

Institute for Christian Teaching  
Education Department of Seventh-day Adventists

# **FAITH BEHAVIORS IN STAGES OF DEVELOPMENT**

by

**Gaspar F. Colón**  
Colombian Union College  
Takoma Park, MD USA

**692-12 Institute for Christian Teaching  
12501 Old Columbia Pike  
Silver Spring, MD 20904 USA**

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## **Introduction**

Understanding more fully the subject of faith development has been a career-long quest for me. Ever since I conducted my first 5-Day Plan to Stop Smoking in the early 70s I wondered about the physiological mechanisms involved in making choices. The plan referred to the frontal lobes of the brain as the center for decision-making. I tucked into the back of my mind a plan to someday discover, in more detail, how the brain functions in things like breaking old habit patterns, will power, faith, etc. In 1976, I had the privilege of taking some classes from Bernell Baldwin that dealt with behavioral physiology as part of my Masters in Public Health at the School of Public Health at Loma Linda University. From then on I pursued informally the study of the brain as it relates to practical aspects of decision-making and behavior change.

In 1982, while working on my Ph.D. in Religious Education at New York University, I began to read the results of a five day symposium on faith development in the adult life cycle. It took place on the campus of The College of St. Thomas in St. Paul, Minnesota on August 10-14, 1981. This symposium originated from a felt need among religious educators to relate an understanding of the nature of human adulthood to adult life cycles. They sought to respond to the question: "If everything else about us changes as we grow older, what might we expect to happen to our faith?" (Stokes, 1982). The material presented as the "Hypothesis Paper," a copy of which was sent to all symposium participants prior to the event, was generated in part by a research team of six graduate students led by research consultant Charles Bruning. Six graduate students generated 21 hypothesis statements to form the basis of discussion at the symposium.

Religious educators sought to clarify concepts of faith development and apply them to existing theories of human development. They identified faith as something that continually develops over the course of a lifetime. Very few people manage to attain ultimate faith. This elusive end product contributes to a crisis in faith because it creates disillusionment and loss of hope. Thus scholars have been driven to other fields of inquiry to create systems of thought which, though innovative, may be distracting from the real issue of identifying what we mean by faith and how it functions throughout the lifetime of a person. Is faith something that naturally happens in the course of growing older, wiser, or more mature? Can faith be complete and perfect at progressive stages of maturity?

Part of the problem that we face in the dialogue is that various researchers come at the issue of faith development with different definitions of the word. This study seeks to unveil some of the "mystery" by: 1) looking at the usage of words in the Old and New Testaments that are translated as "faith;" 2) discovering what, if any, behavioral inferences are evident in the usage of the words; 3) looking at the neuropsychological data to see what mechanisms are associated with those behaviors; and 4) Proposing some strategies that may help individuals develop faith skills that would strengthen the faith of individuals at any stage of their development.

## **Faith and Faith Development**

"Faith development" has increasingly become a subject of interest among religious educators. Inquiry regarding the nature of "faith" and the role of religious educators in its enhancement is becoming popular (Stokes, 1982). The work of James Fowler in faith development became fertile ground for academic inquiry in the surge of religious education research in the late 1970s and early 1980s (Mischey, 1976; Moseley, 1978; Shulik, 1979; Parks, 1980; Stokes, 1982; Moran, 1983).

Fowler began his quest for a specific paradigm through which to study faith while doing graduate research in the work of H. Richard Niebuhr. In Fowler's (1974) book *To See the Kingdom*, a chapter is dedicated to Niebuhr's conceptualization of faith. Fowler describes Niebuhr's

understanding of faith in the context of the tension which Niebuhr himself wished to maintain between the subjectivistic "I-Thou" of Schleiermacher and the "Biblical objectivism" of Barth.

In his analysis of Niebuhr, Fowler uses Niebuhr's lecture on ethics to show what faith sees as it attends to the kingdom of God. Fowler then turns to the more subjective task of discovering "how faith sees and knows, and the *process* of its development." This lays the foundations of his subsequent developmental analysis of faith.

In 1978 Fowler and Sam Keen published a book edited by Jerome Berryman entitled *Life Maps: Conversations on the Journey of Faith*. In this work Fowler sets forth his rationale for a study of developmental stages, which relate to Piaget's eras and stages of logical and cognitive development, Kohlberg's six moral stages, and the works of Erikson and Jung. Fowler's own developmental stages are the result of many biographical sketches drawn from more than three hundred interviews in which Fowler detected certain sequential similarities.

Fowler defines faith as something broader and more personal than religion or belief. He considers it as a universal, which is "a feature of the living, acting, and self-understanding of all human beings, whether they claim to be 'believers' or 'religious' or not." He suggests that, in spite of the English construction of the term as a noun, faith is really a verb. "Yet," Fowler says, "even as we use the static kind of language about faith, we know we are trying to communicate something more. We know somehow that to 'have faith' is to be actively disposed to trust in and to be committed to someone or something. To 'have faith' is to be related to someone or something in such a way that our heart is invested, our caring is committed, our hope is focused on the other" (p. 18). Thus, "faith and faithfulness—at the interpersonal level—constitute foundational dimensions of the development of selves."

Fowler's combination of psychology and biography was again emphasized in *Trajectories in Faith*, which he jointly authored with Robin W. Lovin (1980). In that compilation of biographies the reader can see illustrated highlights of 10 stages of faith that Fowler drew from Piaget, Kohlberg, Erikson, and Jung.

The proceedings of the 1979 First International Conference on Moral and Religious Development (1980) opened the way for further discussion and dialogue regarding the value of analyzing moral and religious maturity through psychological models. In the published volume Fowler presents a more definitive and structured framework of faith and meaning. This presentation evidently became the core of a book which Fowler (1981) subsequently published with the title *Stages of Faith*.

To clarify the issue of faith development the authors of the "Hypothesis Paper" examined various proposed definitions of faith. They concluded that: ". . . no one definition of 'faith' will satisfy everybody" (Stokes, 1982, p. 38). The project leadership further concluded that: ". . . The purpose of this study is not primarily a theological exploration of the meaning of faith, but rather an effort to relate a generally accepted meaning of the term to the dynamics of the Adult Life Cycle" (p. 38).

It has become obvious that the word faith has no consistent definition. In the first paragraph of his book *Dynamics of Faith*, Paul Tillich (1957) states that: "There is hardly a word in the religious language, both theological and popular, which is subject to more misunderstandings, distortions and questionable definitions than the word 'faith'" (p. ix.).

Hans-Jürgen Hermisson and Eduard Lohse (1981) propose that faith ". . . is one of those terms that have been so weighted down during centuries that the original meaning now seems to be hidden" (p. 7). James W. Fowler (1981) admits that faith is "inexhaustibly mysterious" (p. xii.). One author equates faith with "assurance" (Rieff, 1966, p. 135), while another contrasts it with "easy believism" (Collins, 1982). Another says that ". . . faith constitutes a specific identity" (Casalis, 1980, p. 25), while yet another labels it "ultimate concern" (Tillich, 1957, p. 141). Although it is understood that these definitions, along with a myriad of others, are not exclusive of each other, we must admit with Tillich (1957) that the term needs healing before it can be used to heal persons (p. ix.).

It seems that the current trends of religion in the United States generate both ecstasy and agony in the same breath. The inconsistencies between the claim of faith (with its loosely defined ambiguity) and the behavior typified by many Christians, evidenced by Gallup's (1983, 1984) findings, lead this researcher to question some of the premises on which the concepts of faith development are based. Questions arise expressing the fear that the terminology may not be as clear as it needs to be for effective religious education. Is it possible that, with all the talk of faith development, those involved in its study have missed an important aspect of the definition of faith? Is it further possible that the particular use of the word development needs to be re-evaluated (See Moran, 1983)? It was the awareness of these particular dilemmas that led the Religious Education Association to develop a study, which culminated in the aforementioned symposium on Faith Development in the Adult Life Cycle in August of 1981. Yet, with all the effort to scrutinize and identify the role and function of faith development, the terminology remains conceptually and behaviorally ambiguous.

### **Faith as Behavior**

For a clarification of linguistic usages of the word faith in the Old and New Testaments, I relied on available philological and lexicographic resources to discover any specific and consistent characteristics of words, which are translated "faith." I examined six Hebrew words which have been identified by Biblical scholars as key words, viz., *'aman*, *batach*, *chasah*, *kawah*, *yachel*, and *chakhah*. These were compared from several sources and consistencies were noted. Particular attention was given to any behavioral characteristics, which might surface from the word study.

### **Old Testament Usages**

#### **The Word 'Aman**

Up to the present the Hebrew root *'mn* has not been authenticated with certainty in Akkadian, Ugaritic, or in Canaanite-Phoenician. Thus, it is hardly possible to get a good understanding of it from related Semitic languages. The earliest examples of its use are those in the Hebrew. The hiphil form of the Hebrew was later adopted by Syriac, Arabic, and possibly Ethiopic (Jepsen, 1974, p. 292). Aramaic-Syriac has a root word seemingly independent of the Hebrew. Its two forms *'t'mn*, translated *perseveravit*, and *'myn*, translated *constans*, *semper*, and *continuo*, seem to denote time (Brockelmann, 1966, 25). Accordingly, the earliest Aramaic example would read "(May the Pharaoh or his throne be) as permanent as the days of heaven" (Donner & Rollig, 1975, p. 266.3). In Arabic the verb is generally translated "to be faithful, reliable, or to be secure." Accordingly, the cognate nouns mean: "security, rest, peace, reliability, or faithfulness" (Jepsen, 1974, p. 292).

It is difficult to determine whether the original meaning is closer to the Aramaic-Syriac, meaning "to endure," or whether closer to the Arabic, meaning "to be faithful," "to be secure." Jepsen (1974, p. 293) concludes that the meaning of the words derived from the root *'mn* can hardly be determined by finding the original meaning. That would have to be derived from a careful study of the way it is used in the language. Thus, because the etymology of the root *'mn* is so uncertain, it would be wise to look for consistent elements in its context and use.

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*da'akan*. These were compared from several sources and conclusions were noted. Particular  
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### The Testament Usage

#### The Word Aman

Up to the present the Hebrew root *aman* has not been conflated with certainty in Altitian  
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*aman* and *yaman* translated *aman*, *aman*, *aman*, and *aman* seem to share the (Hebrew) root  
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It is difficult to determine whether the original meaning is closer to the Aramaic-Syriac meaning  
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203). However, the meaning of the words derived from this root may can hardly be determined by  
finding the original meaning. That would have to be derived from a careful study of the way it is used  
in the language. Thus, because the etymology of the root was so uncertain, it would be wise to look  
for the root in its context and use.

Drawing from an extensive study of the Old Testament words translated "faith" (Colón, 1987), it is evident that when a Hebrew heard the various words derived from the root *'mn*, the basic idea that came to his mind was "constancy." When the words were used in reference to things, the thought conveyed was "continual." When the derivative words were associated with persons the thought was "reliability."

The *qal* participle meant "one who cares for." The *niphal* meant, "to endure," and thus the participle meant "enduring, lasting." When the *niphal* referred to persons it meant, "stable, reliable." The *hiphil* meant, "to become stable," "steadfast," "to acquire stability." Its use was in reference to a person or his word. *'Emeth* acquired the meaning of "certainty," or "verifiable fact," while *'emunah* conveyed the idea of conduct that results from "reliability" or "faithfulness." *'Amen* is a term which functioned as a response which expressed the strong acceptance of that which was offered, whether positive or negative (Jepsen, 1974).

All forms of *'mn* were predominantly personal. When used in reference to "man" they had a negative ring. Only their use in relation to God is considered absolute (Jepsen, 1974).

#### Other Associated Hebrew Words

The terms that were chosen for their close association with the concept of faith revealed some very similar characteristics. The word *"batach"* had the meaning "to be secure," "to be unconcerned." When used in reference to man *batach* usually had a negative sense of false security, but when used in relation to God it connoted hope and assurance. The word *"chakhah"* meant, "to stay," "to persist," or "to wait," with an intended emphasis on the act of persisting. The cognate term *yachal* also meant "to wait," or "to stay." The connoted emphasis was on the hope, which created a willingness to wait. *Kawah* gave the idea of endurance for the sake of someone or something more ultimate. And *chasah* originated in the imagery of refuge and shelter, but came to mean, "to trust" (Jepsen, 1975; Barth, 1980; and Brown, et al., 1974).

Faith, in the Hebrew Scriptures, is a mindset, which exhibits itself in action. There is no evidence that in the Hebrew meanings there are any distinctions between thought and action, between intellectual assent and commitment, or between conviction and conversion. The only absolute source of faith or faithfulness is God. If there is any false security or false assurance it is because of a broken relationship with God. Conduct, incongruent with the desire to be faithful, is expected unless there is a reliance on the source of reliability.

There is little differentiation in the Hebrew imagery between faith as commitment and intellectual assent. They each seem mutually inclusive of each other. Belief would seem to be more appropriately related only in the sense of its root definition from the German *belieben*, which means "to cherish" or "to hold dear." It is interesting to note that the New Testament preserves the Hebrew connotations of faith. We will now examine additional nuances in the use of the word faith in the Greek New Testament.

#### New Testament Usages

The fundamental word for the *pist-* group of words is *peitho* (The Analytical Greek Lexicon, 1973; Wigram and Winter, 1978; Bultmann and Weiser, 1968; Hermisson and Lohse, 1981). The general use of the term in the New Testament include concepts such as persuasion, trust, confidence, obedience, belief, agreement, and assurance. Extra-biblical uses of the term further include concepts such as appeasement and conciliation.

The Greek equivalent of the Hebrew *'aman* is *pistis*. *Pistis* is generally translated "faith" in the New Testament. It is commonly understood that the early Christian church used and sought to

It is clear from an extensive study of the Old Testament words translated "faith" (1987) that a certain form of Hebrew found the roots derived from the root "to believe" in the sense of "to believe". When the words were used in reference to things, the meaning conveyed was "conviction". When the derivative words were associated with persons, the meaning was "reliability".

The pre-nominal form "one who believes" or "one who trusts" (the nominal form) and the pre-nominal form "underlying" (the pre-nominal form) were used to personify the concept of "faith". The nominal form "to believe" or "to trust" was used to personify the concept of "faith". The pre-nominal form "underlying" (the pre-nominal form) was used to personify the concept of "faith". The pre-nominal form "underlying" (the pre-nominal form) was used to personify the concept of "faith".

All forms of "to believe" were predominantly personal. When used in reference to "man", they had a negative ring. Only their use in reference to God is considered absolute (1987).

#### Other Associated Hebrew Words

The terms that were chosen for their close association with the concept of "faith" revealed some very similar characteristics. The word "to believe" had the meaning "to be convinced" or "to be assured". When used in reference to man, it usually had a negative sense of "to be deceived" or "to be misled". The word "to believe" had the meaning "to be convinced" or "to be assured". When used in reference to God, it conveyed hope and assurance. The word "to believe" had the meaning "to be convinced" or "to be assured". When used in reference to God, it conveyed hope and assurance. The word "to believe" had the meaning "to be convinced" or "to be assured".

Finally, in the Hebrew scriptures, is a mistranslation which exhibits itself in certain places. It is evident that in the Hebrew scriptures there are no distinctions between "to believe" and "to be convinced". The only distinction is between "to believe" and "to be convinced". The only distinction is between "to believe" and "to be convinced". The only distinction is between "to believe" and "to be convinced".

There is little differentiation in the Hebrew language between "to believe" and "to be convinced". They each seem mutually inclusive of each other. Faith would seem to be more than a mere "to believe" or "to be convinced". It is interesting to note that the New Testament preserver of the Hebrew scriptures of faith. We will now examine additional nuances in the use of the word "faith" in the Greek New Testament.

#### New Testament Nuances

The fundamental word for the pre-nominal form of "to believe" is "to believe" (1987). The fundamental word for the pre-nominal form of "to believe" is "to believe" (1987). The fundamental word for the pre-nominal form of "to believe" is "to believe" (1987). The fundamental word for the pre-nominal form of "to believe" is "to believe" (1987).

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maintain the holistic Hebrew connotation of faith as commitment, reliability, and response to a faithful God. Some have suggested that in instances in which *pistis* is used as an object, standing alone, the reference is to a set of beliefs or a doctrinal composite. There is sufficient contextual consistency to argue that these refer to the common allegiance, trust, obedience, confidence, and steadfastness, which were a part of the early Christian and Hebrew mindset.

In Hebrews 11:1 *pistis* is equated with hypostasis. Hypostasis has origins in the scientific concept of sediment, precipitate, or that part of a solution that represents the essence of its content. It has been used philosophically to connote reality. There is also evidence that the term was widely used to mean title deed of property ownership. Paul's use of the term in 2 Corinthians seems to mean absolute confidence (Koester, 1972).

The adjective (*pistos*) and verb (*pisteuo*) forms of the term represent the imagery implied by the term "*pistis*" inherited from the Hebrew *'aman*. While *pisteuo* is fairly consistently translated "to believe" it represents more accurately the root German concept of "*belieben*," which means "to hold dear" or "to cherish."

### **So What?**

Over the centuries since early Christianity the concept of faith has accumulated a great deal of baggage and has generated a fair amount of curiosity. In the twentieth century the concept of faith has been equated with its content, or what has come to be called "beliefs." "Beliefs have changed, and will go on changing. But that is not and has hardly ever been the issue. Various beliefs may have led people to faith, but beliefs are not faith. The opposite is also true. Beliefs have at times remained relatively constant, while faith has varied (Smith, 1979, p. viii). More than one person may have believed much the same thing, but the faith of one may have been strong, while that of the other may have been weak. Beliefs may have been conducive to faith, but they have not guaranteed it. It is possible to inherit religious beliefs and not have faith. In fact, inherited beliefs that are not owned or internalized can become a barrier to faith.

According to the preceding philological and lexicographic arguments, regarding faith in its Judeo-Christian usage, faith is the human quality of focused commitment and personal involvement. It is directed toward something or someone. The content toward which that faith is directed is imperative, but to equate the two proves disastrous. The effect of such a merging of terminology becomes evident when a person begins to assume that to give intellectual assent to a set of teachings is all that religion or society expects. To put it more specifically in the Christian context, if a person assumes that intellectually saying yes to a set of doctrines is having faith, or that sharing a list of concepts is sharing faith, or that understanding a set of axioms and postulates is faith, his understanding of faith will remain ambiguous. A person's commitment may remain untouched while he rests assured that the ideas themselves are enough. While it is true that the content often generates a response of faith, it does not equal that response. To assume that intellectual assent is faith is to give credence to the idea that a thought without a corresponding physical response is, first of all, possible, and secondly, acceptable. This is where Greek dualism is inconsistent with the Judeo-Christian mindset.

Some have asked the question: "what is it that separates the mere exercise of faith from saving faith?" Christianity teaches that faith does not become saving faith until it is focused on the person of Jesus Christ. In John 3:16 we read, "For God so loved the world that he gave his one and only Son, that whoever believes (*pisteuon*) in him shall not perish but have eternal life."



maintain the objective Hebrew composition of faith as commitment, reliability, and response to a faithful God. Some has suggested that in instances in which *emuna* is used as an object, something about the witness is to a set of beliefs or a doctrinal composition. There is sufficient contextual consistency to argue that these refer to the common allegiance, trust, obedience, confidence, and reliability which were a part of the early Christian and Hebrew mindset.

In Hebrew *emuna* is equated with *hypostasis*. *Hypostasis* has origins in the scientific concept of sediment precipitation, or that part of a solution that separates the essence of its content. It has been used figuratively to denote reality. There is also evidence that the term *emuna* was used to mean the idea of property ownership. Paul's use of the term in 2 Corinthians seems to mean "absolute confidence" (Koster, 1972).

The adjective *emuna* and verb (*emana*) forms of the term represent the imagery implied by the term "faith". In Hebrew *emana* is highly consistent in meaning "to hold" or "to believe". It represents more accurately the root German concept of "Ableben", which means "to hold dear" or "to cherish".

### Emuna and Faith

Over the centuries since early Christianity the concept of faith has accumulated a great deal of baggage and has generated a lot of confusion. In the meantime the concept of faith has been equated with its content, or what has come to be called "beliefs". Beliefs have changed and will go on changing, but that is not and has hardly ever been the issue. Various beliefs may have led people to faith, but beliefs are not faith. The opposite is also true. Beliefs are not faith. Beliefs may be relatively consistent with faith but they may also be inconsistent. One person may have beliefs that are the same thing, but the faith of one may have been strong while that of the other may have been weak. Beliefs may have been conducive to faith, but they may not have been. It is possible to inherit religious beliefs and not have faith. In fact, inherited beliefs that are not owned or internalized can become a barrier to faith.

According to the preceding philological and lexicographic arguments, regarding faith in its Hebrew-Christian usage, faith is the human quality of focused commitment and personal investment. It is directed toward something or someone. The focus toward which the faith is directed is imperative, but to equate the two proves disastrous. The effect of such a merging of terminology becomes evident when a person begins to assume that to give intellectual assent to a set of teachings is all that religion or society expects. To put it more specifically in the Christian context, if a person assumes that intellectually saying yes to a set of doctrines is having faith, or that showing a list of concepts is showing faith, or that understanding a set of axioms and postulates is faith, his understanding of faith will remain ambiguous. A person's commitment may continue unchanged while he rote assures that the ideas themselves are sound. While it is true that the content often generates a response of faith, it does not equal the response. To assume that intellectual assent as faith is to give credence to the idea that a thought without a corresponding physical response is first of all possible and secondly, acceptable. This is where Greek tradition is inconsistent with the Hebrew-Christian mindset.

Some have asked the question: "What is it that separates the mere exercise of faith from saving faith?" Christianity teaches that faith does not become saving faith until it is based on the person of Jesus Christ. In John 1:12 we read, "For God so loved the world that he gave his only son, that whosoever believes (emana) in him shall not perish but have eternal life."

### **Possible Behavioral Aspects of Faith**

Through the study of the derivatives of the Hebrew root 'mn, along with the other Hebrew words associated with faith, it became evident that faith is, first of all, a quality of God which is activated in individuals as a response to God. Included among the many uses of the term are the traits of anticipatory endurance, continuity, nurture, stability, assurance, reliability, conscientiousness, and certifiability. With the Greek words in the *pist-* family there are many uses that include similar traits such as steadfastness, assurance, reliability, trustworthiness, consistency, confidence. The verb form of faith is referred to as belief in the sense of *belieben*, or holding dear, or cherishing. If these are traits associated with human behavior, then there ought to be corresponding behaviors for which studies in physiology and psychology can provide a richer base of information regarding faith development. Furthermore, if human beings are holistic creatures, then what happens in the mind or brain has physical manifestations that are measurable to the extent of scientific understanding and technology.

### **Common Denominators: Sample Faith Behaviors Compared to Neurophysiological and Neuropsychological studies.**

Though it is true that Christian tradition has perpetuated a dualistic paradigm of human existence, there is no foundation for psychophysical dualism in the Judeo-Christian Scriptures. Many have believed that in order to be Christian one must reject psychophysical monism and adopt some form of Cartesian dualism. This view is not only prevalent among theologians and philosophers, but among some well respected scientists. The distinguished physicist Sir Arthur Eddington (1939) and the Nobel prizewinning physiologist Sir John Eccles (1970) have advanced concepts of voluntary action that are, in principle, very similar to those of Descartes. Yet, the Bible does not teach that man has a soul. It simply teaches that man is a soul (see Gen. 2:7). Dualism is an extra-biblical concept that has been syncretized into Christian tradition. Therefore, it is asserted in this research that neurophysiological and neuropsychological research is not incompatible with Judeo-Christian belief. It is rather a different level and perspective of the same phenomenon. The issue centers on agreeing at which level each observation is going to be made and later confirmed. It is further asserted that the concept of mind is a metaphorical representation of the results of brain function (MacKay, 1980).

Given that faith refers to human behavior patterns, as stated in the previous section, we will examine studies that identify similar behaviors in existing physiological and psychological literature. These provide insights for religious educators as to how these behaviors manifest themselves, what facilitates them, and what suppresses them.

#### **Attention vs. Arousal**

It is impossible to list or explore all behaviors associated with the behavioral traits listed above. In fact, it seems almost presumptuous to even attempt a starting point for such an investigation. Yet if faith has behavioral connotations, as asserted above, then one must venture into some calculated comparisons with basic behaviors which are being researched in the field of neurophysiology and neuropsychology. One such basic behavior is "attention." Faith behaviors like nurture, stability, assurance, reliability, conscientiousness, certifiability, steadfastness, and confidence, are not possible without attention. Attention is antithesis to arousal. Attention and arousal are basic to any human behavior and they act in relation to any external and internal stimuli. If faith is a response to definable stimuli, then the study of attention and arousal arises as a basic component of faith behavior. One of the key systems of the brain responsible for attention behavior is the reticular formation.

The reticular formation (RF) is a group of 98 interconnected nuclei, which form a conspicuous network of nerve fibers in the brainstem (Woody, 1982, p. 465). This area of

Though the study of the derivatives of the Hebrew root was done with the other Hebrew words associated with faith, it became evident that faith is that quality of God which is related in individuals as a response to God. Included among the many uses of the term are the idea of ambiguity, endurance, continuity, stability, assurance, reliability, consistency, and certainty. With the Greek words in the New Testament we may say that includes similar uses such as steadfastness, assured reliability, unwavering consistency, etc. The verb form of faith is related to the sense of behavior or holding dear or cherishing. If there are faith associated with human behavior, then there ought to be corresponding behavior for which studies in physiology and psychology can provide a better basis of information regarding faith development. Furthermore, if human beings are held to be more than what happens in the mind or brain has physical manifestations that are meaningful to the extent of scientific understanding and technology.

*Christian Developmental Studies with Behavioral Correlates in Neuropsychological and Psychological Studies*

Though it is true that Christian tradition has perpetuated a dualistic paradigm of human existence, there is no foundation for psychophysical dualism in the Judeo-Christian Scriptures. Many are believed that in order to be Christian one must reject psychologically based emotion and adopt some form of Christian dualism. This view is not only prevalent among theologians and biblical scholars but among some well respected scientists. The distinguished physician Sir Austin Bradford Hill (1939) and the Nobel prize-winning physiologist Sir John Eccles (1970) have advocated concepts of voluntary action that are, in principle, very similar to those of Descartes. Yet the Bible does not teach that man has a soul. It simply teaches that man is a soul (see Gen. 2:7). Faith is an extra-biblical concept that has been synthesized into Christian tradition. Therefore, it is argued in this research that neurophysiological and neuropsychological research is not incompatible with Judeo-Christian belief. It is either a different level and perspective of the same phenomenon. The same content or aspect of each observation is going to be made and later confirmed. It is further asserted that the concept of mind is a metaphorical representation of the reality of brain function (Kilpatrick, 1980).

Given that faith refers to human behavior patterns, as stated in the previous section, we will examine studies that identify similar behaviors in existing physiological and psychological literature. I hope to shed insights for religious educators as to how these behaviors manifest themselves, what facilitates them, and what suppresses them.

*Attention vs. Arousal*

It is impossible to list or explore all behaviors associated with the behavioral traits listed above. In fact, it seems almost preposterous to even attempt a starting point for such an investigation. Yet it faith has behavioral correlates, as asserted above, then one must venture into some related comparisons with basic behaviors which are being researched in the field of neuropsychology and neurophysiology. One such basic behavior is "attention." Faith behaviors like mental stability, assurance, reliability, consistency, steadfastness, and endurance are not possible without attention. Attention is antithesis to arousal. Attention and arousal are said to be human behavior and they act in relation to any external and internal stimuli. It faith is a response to definable stimuli, then the study of attention and arousal makes as a basic component of faith behavior. One of the key systems of the brain responsible for attention behavior is the reticular formation.

The reticular formation (RF) is a group of 98 interconnected nuclei, which form a continuous network of nerve fibers in the brainstem (Woodz, 1983, p. 402). This area of

interconnected nuclei involves portions of the medulla, the pons, the mesencephalon, and even the diencephalon. The RF begins at the upper end of the spinal cord and extends upward into the hypothalamus, through the central portions of the thalamus, and its adjacent areas (Guyton, 1976, 140). These connections with the hypothalamus, the cerebral cortex, the cerebellum, and the spinal cord are a consistent reminder of the RF's ubiquitous influence throughout the brain.

The RF receives data from almost all of the sensory systems through afferent (toward the brain) channels. It also has efferent (away from the brain) connections, direct or indirect, with all levels of the central nervous system (Barr & Kiernan, 1983, p. 145). The RF is therefore considered to be the "central coordinating agent" of the brain (Smythies, 1970, p.36). It is the most wide-open system with the greatest diversity of afferent and efferent channels found in the brain (Nauta, 1972).

Among its several functions in the human brain the RF is known for its role in the control of the sleep/wake cycle (D. D. Kelly, 1981). One of the outstanding features of the RF is its influence on levels of consciousness and degrees of alertness through the ascending reticular arousal system (ARAS). The mechanism responsible for attention and arousal are found in the RF, along with its complex interplay with the cerebral cortex and the sensory thalamic nuclei, which neural scientists identify as mechanisms responsible for arousal and attention.

In effect, the two terms are antagonistic. To be aroused is to be generally alert, accessible to any of a large number or variety of events. Attention, on the other hand, implies a specific perceptual bias. In fact, concentrated attention often is responsible for our failure to miss an event to which we are not attending (Robinson, 1980, p. 104).

Memory plays a large role in any treatment of the concepts of arousal or attention. An individual, who is aroused by or is especially attentive to a particular stimulus, responds to certain features of the environment at the expense of others. This is not done "willy-nilly." Instead, the attention is caught by a meaningful stimulus, something known or seen before. Robinson (1980) describes the familiar scene:

A man stands in a crowded room, having a drink with a small group of friends. The noise level in the room is very high, but the man is attending to his friends' remarks and is essentially deaf to anything else in his surroundings. Suddenly someone in another group several feet away happens to mention his name; and, although he has heard nothing of their conversation up to this point, he hears his name mentioned, loud and clear . . . He has been able to filter out meaningless background activity, but with the introduction of something meaningful, his attention shifts immediately, and the distant message passes through his "filters" unimpeded (pp. 104-105).

These examples reveal that at any given time most of what occurs around an individual fails to enter conscious awareness. Also significant is the fact that this filtering is not arbitrary, but selective through the influence of memory (Robinson, 1980, p. 105). A myriad of stimuli assault the sense organs. The passive filtering characteristics of the organs themselves block most of the stimuli (i.e., ultraviolet radiation and sound frequencies above 20,000 cps). Stimuli, which are compatible with the sensory capacities of the individual, are relayed to the reticular activating system. At this point the individual will either process the stimulus through the memory filter and forward it to the attention mechanisms or drop it out—or directly relay the stimulus to the attention mechanisms (e.g., when a child touches a hot stove) (Robinson, 1980, pp. 105-106).

Peter H. Lindsay and Donald A. Norman (1977) summarize the functions of the RF:

Here is a neural structure capable of monitoring the volume of traffic in the sensory system, of detecting transient changes in environmental stimulation, of altering characteristics

interconnected neural pathways portions of the modality. The point, the mesencephalon, and even the diencephalon. The RF begins at the upper end of the spinal cord and extends upward into the pons, through the central portions of the thalamus, and its adjacent areas (Cajal, 1909, p. 100). These connections with the thalamus, the cerebral cortex, the cerebellum, and the spinal cord are a consistent feature of the RF's distribution throughout the brain.

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In effect, the two terms are antagonistic. To be aroused is to be generally alert, receptive to any of a large number of variety of events. Attention on the other hand implies a specific perceptual task. In fact, unaroused attention often is responsible for our failure to miss an event to which we are not attending (Robinson, 1980, p. 104).

Attention plays a major role in any treatment of the concept of arousal or attention. An individual who is normally or is especially attentive to a particular stimulus responds to certain features of the environment in the eyes of others. This is not done "willy-nilly," because the attention is caught by a perceptible stimulus, something known or semi-known (Robinson (1980) describes the familiar scene:

A man stands in a crowded room, staring at a drink with a small group of friends. The noise level in the room is very high, but the man is attending to his friends' remarks and he occasionally nods to something else in his surroundings. Suddenly someone in another group says something that appears to mention his name, and although he has heard nothing of their conversation up to this point, he hears his name mentioned, loud and clear. . . . He has been able to filter out meaningless background activity, but with the introduction of something meaningful, his attention shifts immediately, and the distant message passes through his "filter" unimpeded (pp. 104-105).

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and efficiency of cortical processing, of amplifying or attenuating messages on their way to the cortex, and of receiving messages that have important influences on the activity of the organism, ranging all the way from control over sleeping and waking cycles to processing (pp. 677-678).

Given these facts about the reticular formation, it is interesting to note that anything that overloads the arousal/attention mechanisms is likely to disrupt this behavior that is associated with faith. In his recent book, titled *Thrilled to Death*, Archibald Hart (2007) suggests that 21<sup>st</sup> century society is so addicted to the pursuit of pleasure through “DVDs, MP3s, GameBoys, NASCAR, movies, television, live shows, pornography, sports, travel, water parks, theme parks, cruises, specialty restaurants,” etc., that we are “killing our ability to experience the very pleasure we are pursuing.” He asserts that this overindulgence in pleasure results in addiction to extreme forms of stimulation, boredom with the ordinary, and high prevalence of anhedonia in otherwise normal individuals.

In the past, anhedonia has been diagnosed in persons, who show signs of severe depression, schizophrenia, or clinical stress. It represents a condition in which people have a reduced ability to experience pleasure. Now, says Hart, a larger portion of society is experiencing anhedonia as a result, ironically enough, of overloading our pleasure centers. It seems reasonable to assume that this overstimulation of the arousal centers of the brain hinders the ability of the reticular formation to regulate focus and attention, thereby hindering faith behaviors.

#### Conditional Readiness

A group of behaviors, which may merit examination in the course of identifying aspects of faith, are what Donald M. MacKay (1969) calls "conditional readiness." Conditional readiness is the composite of internal behaviors, which are not obvious to an observer. The neural pathways register a meaning that directs a future action and renders an individual ready to act conditionally. This readiness for future action depends on the relevance of the information and the circumstances which arise.

Conditional readiness is a fundamental behavioral manifestation, which is relevant to all of the above definitions of faith. Traditional learning theory suggests that learning equals behavior change. Therefore, observations of changing patterns of human reactions and extrinsically observable and predictable behavior have been the tool of learning theorists. Exposing an individual to a set of facts and testing for correct answers is the classic approach to verifying behavior change.

But suppose I am sitting in my study in the basement of the house reading a book and my wife enters the room. She informs me of the fact that it is raining outside. She notices that I turn the page in my book and continue reading without responding to her presence or her words. Her assumption is that no learning took place because there was no visible behavior change. An hour later, she notices that I picked up the umbrella before I leaving the house. When did learning take place? It really depends on what level of behavior you examine.

Current literature reveals that at the neuronal level there is evidence of versatility capable of basic learning (Kandel, 1981a & b). This is based on synaptic studies that reveal evidence of dendritic and synaptic plasticity congruous with learning behavior. There is also evidence of versatility in the activation of inhibitory and excitatory response, at the neuronal level, which is mediated by a variety of neurotransmitters (possibly even beyond the bounds of Dale's law\*) and electrically activated boutons. A variety of structures and specialized division of labor of cells may

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\* The idea that a neuron always releases one, and only one, neurotransmitter at all its synapses. This concept is proving to be untrue in some cases.

lead some to believe that their understanding of integrative behavior at a neuronal level is hampered merely by technological and intellectual limitations (Hammerschlag & Roberts, 1976).

The limbic system possesses mechanisms that are noted for their role in creating long-term memory (Barr & Kiernan, 1983). It is believed that the hippocampal formation can create a repetitive circuit (long term potentiation), which silently rehearses the circuitry essential for potential behavior (Schwerdtfeger, 1984; Schmidt, 1978 a & b). This provides for a cognitive map for responding to a possible itinerary of behavior in response to expected or potential stimuli (O'keefe, 1979). This function is mediated by the functions of the entire limbic system, which synergize input from cortical and reticular areas of the brain (Isaacson, 1982).

This idea of silent rehearsal is best illustrated by the story of the young Chinese concert pianist Liu Shih-kun who, at the age of 19 won second prize at the First International Tchaikovsky Competition in 1958. In the mid-1960s he was an established concert pianist in China. Madame Chiang Ching, wife of Mao Tse-tung, led a "cultural revolution" that isolated China from the West and outlawed everything western from China. Liu Shih-kun refused to give up the music that he had grown to love so much and was imprisoned.

Liu Shih-kun spent six long years in a tiny prison cell with no books to read (save the teachings of Chairman Mao), no paper, and no piano. He was then released as part of President Nixon's diplomacy and was asked by Madame Chiang Ching to perform in Peking with the Philadelphia Orchestra. He performed exceptionally well. After another 18 months in prison he was again released for another concert and played brilliantly.

When asked how he could play so masterfully after seven and a half years, Liu Shih-kun said that he did practice his piano every day in his imagination—on a piano that no one else could see! (Aurandt, 1980)

Conditional readiness, like attention, seems to be essential for the production of traits such as endurance, continuity, nurture, stability, assurance, reliability, conscientiousness, steadfastness, trustworthiness, consistency, confidence, and cherishing. It is therefore possible that conditional readiness also provides strategies, which exemplify the type of skills that faith development "experts" will want to assist their clients in achieving. It is interesting to note that 3 and 4-year olds spend a great deal of time asking questions. This is part of the process of developing conditional readiness. Activities with children, youth, and even adults that involve role-playing or case studies help the brain to rehearse appropriate responses to a variety of situations. Repetition and memorization are ideal activities that exercise our ability to reduce stress that comes from having prolonged exposure to the unknown. These rehearsal activities prepare an individual to respond appropriately to real situations when they arise.

#### Temporal Integration

Another behavior, which may be associated with faith, is temporal integration. Temporal integration is the function of human behavior that is associated with time. Faith, by definition, is related to concepts such as anticipation, endurance, hope, continuity, stability, reliability, consistency, steadfastness, and trustworthiness, each of which has an inherent relation to the force of time. Faith may be identified as that manifestation of personhood, which maintains a person's focus and motivation in spite of the entropy of time. How the human brain integrates its functions in relation to time may prove to be enlightening in the quest for physiological illustrations of faith behaviors when subjected to delay and deferred dreams.

and seems to believe that their understanding of integrative behavior in a neuronal level is hampered largely by technological and intellectual limitations (Hammack & Roberts, 1976).

The limbic system processes mechanisms that are noted for their role in creating long-term memory (Barr & Keenan, 1983). It is believed that the hippocampal formation can create a reproductive circuit (long term potentiation) which essentially releases the circuitry essential for potential behavior (Schacter, 1978 & B). This provides for a cognitive map for responding to a possible identity of behavior in response to expected or potential stimuli (O'Leary, 1979). This function is modulated by the functions of the entire limbic system which originates from cortical and reticular areas of the brain (Leisman, 1982).

This idea of alien behavior is best illustrated by the story of the young Chinese concert pianist in Shanghai who, at the age of 19 won second prize at the First International Competition in 1958. In the mid-1960s he was an established concert pianist in China. During Chiang Kai-shek's "cultural revolution" that isolated China from the West and outlawed everything western from China, Lin Shih-kun refused to give up the music that he had grown to love so much and was imprisoned.

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When asked how he could play so masterfully after seven and a half years in a tiny cell, he said that he did practice his piano every day in his imagination--on a piano that no one else could see. (Arnold, 1986)

Conditioned responses, like attention, seem to be essential for the production of traits such as endurance, courage, accuracy, stability, assurance, reliability, conscientiousness, steadfastness, responsibility, consistency, confidence, and optimism. It is therefore possible that conditioned responses also provide strategies which exemplify the type of skills that fifth development "exerts" will want to assist their clients in achieving. It is interesting to note that 3 and 4-year olds spend a great deal of time asking questions. This is part of the process of developing conditional responses. Activities with children, young and even adults that involve role-playing or case studies help the brain to release appropriate responses to a variety of situations. Research and meditation are ideal activities that exercise our ability to reduce stress that comes from being prolonged exposure to the unknown. These technical activities prepare an individual to respond appropriately to real situations when they arise.

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Time is an agent of entropy. The second law of thermodynamics may illustrate this. In a closed system, any process in which heat is exchanged, the orderliness of the energy that is exchanged decreases. To put it another way, energy tends to scramble in the process of exchange over a period of time. Time is a consistent variable, which makes this possible. Time tends to diminish expectation in the same way, and the only way to counteract the natural entropy is through the active process of reintroducing the desired stimulus. This is called temporal integration.

Temporal integration is a behavior, which processes expectations and integrates (or rehearses) responses to counteract the temporal disintegration, which is inevitable. Classic conditioning experiments, which illustrate temporal integration, are numerous (see Konorski, 1967; Woody, 1982). It is quite obvious that temporal integration, as illustrated by delayed response and delayed gratification studies, is indispensable for the production of traits such as endurance, continuity, nurture, stability, assurance, reliability, conscientiousness, steadfastness, trustworthiness, consistency, confidence, and the ability to cherish or hold dear.

The process of temporal integration is mediated by complex physical connections in the brain. "The connection between limbic system and neocortex involves chiefly the frontal cortex" (Jaenig, 1978, p. 264). The frontal cortex or prefrontal cortex (frontal lobes) of the brain is the part of the cerebral cortex, which receives projection fibers from the mediodorsal nucleus of the thalamus. It also receives afferent fibers from numerous structures of the diencephalon, the mesencephalon, and the limbic system. These are thought to convey influences from lower levels of the brainstem and from limbic structures (Fuster, 1980, pp. 37-39).

Luria (1973) concludes, from thirty years of laboratory inquiry into the possible functions of the frontal lobes, ". . . that the frontal lobes play an essential part in the higher forms of regulating the states of activity" (p. 22). These states of activity include the accomplishment of complex tasks and ". . . the execution of intentions that determine the direction of human activity and impart to the latter an elective and purposive character" (p. 22).

Fuster (1980), in his book *The prefrontal Cortex*, states that the most general characteristic function of the prefrontal cortex is its function serving a wide range of cognitive and motor activities (at multiple levels). This super ordinate function of the prefrontal cortex, says Fuster, is the formation of temporal structures of behavior with a unifying purpose of goal.

Time is probably the single most critical factor determining the involvement of the prefrontal cortex in the synthesis of given behavioral structure, reflects Fuster. The mere interposition of time within the structure may necessitate the binding role of the prefrontal cortex. Complex behavioral structures take longer to execute than do simple ones. Thus, it can be argued that the prefrontal cortex adds to the temporal dimension of potential behavioral patterns.

Fuster suggests that to better understand the synthetic function of the prefrontal cortex it is helpful to conceptualize all behavior as a hierarchical order of temporally structured units. Purpose implies a future goal, and the behavioral unit defined by a given purpose is not terminated until the goal is reached. Successive units with limited short-term goals make larger and longer units with longer-term objectives. Therefore it would seem logical to conclude that the prefrontal cortex allows the organism to form structures at a higher level in the behavioral hierarchy and also facilitates the bridging of temporal discontinuities within the structures. The higher the level and the longer the discontinuity, the more essential is the role of the prefrontal cortex.

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The behavioral structures for which the prefrontal cortex is so important are indeed complex temporal gestalts. Fuster's views deviate from Gestalt psychology not only in that they emphasize the temporal, instead of the spatial aspects of the structure formation, but also in that they have little use for the nativism that encumbers much of classical gestalt theory. As he sees it, the organism does not merely experience temporal gestalts; it makes them.

From his survey of literature and his own experimentation Fuster believes that the delayed-reaction test is probably the best procedure ever invented to assess an animal's ability to form temporal structures and to assess the role of the prefrontal cortex in behavior organization. Temporal gestalts obey the same laws that govern spatial gestalts. One of them is the law of proximity. Close or contiguous elements are treated as parts of the same configuration, whereas distant elements are not. Interfering elements that are similar but not equivalent to elements of the behavioral configuration compete with them, distorting the configuration or perverting it. Extrinsic stimuli may interfere at any time in the course of the configuration, but they are most likely to do so, perhaps in greatest number, during the temporal intervals that separate its critical elements. The synthesis of a delayed-response or delayed-matching trial (a test of an individual's ability to respond correctly to a previously given stimulus when that stimulus is repeated among other stimuli after a delay) is most vulnerable to external interference during the delay.

The question that we need to ask is, "What strategies are necessary for persons to keep hope alive when subjected to waiting?" Some known strategies are intermittent reward, rehearsing the future event or objective, celebrating milestones toward the anticipated event or action, etc. It strikes me that preparation for the Sabbath day that God instituted and sanctified in Eden, represents to us a weekly rehearsal of attitude and anticipation for the second coming of Christ.

### **Conclusion**

There may be many behavioral substrates of faith, which could be identified and studied. These three serve merely as illustrations of cybernetic\* models, which may prove to be beneficial in a field of study such as faith development. The problem, which faces theorists in religious education, and particularly in faith development, is that of a lack of specificity in language along with a lack of specific strategies for the facilitation of faith development. One reason for this is that the use of the term "faith" has been relegated to popular contemporary usage, which has, through an evolved sequence of linguistic changes, lost its original specificity. Another reason may be that cybernetic research in the fields of neurophysiology and neuropsychology has been given very little if any attention at all.

One of the best ways to evaluate the coherence of emerging concepts in a field of study is to examine its language. The terminology, which is in use, ought to be crystallized in order for exchange of meaningful data to take place. At times it is necessary to use existing terminology with a particular difference in meaning. That is justified if a term or group of terms still exist(s) to connote the meaning inherent in the original term. It is possible that, with emergent philosophies, assumptions are built upon commonly used terminology, which has been defused by multiple strata of linguistic change. It is with that possibility in mind that I deal with the most basic roots of the term faith in the Old and New Testament Scriptures. It is hoped that by uncovering some basic root meanings to the word "faith" more precise imagery and usage will be possible in relation to faith development.

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\* Cybernetics is the science of communication and automatic control systems in both machines and living things.

The traditional structure for which the proposal comes is so important we should consider it in detail. Piaget's view derives from Gestalt psychology not only in that they emphasize the spatial aspects of the structure formation, but also in that they have little use for the notion that structure is a mere mental image. As he says in the organization does not merely experience temporal Gestalt it makes them.

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condition test is probably the best procedure ever invented to assess an animal's ability to learn temporal  
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show the same laws that govern spatial Gestalt. One of them is the law of persistence. Other  
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positive insight and unity will be possible in relation to faith development.

Continued in the science of communication and automatic control systems in both machines  
and living things.

John W. Fowler (1981), in his stages of faith, highlights the importance of relating psychosocial development stage theory to structural-developmental stage theory. These, he states, "may help clarify in what sense faith stages may be said to be normative." Fowler warns that faith stages should "not be understood as an achievement scale by which to evaluate the worth of persons." Neither are they to be represented as "educational or therapeutic goals toward which to hurry people." The aim, therefore, of education and nurture is to realize the potential strength of faith in each stage and facilitate the reworking of that faith as it meets the challenges of parallel psychosocial eras (p. 114).

Does this mean that these stages are goals, but that what is wrong is the hurrying? Moran (1983, p. 112) asks that question and notes that Fowler refers to each stage as having an integrity of its own; therefore a person can live a rich life at any of the stages. Paradoxically, Fowler shows distress at the willingness of many to settle into early or middle stages. Fowler (1981) criticizes religious institutions for dealing at a stage three level\* and not challenging individuals to become stage four\*. Television preachers have mastered the art of stage three preaching, "offering a tacit version of Christian theology that centers in a vicarious interpersonal warmth and meaning....They constitute a parody of authentic Christianity and an abomination against biblical faith" (p. 164).

Moran (1983) observes that Fowler, like Kohlberg, underestimates the problem posed by having a normative endpoint in a developmental scheme (p. 112). Moran notes that:

. . . developmental theories arose as a way of avoiding determinism of both the beginning and the end. Piaget and Erikson in different ways create a tension of opposites so that their systems have no endpoints. They both recognize the paradox: To know the end of development is to subvert the notion of development because then the process of developing is merely an unfinished case of the developed and is therefore not very important (p. 113).

Fowler (1981) admits that whenever he speaks on stages of faith and tries to describe the structural features and styles of each stage, people are always more interested in stage six (p. 211). It would stand to reason that if people find out what the endpoint is, they will assume that everything else leading to it is preliminary to that end and therefore reducible to steps toward that end. The titles of two of his books may add to the misunderstanding, viz., *Life Maps: Conversations on the Journey of Faith* (Fowler & Keen, 1978), and *Becoming Adult, Becoming Christian: Adult Development and Christian Faith* (1985). Linear imagery, though not intended, is present nevertheless.

What can Fowler do to avoid this problem? The paradox may be found in the descriptions of faith stages. When describing each faith stage Fowler expends a considerable amount of energy outlining the environment, the roles, the tasks, the relationships which ideally ought to exist, and

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\* Fowler's stage three says that as the adolescent moves into adulthood and begins to take an adult responsibility—marriage and family, vocation, financial responsibility, etc.—he/she also often begins to question some of the faith assumptions of parents and/or religious tradition. For many, the need to doubt, question, and even reject elements of one's faith traditions is necessary for faith development. This phenomenon is not restricted to young adulthood, as an increasing number of persons in the middle and later years are faced with the need to rethink their faith.

\* Fowler's stage four says that no earlier than the middle years, some adults are able to bring into meaningful reconciliation the variety of faith dynamics that have played important roles in previous stages of their faith development—their faith roots of family and church, the beliefs of others, the answers they have found to their own questions, all tempered with the maturity that comes only with the experiencing of life.

what happens when any of these is out of proportion either psychosocially or structural-developmentally. All of these are important in describing the results of faith, the context of faith, the demand for faith, the value of faith, but do they specifically characterize the act of faith or the manifestation of faith as a means to those ends?

To put it another way, people develop. Developing people use faith to meet the challenge of each task or role within each stage of human development. To equate the result with the means creates a problem that continues to compound itself through expectations (one level of observation) without specific behavioral skills to achieve them (another level of observation). Faith is inseparable from the object of faith or the stimulus, which created a need for its use. Yet it cannot be said that they are the same thing.

It is important to have and maintain a concept of the psychosocial variables and interface those with known factors of expectations, roles, and tasks, which are part of the structural-development model of human development. Without these there would be no use for faith. What is also important is that behavioral mechanisms or sub-structures of faith be recognized as another level of inquiry which may provide answers that are more fundamental, rather than moving to the more complex until faith winds up being equated with the ego (Kegan, 1977; Fowler 1980). The key to this synergistic multilevel approach is that the compatibility of concepts can be evaluated when the data collected at varying levels of inquiry are set side by side and points of equivalence are identified. This requires a holistic view of personhood, which will not exclude the consideration of certain levels of behavior because tradition and history have bifurcated the human soul.

Fowler's stages are valuable as contexts for the exercise of faith. At each stage they provide interplay of observed tasks, roles, and expectations that may be appropriate for that individual. The seven aspects which add dimension to Fowler's stages might prove to be specific enough to be compared with yet to be derived substrates of faith like those presented as illustrations from the fields of neurophysiology and neuropsychology, viz., attention, conditional readiness, and temporal integration. The result could very well be a set of developmental stages in which individuals can achieve full maturity of faith to meet the challenges posed by increasingly complex roles, tasks, and expectations.

If it is true that faith has physiologically identifiable substrates; the issue, at least to some degree, becomes stewardship. Stewardship implies dominion with responsibility and accountability. Faith becomes a behavioral resource that people either use effectively to meet their changing roles, tasks, and expectations, or not. Regardless, people are responsible for their use or misuse of faith within the context of changing roles, tasks, and expectations. To treat faith as if it were some entity which somehow functions on its own or which through observation could be figured out so that persons could adjust to its trajectory or pattern (viz., a dualistic paradigm) places the individual in a passive mode of operation. The result may be that too much precious time is spent examining a concept of faith, which has become so broad in its scope that very little time and effort are spent developing the personal skills of faith.

This may be partly the result of a failure among developmentalists to distinguish between descriptive inquiry and prescriptive attitudes. Is the behavior pattern being observed simply a description of what is, or is it a prescription of what ought to be? If the paradigm is dualistic then the observed data will likely be prescriptive. On the other hand, if a holistic paradigm is adopted then descriptive data could be used to monitor the variances in consistency to the ideal, thus skills can be developed to create consistency with the ideal if that is desired.

To illustrate this, take the statement: "Older adults tend to have more faith than younger adults." Is this prescriptive or is it descriptive? One observer will accept that reality as a prescription for how things will continue, and will put the effort into adjusting the society's expectations to that reality. Another will accept that reality as a measure of divergence from an ideal, and will put the effort into nurturing skills to achieve that ideal. Developmental studies in the field of religious education must consider the distinction between prescriptive and descriptive applications to observed data.

What Fowler has laudably sought to accomplish in his work is found in the subtitle of his book *Stages of Faith* (1981), which reads: "The psychology of human development and the quest for meaning." He has provided the groundwork, from the perspective of human development, for describing and analyzing the relationships between faith and other developmental factors that contribute to human maturity at each stage of life. What Fowler has not done is isolate faith behaviors that are specifically called for as a means of successful maintenance of equilibrium in each stage of human development.

When we examine the nature of faith as behavior, identifying faith skills that can help religious educators to nurture individuals to a full expression of faith at their particular level of development, we will have taken our understanding of faith development to another level of practicality. The work of Piaget, Erickson, Kohlberg, Jung and other leaders in developmental research has been invaluable to our understanding of how persons develop. I pray that this complementary examination of faith from another perspective will help religious educators to nurture individuals, regardless of their stage of development, to achieve a full measure of faith.

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