad spectrum of possible responses by theology to the challenges of the techno-scientific worldview can be imagined to range from total accommodative optimism to outright rejectionistic pessimism.

Technological optimism.

An optimistic view of technology is held by those who fully embrace technology and believe it promises a better life and hope for this world and the human race. Those who subscribe to this view cannot deny that technology results in problems and undesired effects, but they believe that any problems brought about by technology can be solved. Two underlying assumptions of those who view technology so optimistically include a stress on the creation of humankind in God's image, and human rule over nature based on the biblical interpretation of human origins (Ferré 1995, 99). Technological optimists would point out that in the Genesis account of creation humankind were created in the image of God (1:26, 27), told to "rule over" the Earth and "subdue" it (1:26, 28), and mandated (the "cultural mandate") to "till and care for" the Garden of Eden (2:15). In the image of God, humankind are both a reflective and active creation of God. As such, humankind's desire is to imitate their Maker and, as Clarke would put it (without using his terms[2]), refashion the world that has been given them, malleable and plastic under their fingers, to be transformed by their own initiatives and artistic inventiveness, so that it will express in a new way both the divine image of its Creator and the human image of its fashioner (Clarke 1972, 250). Such fashioning by humankind includes the building and use of technology. This view of technology envisions a harmony between God's creation and human fashioning using what God has already provided.

Technological pessimism

The critique of technology characterizes the Frankfurt School and especially its leading members, Adorno and Horkheimer in their "Dialectic of Enlightenment" (1972) where they argue that instrumentality is in itself a form of domination, which, by controlling objects violates their integrity, suppresses and destroys them. If this is so, then technology is not neutral, and simply using it involves taking a valuative stance (Adorno 1972).

One underlying assumption of those who view technology so pessimistically is the assumption that technology is a part of humankind's Fallen nature. One well known technological pessimist is Jacques Ellul. In his article "Technique and the Opening Chapters of Genesis," Ellul claims that a part of the paradise that was Eden before humankind's downfall included the lack of need for any effort on the part of Adam to accomplish anything he put his hand to. "No cultivation was necessary, no care to add, no grafting, no labor, no anxiety. Creation spontaneously gave man what he needed, according to the order of God. . . . Creation as God made it, as it left his hands, was perfect and finished" (Ellul 1984, 125-126). This perfect and finished state would preclude the creation and use of technology by humankind; technology ensued only because of the Fall. According to Ellul, technology is only present in the condition of sin. Furthermore, Ferré, not necessarily a technological pessimist, says that the "sad legacy of the Fall" is that "every aspect of human life and practice is subject to distortion and abuse" (Ferré 1991, 218); and this would include technology. Technological optimists rely heavily on the cultural mandate and redemption without giving due reflection to the reality of the Fall and humankind's disobedience and secularization of society. Technological pessimists run the danger of taking the Fall and disobedience and secularization without the good news of the cultural mandate and the redemption. In considering the positive and negative aspects of technology, the human motivation and mindset behind our technology become central. When our motives are dominantly anthropocentric and exploitative, our technology has been and will be a curse. On the other hand, when new motives replace the old ones, our technology could be a blessing" (Ferré 1995, 112). Nonetheless, let us take a closer look at the general consistence of objects or the technological thing.

Concepts of super maker-object, maker-object and made-object

Habemas states that technology is a generic project, "a 'project' (or made-object) of the human species *as a whole*", not of some particular historical epoch like class society or of a particular class like the bourgeoisie (Habermas 1970: 87). Harold P. Nebelsick, in his work titled "Theological Clues from the Scientific World" (19840), succinctly states that any theology which continues to accept the Cartesian subject-object dichotomy which divides the mind from the reality of the world, the res cogitans from the res extensa, is indeed suspect. Notably, this division of the mind from the reality of the world entails a God-nature dichotomy so that any reference to God's activity in the world must necessarily be classified under the category of "myth".

Here, an introduction to the concept of maker-object and made-object is made. Both maker-object and made-object are objects, and are different in ancestry or precedence as well as the quality of their inherent attributes. An object is maker-object or made-object depending on its constructive ancestry or descendance from another object. For instance God the super maker-object (or super-ancestor), made man, the made-object (descendant). And man, the maker-

object, fashioned computer, the made-object. Thus, man is made-object or maker-object relative to God or computer, respectively. Usually, the attribute values of the maker-object are greater and more than those of the object it makes. Interpretive values and information of (or in) made-objects are derivatives of those of their maker-object. As previously explained, the terms "thing" and "object" are synonymously used for all entities (natural and supernatural). It is conceivable that there is an original designer and creator of all things. Beside the Biblical testimony, the made (created) things in their unique complexities and intricacies of design and harmony also testify that indeed, there is an all-wise designer (SUPER MAKER-OBJECT). A wrist watch (MADE-OBJECT), in its intricacy and order, cries in its own silent language that it has a maker (MAKER-OBJECT). A computer silently testifies of its intelligent designer. So, there are made-objects, maker-objects and super-maker-object. These objects exist and function within their nature and culture (physical, metaphysical or otherwise). There is harmony between them. Figure 1 below attempts to simplify a rather absolutely complex state of relationships within and between objects, all in the environment of their nature and culture. So, there are both intra-relationships within, and inter-relationships between them. Typical intra-object relationships are relationships and harmony of human biological and functional components such as the eye, the nervous system, the circulatory system, the immune system, the brain, etc. The harmony and well coordinated intra-object relationships result in the total unified functionality of the object. Similarly, there are interactive and functional inter-object relationships, such as in humans and their dogs, men and computers, bird and trees, bridges and automobiles, plants and water, etc. More importantly, these objects have meaning, function and operation in the confluence of their prevailing nature and culture. Impliedly, Latour defined quasi-objects as man-made objects or entities, such as computer technology, and objects are God-made objects or entities, such as tree, sea, moon, man, etc. Are objects just physical or cultural (without relationships)? No. Rather, they are a harmonious union of the two.
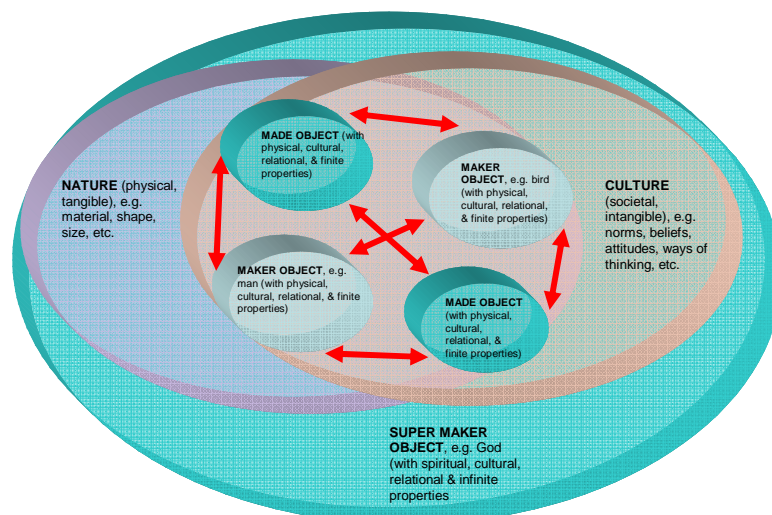

FIGURE 1:   Complexity of Object Interaction and Influence

And this relationship, as well as the information and value inherent in it, is exactly the reason why natural objects are objects. It then becomes necessary to expand the definition of object to include the now known embodiment of intrinsic values, behavior and interaction with other objects and their environment. There are physical and cultural interactions within objects (such as the technological thing) and between objects and their makers. We (as objects) influence the shape of the technological thing which we make. The technological thing in turn, shapes our lives and behaviors.

Interactive influence of objects

An object embodies relationships within itself and between physical and cultural elements. If Habermas position is correct (as it appears), then what he calls the fraternal relation to nature should not be its demise. Objective relation to the objective world is already social. Pure instrumentality is not opposed to social norms, since all attitudes have a social dimension. Markets, administrations, and technical devices have what I will call an *implementation bias*: the form in which they are realized embodies specific valuative choices. These designed-in biases leave a mark on the made-object, even in those domains where they appropriately regulate affairs. The sculptor Tony Cragg talks about relationship between people and materials that also goes beyond the physical: "…any material that comes near to us, any material that we even see, automatically becomes more intelligent because it assumes metaphysical qualities in addition to its physical qualities. The material starts to have information attached to it, to have a history and to assume poetic qualities, it gets used in language and it becomes meaning and metaphor". The sense is that material objects become information repositories forever linked to their maker whether they are sculptures of an individual artist in Lagos, Nigeria or automobiles by groups of artists and engineers in Detroit, USA. This is not to deny the importance of the reductionistic procedure of getting at the basic building blocks of our bridge. This is what allows us to build our bridge in the first place. This reductionism also aids in our understanding of the thing. However, meaning is found as we put parts together in ways guided by our cultural goals. Meaning arises when we embed our personal and corporate hopes, dreams, and even yearning for control over circumstances into our various technological artifacts. These hopes and dreams, embodied in the bridge, make it more than just a complicated piece of material.

Furthermore, makers of objects, technological or artistic, embed values in them. Their particular size, shape, material, and function mirror personal and corporate values. In this sense, the authors of *Responsible Technology* argue that technology is non-neutral, that is, value-laden.[3] To both God and man, technological things like all other objects embody both physical and metaphysical information and meaning. Objects are information repositories, a link to their maker (God, man or other). For instance, God asserts that he has eyes. "For mine eyes *are* upon all their ways: they are not hid from my face, neither is their iniquity hid from mine eyes." (Jer. 16:17, KJV) Beside the biblical account that God has eyes and sees(2Kings 19:16; Rev 19:12), it can be inferred that the idea of availing eyes to man for the purposes of seeing originated from God who has eyes and can see. Within the context, three aspects of a technological thing are presented as a means to open up avenues for a Christian perspective. Firstly, it is seen as object with meaning, value and information; it is not just some physical, concrete object situated within our physical line of sight. This object is a repository of values embedded in its various physical arrangements. Secondly, this object is read as an interpretive or *hermeneutical text*. It contains information about us, our values, our lifestyles, and in particular, the meaning we attach to these

technological things. And the author agrees that the very structures of our technological machines give direction and guidance for reading off these meanings. Hence, thirdly, the technological thing is seen as *logos*. Yet, even though we can read the machine-text for meanings beyond itself into the surrounding culture, it still remains finite and limited, so we deem it as *localized logos*. These three concepts, object, hermeneutical text, and localized logos, are intended as guides, within the infinitely richer *Logos,* for the development of a Christian perspective of technological things (including bridges and computers). The *relational character* of all three is key for this perspective. Technological things, like other objects also interact with themselves and other objects and cultures (see figure 1). As the technological thing emerges at its most complex level, its consequences and behaviors, both physical and societal, are more difficult to predict and control. In this sense, its interpretive powers are also more difficult to predict and control. Its interpretative powers are more difficult to contain, and are limited or localized. Hence, the technological thing or machine is deemed *localized logos*. Merely the use of and/ or presence of these artifacts among us cannot capture all that is meaningful in our lives.

Interpretation and meaning of objects

The made-objects interact within themselves in nature, culture, hermeneutical text and localized logos. These interactions are reflective of the attributes of their maker. And these attributes become the vehicle of interaction and communication between the micro- and macro-component elements of the objects. These attributes basically form the medium of communication between the made-objects and the maker-objects. In that same light also, the said attributes are vehicles of inter-object communication and interaction, and therefore of information and value interpretation. It must be mentioned, however, that these inter-object interactions and communication are not only limited to objects and their integral components, but also to integral component parts of different objects in close proximity to warrant such (physical or other) interaction. Figure 2 below shows a pyramid of object meaning. The within object interaction of the integral parts is indicated with the bi-directional orange arrow. The hierarchical co-existence of objects is illustrated by the levels of the pyramid. At the pyramid base are the micro-component object parts, and the top culminates in the supremacy of the super-maker-object. The leveled interactive communication between different objects flows downwards and is illustrated with the downward arrows, and the leveled interpretation of meaning and value of, and in objects, flows upwards and is shown by the upward arrows. Note that the creation (making or fashioning) intent and purpose are designed into, and implemented in, the leveled downward direction, whereas the interpretation and derivation of meaning and value are incrementally leveled upwards as you ascend the pyramid ladder. Furthermore, ensuing from these relationships and embedded in them, are bi-directional reflections of properties and qualities of the maker-objects and made-objects.
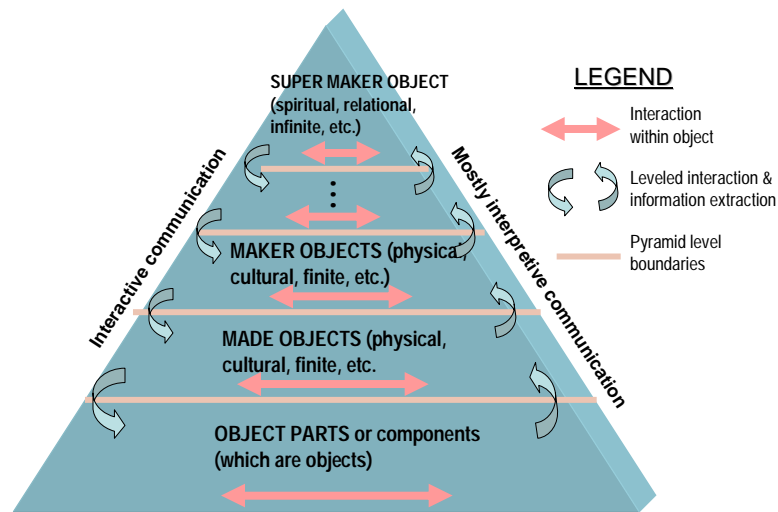
FIGURE 2:   The Pyramid of Object Meaning

We see the technological thing then as object that embodies relationships within and between the physical and the cultural. These relationships emerge as we rise up Jackson's ladder to where the meaning (in relationship) of the artifact emerges. Relationship, of course, is at the heart of our Christian faith. Old Testament writers emphasize the relational being of God and His people. The heart of meaning for Adam and Eve was (and is) relationship. The soul of the Israelite nation was located not in geography or kings but in its covenant relationship with God. Christ's coming continually restores this relationship. That we as Christians would see relationship at the heart and core of reality, including the meaning of technology, should not be surprising at all.

Our phenomenological experience of technological things yields them more than just physical entities. They affect culture and are affected by culture. The physical machine and cultural machine are truly one. And, since the technological thing can also yield to interpretation of meaning both of itself and of culture, the technological thing, the object, is a hermeneutical text. This idea of Scripture being its own interpreter is here extended to the technological thing. In fact, the object, like the whole of Scripture, is in some real sense its own context and scope. Therefore, we can (and should) interpret the hermeneutical text to find the values embedded in it. Bridges are built for reasons. And we arrive at some measure of meaning as the machine is assembled and used. Meanings emerge along with the artifact when interpretive machine performance takes place. We can explore the truth about ourselves by interpreting our technology in much the same way we can learn of life by interpreting artistic, musical, dramatic, and literary act. We learn who we are and what we value. Similarly, we learn who our maker is, and his values and purposes for making us. Our "performance" and functionality guide us to understand the purposes for which we were designed and made. The eyes are made and purposed to see. And we can measure our relative success in performance by measuring the degree to which our performance "lines up" with the values and purposes for which we were made.

Biblical hermeneutics

Hermeneutics offers the science of understanding a message or complete thought, especially that which is communicated through written text. Essentially, hermeneutics seeks to know how to interpret the actual intended conveyance of a message. Charles Hodge, the reformed systematic theologian succinctly summarized the rules of interpretation of the Scriptures in three statements: 1) the words of Scripture are to be taken in their plain historical sense; 2) if the Scriptures be what they claim to be, the word of God, they are the work of one mind, and that mind divine; 3) the Scriptures are to be interpreted under the guidance of the Holy Spirit, which guidance is to be humbly and earnestly sought. According to some early writers[4] on hermeneutics and specifically, the principles of Bible interpretation, four major principles have been highlighted:

1) The sense of Scripture is that which God through Scripture intends to reveal, to convey to us; its thoughts and truths. 2) The sense of Scripture is to be sought in and determined by the words of Scripture. This is one of the fundamental principles of Biblical interpretation. 3) Every word, phrase or sentence has one and only one definite sense in a certain given connection. When we say this, we must remember that a word may be actually written only once, but yet may be used in different senses, the figurative and the literal. 4) Hence the sense of Scripture is sometimes impressed literally, sometimes figuratively. It is necessary to determine when it is used in the literal and when in the figurative sense. a) The literal sense is the common, ordinary meaning of a word. This must, however, be distinguished from the original meaning or the etymology which is often obsolete and quite different from the common meaning; b) The literal or proper sense of a word or phrase must always be accepted as the intended sense, unless there is an absolute necessity for understanding it figuratively; c) In interpreting Scripture, it is of the greatest importance to ascertain the scope of the writing under consideration, i.e. the purpose or aim an author has in view; d) We must distinguish between the "scopus generalis" of the Bible, and the special scope of a particular book of the Bible or portion of the Bible. The scope of a book or portion of a book must harmonize with the scope of the Bible as a whole; and e) The general scope of the Bible is Christ, or that Christ is the Savior of mankind.

Christian perspective of the technological thing

Gadamer suggests that "Christology prepares the way for a new philosophy of man, which mediates in a new way between the mind of man in its finitude and the divine infinity. Ultimately, we can view technological things in a meaningful way because of the overall structure of relational unity given in the divine/ human Word, the Logos. In this larger relational unity, the relational character of the object, hermeneutical text, and localized logo point us toward a Christian theory of technological things as containers of information about ourselves and our maker-object, who we are and what we value. In application in the life and profession of the Christian scientist, an emphasis on Christian ethics with Biblical guiding is underscored. The Christian computer scientist, for instance, is seen as a maker-object (who himself is a made-object) that consciously or not, leaves a deluge of information and values (about himself, his values, beliefs, biases, etc.) on the computer that he makes. The Christian programmer realizes that he is a maker-object, now actively engaged in the creation of an object (program) which embeds information about his world. Similarly, a Christian systems designer is a creator of a

computer/business system that reflects his world, and has become a vehicle to effectively communicate to the rest of God's creation. These ideas, however, must take shape and form within a larger unity if our interpretation of meaning is to have reality. This larger unity is that found in Christ *the Logos*, the ultimate meaning structure for interpretation, transferring predecessory information and value. He exists before everything, and all things are held together in him (Colossians 1:17, *New English Bible* (Oxford: Oxford University Press, 1970), 256). Given this picture of reality, my contention is that it should not be surprising that meaning is found more in relationships between and within things than in the things themselves. This is suggested as an area ripe for further investigation within a Christian perspective.

Conclusion

The intent of this paper is to bring us to the point where we (as made-objects) see that the relational character of our creation is real especially in that it mirrors the real relational character of our Lord (our maker-object). In that light, the call is to, along with our disciplinary investigations of reality, explore with the same scholarly rigor the nature of relationships between, for example, our various disciplinary concepts. In short, the call is to move our Christian scholarship more and more into interdisciplinary, relational areas. Along these lines, a good first step would be an interdisciplinary study of the relational traits of our technological things. It is hoped that the relational characteristics the object, hermeneutical text, and localized logos, as applied to our technological artifacts would help sharpen the focus of such a query.

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Endnotes

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[1] Psalm 24:1, New English Bible (Oxford: Oxford University Press, 1970), 627.

[2] Notably, Clarke used the terms "create" and "recreation" on the part of humankind. The author thinks this is a misuse of those terms that derive their full meaning in the power and authority of God alone. It is rather obvious that no human has the power or authority to create or recreate anything in the strict sense and meaning of those terms.

[3] Responsible Technology, ed. Stephen Monsma (Grand Rapids, MI: Eerdmans, 1986), Chapter 3.

[4] Prof. W.M.H. Paterson, St. Paul, Minn., 1896; Dr. L. Fuerbringer, St. Louis, Mo., 1912; Dr. C.O. Hofmann, St. Louis edition, 1876, of "Institutiones Theologiae Exegeticae," (Wittenberg, 1754) [Mankato, Minn. 1957] compiled by Prof. George O. Lillegard