1989

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Pittsburg State University Graduate Bulletin 23 (1989): 5-14

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Donald Wayne Viney

Two of the underlying assumptions in the controversy over Creation Science and Evolution are that science and religion are in the business of explaining certain natural phenomena and that the success of one explanation entails the failure of the other. These assumptions not only inform the Creation/Evolution controversy, they are also at the root of much of what Andrew White called the warfare of science with theology.[1] White's notion of a warfare between science and theology overstates the case. The relationship between science and religion has as often been one of reconciliation and compromise as of discord and conflict.[2] Nevertheless, the idea persists both in the popular imagination and sometimes in the scientific community that science and religion are, at bottom, antagonists. The Creation/Evolution controversy, as it is presented in popular literature, reinforces this belief. The purposes of this paper are (1) to unravel some of the strands of argument that lend support to the warfare motif and (2) to demonstrate that the intellectual landscape since Darwin does not support a view that would make evolution and creation irreconcilable hypotheses.

A humorous treatment of the "warfare" between science and theology is found in a play by Aristophanes called *The Clouds*, first produced in 423 BCE. The philosopher Socrates instructs an old country gentleman named Strepsiades on the causes of rain, thunder, and lightning. Socrates flippantly announces that neither Zeus nor any of the other gods exist. Strepsiades is incredulous for he had been brought up to believe that rain was caused by "Zeus pissing through a sieve." Socrates explains that the clouds cause rain. He goes on to demonstrate that thunder is caused by the clouds turning somersaults. He uses Strepsiades as his model.

> Socrates: It's a public holiday. You've stuffed yourself with meat balls. You have indigestion. What does your inside do? Rumble!
> Strepsiades: You're right by Apollo! It plays up and churns around and the meat balls boom like thunder, and the noise is dreadful; first, *piano*, burp. Then, *mezzoforte*, Burp, Burp. And when my bowels begin to open it thunders BURP *fortissimo*, just like the clouds.

> Socrates: Consider then: if from so small a belly so great a blast can come, its only reasonable that air, which has no boundaries can make loud thunder. That's why we use the same name in both cases—wind!

Socrates concludes by explaining that lightning is the natural result of a sirocco trapped inside clouds, inflating them like balloons and igniting itself through friction. The conflict between science and religion is evident. If rain, thunder, and lightning are caused by natural processes, then Zeus cannot be invoked to explain them and he becomes otiose, or worse, non-existent.

The exchange between Socrates and Strepsiades brings to mind the controversy over Benjamin Franklin's invention of the lightning rod in 1752. A few theologians and ministers around the world condemned Franklin's invention as a way of trying to harness the power of God. When earthquakes hit Massachusetts in 1755, the Rev. Thomas Prince attributed them to God's displeasure over the many lightning rods that had appeared around the city. Prince proclaimed to his congregation:

> Oh! there is no getting out of the mighty hand of God. For I cannot believe that in the whole town of Boston, where so many iron points are erected, there is so much as one person, who is so weak, so ignorant, so foolish, or, to say all in one word, so atheistical, as ever to have entertained a single thought that it is possible, by the help of a few yards of wire, to get out of the mighty hand of God.[4]

The Reverend Prince apparently saw lightning, not as a natural phenomena, but as the power of God. Likewise, he attributed the Boston earthquake to divine activity. With Franklin's lightning rod—and worse still, Franklin's theory of electricity—the theological explanation collapses. Imagine Reverend Prince's indignation could he have foreseen modern theories of plate tectonics that explain even earthquakes without reference to God.

A dramatic demonstration of the lightning rod's potential for "getting out of the mighty hand of God" and for saving property and lives came in 1767, fifteen years after the rod's invention. Officials at the church of San Nazaro in Brecia ignored repeated advice to erect a lightning rod atop the steeple. Several thousand pounds of gunpowder, stored in the Church's vaults, exploded when the Church was struck by lightning. One sixth of the city was destroyed and an estimated three thousand lives were lost in the fire.[5]

The Creation/Evolution controversy is another example of apparently competing explanations between science and religion. In this case, however, the phenomena to be explained are biological, not meteorlogical. But the principle is the same. In broad outline, the assumption is that either Darwin (or some variant of Darwinism) or the Bible explain the variety and distribution of species around the globe. If Darwin wins then the Bible is wrong. The Creation Scientists add another assumption that aggravates the problem and elevates the stakes.

They say that if evolution wins, atheism wins. In the words of Henry Morris and Gary Parker, two well-known advocates of Creation Science, "The Evolution Model, by its very nature, is an atheistic model . . ." The parallel with *The Clouds* and the story of the lightning rod is nearly exact. As a point of historical fact (as opposed to Aristophanes' parody), Socrates *was* accused of being an atheist, although he denied the charge. And we have already seen that Reverend Prince associated the belief that God's power could be controlled by the lightning rod with "atheistical" thinking.

Although the Creation/Evolution controversy is fueled by the apparent conflict between scientific and theological explanations, the evidence provided that a real conflict exists is remarkably poor. For example, Morris and Parker claim that evolution and creation are contradictories. Evolution, they say, "assumes that the universe is self-contained, and that the origin and development of all its complex systems . . . can be explained solely by time, chance, and continuing natural process, innate in the very structure of matter and energy." On the other hand, creation "maintains that the universe is *not* self-contained, but that it must have been created by processes which are not continuing as natural processes in the present." Morris and Parker claim that these two views are the only possibilities. But this is incorrect. Let S = "the universe is self-contained" and let N = "the origin and development of complex systems is solely explained by natural processes, etc." Then, according to the above definitions:

Evolution = S and N
Creation = not-S and not-N

Clearly, these are not the only possibilities. Others include "S and not-N" and "not-S and N." In fact, the contradictory of evolution, as Morris and Parker define the term is:

"not-S or not-N,"

or alternately,

"It is not the case that both S and N."

The Creationist's own definitions fail to support the thesis that evolution and creation are contradictories. Indeed, a good case can be made that the thesis "not-S and N" is the position commonly called theistic evolution, a view that combines belief in God and belief in evolution. Surprisingly, Morris and Parker admit that theistic evolution is possible. They add the qualification that evolution is to be judged by scientific criteria whereas theistic evolution is to be judged by theological criteria.[6] What is this, however, but an admission that evolution is not inherently atheistic?

Since the time of Darwin, some version of theistic evolution has appealed to persons informed by biological science and theistic religion. Darwin himself struggled with the problem and often felt the pressure of the dilemma, the choice between a "scientific" and a religiously based explanation. Indeed, there is no

question that the main rival to Darwin's theory was the theory of Special Creation. However, it should be noted that the theory of Special Creation as Darwin's contemporaries developed it has almost nothing in common with what goes by the name "Creation Science." Because of the advances in the sciences of geology and paleontology, the Special Creationists of Darwin's day had rejected a literal reading of Genesis and accepted the idea that the earth is older, by several orders of magnitude, than a few thousand years. Creation Scientists do not make these concessions. Indeed, what divides the Special Creationists from the Creation Scientists is more profound and involves a fundamental disagreement concerning the question whether evolution is a scientific hypothesis. It is instructive that the arguments of the *Origin* are framed in such a way as to meet the demands of scientific standards as outlined by John Herschel (1792-1871) and William Whewell (1794-1866), two of the outstanding philosophers of science of their day, both of whom were Special Creationists.[7] In Darwin's day the scientific status of evolution was not a point of contention between evolutionists and creationists. In our day, Creation Scientists and evolutionists disagree on whether evolution is scientific.[8] The theoretical distance between Special Creationists and Creation Scientists can be expressed by saying that, in terms of their understanding of evolution and its relation to scientific inquiry, Special Creationists have more in common with modern evolutionists than they have with Creation Scientists.

As Darwin made his travels and the idea of evolution took shape in his mind, he gradually came to see the prevailing theistic theory of nature's biological diversity as inadequate. It is the explanations of the Special Creationists that, time and again, Darwin targets in *The Origin of Species* (1859). One example will suffice to illustrate the point:

> [The] general absence of frogs, toads, and newts on so many oceanic islands cannot be accounted for by their physical conditions; indeed it seems that islands are peculiarly well fitted for these animals; for frogs have been introduced into Madeira, the Azores, and Mauritius, and have multiplied so as to become a nuisance. But as these animals and their spawn are known to be immediately killed by sea-water, on my view we can see that there would be great difficulty in their transportal across the sea and therefore why they do not exist on any oceanic island. But why, on the theory of creation, they should not have been created there, it would be difficult to explain.[9]

Here we see in clearest terms the mind of Darwin at work. The phenomenon to be explained is the absence of frogs, toads, and newts on so many oceanic islands. Darwin's theory explains this by saying that the animals had no way to migrate to the islands since salt-water kills them. The Special Creationists had no explanation beyond an appeal to the mystery of divine fiat for why God would not place creatures in environments ideally suited for them. Darwin was not so bold as to claim that his theory had all the answers to nature's biological

anomalies; but he did believe that his theory had more answers than the theory of Special Creation.

If Darwin believed his theory of evolution was better at accounting for the facts of nature than the theory of Special Creation, he did not equate evolution and atheism. It is true that Darwin came to reject Christianity. But this was as much because of his sensitivity to the suffering animals as to the theory of evolution. Darwin spoke of the "quiet war of organic beings, going [on] in peaceful woods & smiling fields." He was particularly sensitive to what theologians call natural evil—suffering resulting from natural causes as opposed to human agency. For Darwin, the vast amount of suffering and cruelty in nature would be an embarrassment to a God who was at once perfectly good and limitless in power. Nevertheless, Darwin never entirely gave up on belief in God. Frank Burch Brown summarizes Darwin's religious attitudes in later life:

> . . . his beliefs concerning the possible existence of some sort of God never entirely ceased to ebb and flow, nor did his evaluation of the merit of such beliefs. At low tide, so to speak, he was essentially an undogmatic atheist; at high tide he was a tentative theist; the rest of the time he was basically agnostic—in sympathy with theism but unable or unwilling to commit himself on such imponderable questions. Overall his thought regarding theological matters could best be described as being in what he himself termed a "muddle."

Darwin adopted T. H. Huxley's term and called himself an agnostic, to express a kind of suspension of belief in the absence of sufficient evidence.[10]

Charles Hartshorne argues that Darwin's reluctance to embrace theistic belief had less to do with his biological discoveries than with his acceptance of the presupposition of the dominant theology of the age which pictured God as an all-controlling power capable of unilaterally determining the course of nature. When this view of God is grafted onto a philosophy of nature, the result is an exclusion of the role of chance in explaining evolutionary development. Hartshorne notes that evolutionary theory can dispense with, and is better off without, the deterministic assumption. He also argues that the denial of chance ruins theology by making the problem of natural evil unmanageable. Darwin was right: a world order in which every monstrosity, every suffering, every birth of an unviable, illadapted animal [is] divinely decreed" discredits the idea of the all-arranging power of a perfectly benevolent deity.[11] Darwin's mistake was to suppose that a theology which affirms God as the creative ground of existence could not recognize the role of chance, accident, misfortune, and tragedy in shaping the natural world.[12]

The theological muddle in which Darwin found himself was mirrored in the scientific community. Some thinkers, like T. H. Huxley (1825-1895) adopted a positivistic and materialistic stance that effectively excluded God from the thinking of reasonable people. Others, like the American botanist Asa Gray (1810-1888) strove for a compromise with evolutionary theory. According to

Gray, a devout Presbyterian, it was possible to believe in both evolution and natural theology. Instead of seeing God as the creator of fixed species, Gray pictured God as the designing power behind evolutionary change. Indeed, Gray went so far as to claim that "a theistic view of Nature is implied in [Darwin's] book, and we must charitably refrain from suggesting the contrary until the contrary is logically deduced from his premises . . ."[13] Unlike present day Creation Scientists, Gray would not equate evolution and atheism. As a botantist, guided by the weight of scientific evidence, he was compelled to abandon the theory of Special Creation. But as a thinking religious man he clearly saw that the theological implication of the falsity of Special Creation is not that God does not exist but merely that God did not create fixed species.

Interestingly, Gray's approach was shared not only by many scientists but by many theologians and Biblical scholars as well. While a conservative fold, led by Charles Hodge (1797-1878), repudiated Darwin's theories as incompatible with Christianity, others like Frederick Temple (1821-1902), A. H. Strong (1836-1921), and Henry Ward Beecher (1818-1887) explored ways of reconciling evolution and Christianity. While there were important differences among these men, the fact remains that they did not accept the equation of evolution and atheism.[14] The movements of thought within Christian centers of learning came to see Darwin not as a threat, but as a chance to better understand the ways of God. Eric C. Rust summarizes the case well:

> Once the Christian Church had, somewhat belatedly, made its peace with "evolution" as a creative process, the category entered theological thought at the levels of Biblical study and systematic theological thinking.[15]

Alfred North Whitehead's idea that the clash of doctrines is not a disaster but an opportunity expresses the attitude of many nineteenth century theologians toward evolutionary theory.

The twentieth century has seen numerous attempts to find common ground between religion and science, or at least to show their compatibility by demarcating their respective boundaries. The names of Frederick Tennant (1866-1957), William Temple (1881-1944), and Pierre Teilhard de Chardin (1881-1955) come immediately to mind. These thinkers represent the dominant trends of twentieth century theology that see no final conflict between evolution and creation. So dominant is this trend that Roland Mushat Frye can write without fear of contradiction from his peers that "creation-science cannot be regarded as representing either responsible science or responsible religion."[16] Hartshorne is even more emphatic: "I say [creation-science] is bad philosophy, bad science, bad theology, and bad hermeneutics (textual interpretation), and no good thing at all."[17]

A persistent and vocal minority throughout the twentieth century has insisted that one must choose between Darwin and the Bible. One of the things that makes the minority opinion fascinating, beyond the sheer anachronism of it

all, is that the controversy has on several occasions become a *legal* confrontation. Few dramas in literary fiction can match the real life drama of the so-called Scopes Monkey Trial in Dayton, Tennessee in July 1925. John Scopes, a biology teacher, was accused of breaking a law in Tennessee prohibiting the teaching of evolution. William Jennings Bryan (1860-1925), three time candidate for the presidency of the United States, served on the prosecuting team. The defense was led by Clarence Darrow (1857-1938), one of America's greatest lawyers. During the trial, Darrow was disallowed from using scientific testimony to make his case for Scopes. In an unprecedented and brilliant maneuver, he called Bryan to the stand as an expert on the Bible. In what is now part of American legend, the titans clashed over Biblical interpretation and evolutionary theory. Legally Bryan won the day. But the judgment of history has been with Darrow as the fictionalized accounts of the trial make clear.[18] Moreover, laws prohibiting the teaching of evolution in public schools are now acknowledged to be unconstitutional.

An unfortunate consequence of the Scopes trial is that it reinforced the idea that one must choose between science and the Bible. Bryan, the Bible believing Christian, was pitted against Darrow the agnostic. To appreciate the actual options available, one should supplement the story of Bryan vs. Darrow with Bryan vs. Fosdick. Three years before the Scopes trial, Bryan had locked horns with one of the most well-known preachers of the day, Harry Emerson Fosdick (1878-1969). *The New York Times* solicited articles from both Bryan and Fosdick on their views of evolution and the Bible.[19] In his article, Bryan trotted out the standard arguments against evolution. He argued that evolution is mere guess work about human origins, that it is unBiblical, that there is a lack of transitional forms to confirm evolution, that evolution cannot explain things like the human eye, and that it is harmful to the morals of society. These same arguments are typical of the literature of Scientific Creationists of today (although there have been added sophistries about the unreliability of dating methods and the alleged incompatibility of the second law of thermodynamics and evolution).[20] Bryan once again supposes that if Darwin wins, the Bible loses and that evolution results in atheism. As Bryan would later announce at the Scopes trial, "I am more interested in the Rock of Ages than in the age of rocks."

A very different view of evolution and the Bible is presented in Fosdick's reply to Bryan. Fosdick proposes to leave the scientific issues to the scientists and focus instead on Bryan's reading of the Bible. In a classic example of *reductio ad absurdum*, Fosdick points out that if one takes one's science from the Bible, it is not only evolution that one must reject, but other well-established results of science. The cosmology of the Bible reflects the prescientific worldview of its writers.

> The earth was flat and was founded on an underlying sea (Ps. 136:6; 24:1-2; Gen. 7:11); it was stationary (Ps. 93:1; 104:5); the heavens, like an upturned bowl, "strong as a molten mirror" (Job 37:18; Gen. 1:6-8; Is. 40:22; Ps. 104:2), rested on the earth beneath (Amos 9:6;

> Job 26:11);. . . there was a sea above the sky, "the waters which were above the firmament" (Gen. 1:7; Ps. 148:4) and through "the windows of heaven" the rain came down (Gen. 7:11; Ps. 78:23); beneath the earth was mysterious Sheol where dwelt the shadowy dead (Is. 14:9-11).[21]

Fosdick could have added other examples of the Bible's prescientific curiosities: The Bible describes a world in which disease and mental illness are often ascribed to the agency of demons (Mark 1:26, passim); where the existence of witches and other manifestations of supernatural malevolence are routinely assumed (Deut. 18:10; Ex. 22:18, Lev. 19:26; I Sam. 15:23; Isaiah 34:14—see footnote in the *New American Bible*); where thinking is done with the heart rather than the brain (Prov. 23:7; Isaiah 10:7; Matt. 9:4; Matt. 15:18-19)—the words "brain" and "brains" are not found in the Bible; where heaven is literally above and hell literally below the earth (Luke 24:51; Acts 1:10-11; I Peter 3:19); and in which the end of the world was believed to be imminent (Rev. 22:7, 12, 20; I Thess. 4:15f). If one takes one's science from the Bible, literally read, one learns that bats are birds and were created the same time with other birds (Lev. 11:13, 19; Deut. 14:11-18; Gen. 1:20-25), that sea mammals such as dolphins and whales were created with the fish (Gen. 1:20-25), that rock badgers and hare chew the cud (Lev. 11:5-6), that some insects are quadrupeds (Lev. 11:20-23), and that the value of *pi* can be inferred to be simply 3 (I Kings 7:23). In short, the claim that the Bible yields up a scientifically accurate picture of the world is as far from the truth as anything could be.

Fosdick's knowledge of the history of science and theology allowed him to see that those who have used the Bible as a guide to scientific truth have invariably been forced to retreat in the face of the advance of knowledge. Indeed, the Babylonians, the Egyptians, and the Greeks were far ahead of the Hebrews in terms of their scientific knowledge. Fosdick argues that the treasures of scripture are more in the moral and spiritual truths it teaches than in the historical and scientific details by which these truths are conveyed. He agrees with Bryan that materialistic philosophy is incompatible with Christianity, but he does not believe that evolution is necessarily materialistic. More than Bryan, Fosdick was willing to see evolution, in theological terms, as God's way of creating.

Fosdick concludes his article with the promise that, should Bryan continue the crusade to make the teaching of creationism mandatory in the public schools, multitudes of Christians would fight against him. The promise was prophetic. In the 1982 trial over Arkansas' equal time bill, requiring equal time for creation and evolution in the schools, the majority of persons listed as Plaintiffs (i.e. those opposing the equal time bill) were in some way associated with mainline Christian religious organizations. Clergy from the United Methodist, Episcopal, Roman Catholic, African Methodist Episcopal, Presbyterian, and Southern Baptist Churches were among the plaintiffs.[22] The bill was defeated.

Fosdick and Bryan would cross paths again little over a year after the exchange

of articles occurred. Fosdick had been the Guest Minister at the Presbyterian Old First Church in New York City for four years. Bryan, who was a Presbyterian, led the fight in the 1923 General Assembly to call for Fosdick's resignation. The Assembly reached a compromise, offering Fosdick the pulpit of Old First provided he was willing to become a Presbyterian (Fosdick was a Baptist). Fosdick graciously refused and tendered his resignation. Shortly thereafter, Fosdick was lured to another pastorate, one that included the building of Riverside Church in New York City. Over the west portal of the church building are a series of carved figures representing scientists, philosophers, and religious leaders. Among the figures is one representing Charles Darwin.[23]

The irony is fitting. Darwin, whose theories were once thought to be antithetical to Christianity, had been adopted by the church as one of its saints, immortalized in stone after the manner of the great carvings on European cathedrals. Could even Darwin have foreseen that the religion in which he stirred so much controversy would come to the point of fully recognizing his monumental achievements in science? Perhaps it was beyond Darwin to forecast such dramatic changes. The Church itself had evolved. By a process analogous to natural selection, doctrines that confined the revelation of God to a single book written before the dawn of modern science, found it increasingly difficult to survive in a Church that had become aware of the creative processes of the universe.

Notes

[1] Andrew D. White *A History of the Warfare of Science with Theology in Christendom*, New York: Braziller, 1955.

[2] David C. Lindberg and Ronald L. Numbers, editors, *God and Nature*, Berkeley: University of California Press, 1986.

[3] Aristophanes, *The Clouds and The Pot of Gold*, translated by Peter D. Arnott, New York: AHM Pub. Corp., 1967, pp. 17-18.

[4] Bernard I Cohen, "Prejudice Against the Introduction of Lighting Rods," *Journal of the Franklin Institute*, 253/5 (May 1952), p. 433.

[5] White, *A History of the Warfare*, p. 368.

[6] Henry Morris and Gary Parker, *What is Creation Science?* revised edition, El Cajon, California: Master Books, 1987, p. xii; cf. p. 19; pp. 299-300.

[7] Michael Ruse, *The Darwinian Revolution Science Red in Tooth and Claw*, Chicago: Chicago University Press, 1979, pp. 176-180.

[8] A helpful discussion of this issue can be found in Philip Kitcher's *Abusing Science The Case Against Creationism*, Cambridge, Massachusetts: MIT Press, 1982, pp. 30-54.

[9] Charles Darwin, *The Origin of Species*, edited by J. W. Burrow, Middlesex, England: Penguin Books, 1983, p. 382.

[10] Frank Burch Brown, *The Evolution of Darwin's Religious Views*, Macon, Georgia: Mercer University Press, 1986, pp. 38, 27, 30.

[11] Charles Hartshorne, *Omnipotence and Other Theological Mistakes*, Albany, New York: State University of New York Press, 1984, p. 70.

[12] For an excellent discussion of this view see Jay B. McDaniel's *Of God and Pelicans A Theology of Reverence for Life*, Louisville, Kentucky: Westminster-John Knox Press, 1989.

[13] Asa Gray, "The Compatibility of Evolution and Religion," *Darwin and Darwinism*, edited by Harold Y. Vanderpool, Lexington, Massachusetts: D. C. Heath and Company, 1973, p. 114.

[14] Frederick Gregory, "The Impact of Darwinian Evolution on Protestant Theology in the Nine-

teenth Century," in *God & Nature*, pp. 369-390. It should be noted that while Temple, Strong, and Beecher did not reject evolutionary theory, they did reject natural selection as the mechanism of evolution. Thus, they rejected Darwinism without rejecting evolution (p.383).

[15] Eric C. Rust, *Evolutionary Philosophies and Contemporary Theology*, Philadelphia: Westminster Press, 1969, p. 15.

[16] Roland Mushat Frye, editor, *Is God a Creationist? The Religious Case Against Creation-Science*, New York: Charles Scribner's Sons, 1983, p. 22.

[17] Hartshorne, *Omnipotence*, p. 67.

[18] Jerome Lawrence and Robert E. Lee, *Inherit the Wind*, New York: Bantam Books, 1960.

[19] The articles by Bryan annd Fosdick are reprinted in *Evolution and Religion The Conflict Between Science and Theology in Modern America*, edited by Gail Kennedy, Boston: D. C. Heath & Co., 1957, pp. 23-34.

[20] Kitcher, *Abusing Science*, pp. 155-164; 89-96. See also the articles by George Abell, Stephen G. Brush, Steven D. Schafersman and John W. Patterson in *Scientists Confront Creationism*, edited by Laurie R. Godfrey, New York: W. W. Norton, 1983.

[21] Fosdick, in the Kennedy volume, p. 32.

[22] Ashley Montagu, editor, *Science and Creationism*, Oxford: Oxford University Press. 1984, p. 366.

[23] Harry Emerson Fosdick, *The Living of These Days*, New York: Harper & Brothers, 1956, p. 192.

Individual Depression and the Influence of the Family: A Look at Perceptions

Lee V. Alderman

Abstract

Research was conducted to analyze the differences between depressed and nondepressed phychology students in terms of their perception of family members and their influence as measured by the Beck Depression Inventory (BDI), the Family Relationship Inventory (FRI), and a demographic questionaire.

Independent t-tests comparing FRI scores between depressed and nondepressed groups were nonsignificant ($p>.05$). The current study did not show any significant differences between depressed and nondepressed individuals and their perceptions of their parent(s) or guardian(s), or in the way each group perceived their siblings. Also, neither group favored one parent or guardian over the other.

A new method was devised for scoring the FRI when it was used in a large nonfamilial group.

Body of Paper

Approximately 15 percent of American adults will have a depressive episode at least once in their lives, and family incidence of this disorder is considerably greater than that for the general population. Family systems theorists assume that individual behavior can best be understood and treated if it is first viewed within its most intimate social context, the family.

According to researchers at the Family Institute of Kansas City (Corrales, Bueker, Ro-Trock & Smith, 1981), an individual's behavior is a comment on the whole system (family, school, business) and the whole system is involved in the individual's behavior. A circular causality is seen to exist; a view of the family system as a related set of mutually interacting, impacting parts of components. Corrales, et al.'s (1981) statement, while intriguing, raised the question that if an individual's behavior is imprinted by the family system, then this