## SCIENCE, HUMANISM, AND PSYCHOLOGY'S HISTORICAL DEBT TO CHRISTIANITY

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In a recent article in the *American Psychologist*, R.D. Fowler (1990), a former president of the American Psychological Association (APA), referred to psychology as the "core" discipline. As a discipline at the historical and contemporary crossroads of intellectual inquiry into the nature of the human condition, Fowler argued that psychology is in a unique position to make a significant contribution to the resolution of long-standing issues of both an intellectual and practical nature confronting society. The promise inherent in Fowler' description of psychology as the "core" discipline would seem to rest in large part on the theoretical and methodological diversity of the discipline in both its historical and contemporary contexts. Whether psychology is capable of realizing this promise in the sense of a coherent discipline with a unique perspective on the human condition remains to be seen.

By virtue of its intellectual legacy, the wide range of issues with which contemporary psychologists contend are long-standing concerns which, historically, have been the prerogative of philosophers and theologians and, more recently, of practitioners in the natural and life sciences, as well as a host of present-day cognate disciplines of psychology. The diversity of modern psychology, in which Fowler (1990) sees considerable promise, is a source of major concern for other psychologists who see in this diversity of content, theory, and methodology all the hallmarks of a discipline which has yet to achieve the

kind of coherence often thought to be characteristic of the natural sciences.

This is obviously not a recent development, for in its one hundred and twenty years as an independent discipline, psychology, as Toulmin (1972) has observed, has never enjoyed a reputation as a compact enterprise. Modern psychology is heir, in fact, to all the great controversies regarding the nature of man and his place in the universe with which philosophers, theologians, and, later, scientists of various persuasions, have always contended. In psychology, as Lundin (1991) observes, these controversies focused, and continue to focus, on such basic theoretical and methodological issues as: mind versus body; subjectivism versus objectivism; quantification versus qualification; reductionism versus non-reductionism; molar versus molecular; determinism versus teleology; determinism versus free will; utility versus purity; nativism versus empiricism; and, theory versus data. At the risk of oversimplifying the situation, it might be argued that the opposite ends of most of these continua represent psychologists whose theoretical and methodological perspectives reside largely in the scientific and humanistic domains of psychology, respectivelv.

In his analysis of the historical origins of contemporary psychology, Lundin (1991) differentiates between two basic streams of thought and practice which he labels the spirit/mind route and the body route, respectively. The spirit/mind route runs largely through philosophy and theology (or religious practice in general) where a major priority was speculation regarding the nature of the soul/spirit and the mind, the relationship between soul and mind, and their mutual relations with the physical body. The body route, in contrast, found its expression primarily in an emphasis on the material body, the study of which in a formal sense eventually fell into the scientific domains of anatomy, physiology, neurology, evolutionary biology, and, ultimately, various aspects of contemporary psychology.

When psychology first emerged as an independent discipline in the latter half of the nineteenth century, there was a strong sense that the survival and integrity of this "new" field of study would depend very much on its ability to represent itself as a scientific activity. The desire of the early psychologists to emulate the extraordinary success of the natural and life sciences involved widespread acceptance of the view that psychological events are natural, rather than supernatural, phenomena, and thereby amenable to understanding through judicious application of the scientific method with its emphasis on systematic, objective, and verifiable observation.

In the earliest psychological system known as structuralism, the goal was to develop a science of psychology which emphasized a search for the basic building blocks of psychological experience. The highly eclectic system of functionalism, in contrast, represented an attempt to promote a science of psychology in which the functional characteristics and adaptive value of psychological phenomena were the primary concerns. Although differing in their understanding of the appropriate emphasis of a scientific psychology, both structuralists and functionalists accepted the mind and its external and internal attributes, such as 'consciousness', as legitimate targets of scientific inquiry.

With the advent of Watsonian behaviorism and the subsequent rise of B. F. Skinner's radical behaviorism, the 'mind' and its attributes were dismissed as irrelevant at best, and highly detrimental at worst, to the advancement of psychological science. For behaviorists, the overt, observable, quantifiable behavioral event became the basic unit of analysis, the environment became the ultimate determinant of the organism's behavior, and the goal of a scientific psychology was confined to the prediction and control of behaviour. Among the psychological systems of psychology's first seventy-five years as an independent discipline, behaviorism stands out as being in the greatest philosophical and methodological accord with the materialistic, mechanistic, determin-

istic, and reductionistic perspective of much of nineteenth century science. The materialistic and reductionist stance of behaviorism is also very much in evidence among many physiological psychologists seeking to identify psychological phenomena with underlying brain structures and processes.

Like the structuralists and functionalists before them, the Gestalt psychologists of the 1930s and 1940s found the mind and its attributes to be legitimate topics of a scientific psychology. Their view of the perceiver and the learner as an active seeker, organizer, and assimilator of information, and their emphasis on higher level cognitive events, made them the principal forerunners of modern-day cognitive psychology which undertakes an experimental analysis of cognitive structure and function as manifested in the psychological phenomena of attention, perception, learning, memory, language acquisition and use, concept formation, problem solving, and creative thinking. In cognitive science, the "mind" has returned to psychology with a vengeance, but it remains a mind still devoid of the transcendent qualities which the humanistic and existentialist psychologists claim must be acknowledged if psychology is ever to live up to its potential as a unique discipline.

Perhaps the greatest divide in contemporary psychology is between those psychologists who insist that their discipline must be a scientific enterprise and those psychologists who can be described collectively as belonging to the humanistic camp. The more vehement of the psychologists in the scientific camp are inclined to dismiss their humanistically-inclined "colleagues" as lacking in scientific credibility due to the subjectivity of their theories, constructs, and methods. More forcefully, humanistically inclined psychologists have even been derided for the "quasi-religious" nature of their psychological systems where "faith", rather than objective scientific criteria, seems to be the ultimate determinant of validity.

Humanistic psychologists and their existentialist counterparts respond to

such criticisms by arguing that the mechanical and elementalistic view of man endemic to contemporary experimental or scientific psychology can never answer the ultimate questions of what it is to be human, how to actualize the potential inherent in the human condition, or how to find "meaning" in existence. They believe, in general, that if psychology is to have a future as a unique and independent discipline, this future will have to lie in an holistic and transcendent approach to the uniqueness and individuality of each human being. The potential long term threat to psychology in this situation, as Maslow (1970) has pointed out, is that dichotomizing of this sort leads to the isolation of two interrelated parts or traditions which can ultimately undermine the health of psychology as a discipline and, more particularly, as a "core" discipline with a unique perspective to offer on the human condition.

The question naturally arises whether we are faced with an unbridgeable divide in contemporary psychology. Part of the answer to this question undoubtedly resides in the issue of what constraints of a contentual and methodological nature are required for psychology to qualify as scientific activity. One answer is that put forward by the behaviorists, but it is an answer which eliminates from scientific investigation those properties of "mind" which have long been thought to be the special province of psychology.

The social sciences in general, and psychology in particular, have often been accused of accepting too uncritically the main tenets of mainstream nineteenth century science and of holding onto these tenets when natural scientists of the twentieth century have begun to find them wanting. In the rush to replace the troublesome myths of a prescientific era with scientific "truths", Benner (1988) believes that seemingly discredited religious myths were simply replaced by the new myth of a deterministic, materialistic, and elementalistic universe whose essence could be revealed in a literal and objective way by the methods of scientific inquiry. Myths are commonly considered to be inherent-

ly fallacious in nature, but Ehrenwald (1966) has argued that myths are simply human responses to mystery and not inherently untruthful. From this perspective, it might be said that the response of science to the mysteries of the universe also possesses the characteristics of a myth. As McDaniel (1986), for example, has suggested, the refutation of an existing myth often takes place from the perspective of another myth to which we are newly attracted.

Perhaps in tacit recognition of the possibility that the ultimate truths which science pursues may often be more poetic than literal, Hoffman, Cochran, and Nead (1990) have argued that metaphorical thinking is not only commonplace but inevitable, even among those scientists most committed to what might be called literal thinking. Leary (1990) has pointed out that while the rise of modern science was associated with a strong prejudice against metaphorical thinking as a perceived obstacle to the elucidation of a literal and objective reality, much of scientific thinking past and present is, in fact, highly metaphorical in nature. Isaac Newton's notion of a clocklike, mechanical universe, Darwin's concept of natural selection, and the many metaphors for brain structure and function one finds in the brain sciences, including aspects of psychology, can all be seen, upon closer examination, to have been borrowed from the prevailing technology of the era in which they were proposed.

In surveying the use of metaphor in the history of psychology, Leary (1990) notes that William James believed that any reality is subject to multiple categorizations, that the essence of scientific inquiry is the discovery of the most appropriate analogy or analogies to describe or explain a given phenomenon, and that analogies are bound to change in response to insights obtained from ongoing empirical research.

If, as Leary (1990) argues, metaphors are devices for turning the unfamiliar or mysterious, by analogy, into the familiar, then fables, parables, myths, models, and even scientific models and paradigms of the Kuhnian variety

(1962, 1970), all qualify as examples of metaphorical thinking. Leary cautions that

While the metaphorical nature of much of our thought seems intuitively obvious, there is a strong possibility that we will tent to forget this, resulting in a "hardening of the categories" and the various sorts of myths and cults — such as the myth of objectivity and its associated cult of empiticism — that have characterized so much of twentieth century thought in the social and behavioural sciences, as elsewhere.

- Leary (1990, p.3)

In his analysis and criticism of B.F. Skinner's radical behaviorism, Cosgrove (1988) argues that the psychological world view of the theorist must always be taken into account when evaluating the validity of that theorist's account of some aspect of the natural order. No investigator comes to his subject as a *tabula rasa*, and his or her preexisting view can affect such critical factors as: the subject chosen for study; the methodology used in the study; and the interpretation of the data generated in investigations. Or to put it another way, the metaphor one chooses for the phenomenon in question is a major determinant of the type of questions asked and the answers considered acceptable by the investigator (Leary, 1990).

In the twentieth century, the materialistic and deterministic view of the universe held by nineteenth century scientists has been giving way to a much less tangible, more probabilistic accounting of the natural order, a kind of Kantian uncertainty, to which contemporary psychologists of all persuasions should give serious consideration. As evidence against a non-mechanical view of the physical universe, Kelsey (1988), for example, points to the insights offered into the physical universe by relativity theory, quantum mechanics, and

the uncertainty principle of Heisenberg. In the biomedical sphere according to Kelsey (1988), such changes in perspective are being reflected in a more holistic, less materialistic, approach to health and health care as exemplified in a widespread acceptance of the possibility that mental phenomena of both a conscious and unconscious nature can influence the physical body. Psychosomatic medicine and such recent interdisciplinary approaches to disorders of the immune system as psychoneuroimmunology may be taken as examples of this new awareness in the medical community.

The implications of these radical changes in perspective sweeping the natural and biomedical sciences deserve serious consideration by psychologists interested in effecting some sort of reconciliation between the experimentally and the humanistically oriented practitioners of contemporary psychology. Multidisciplinary in its origins, contemporary psychology must somehow find a way to accommodate to the diversity within itself in a way that offers a unique perspective on the human condition. The alternative, as Leahey (1980) has suggested, may be that psychology runs the risk of becoming an "interim" discipline, a discipline which for lack of coherence and uniqueness eventually dissipates as its mandate is assumed by one or more of the disciplines to which it is historically heir or with which it currently shares its fundamental questions

In a recent article entitled "Is psychology the science of behavior?, M.W. McPherson (1992) comments on the reasons for and implications of a preference by mainstream scientific psychology for analysis of the single psychological or behavioral event. In his words,

The roots of this practice appear to have started with the pioneer psychologists' determined efforts to demonstrate that their subject matter was tangible, not psychic, that it was natural, not supernatural. This defended

siveness initiated the still persisting and widely sanctioned practice of playing up the kinship of psychology with biology and playing down its independence and uniqueness. The adoption of the methods of the physical sciences also led to an emphasis on regularity and thus to a slighting of the irregularity that is characteristic of behavior.

- McPherson (1992, p.329)

If, as most humanistic psychologists claim, the transcendent, spiritual, or religious experience is a valid, unique, and natural aspect of the human condition, then a way should be found at some point to incorporate such experiences into the content of a scientific psychology. Such experiences seem to have been part of the human condition since the dawn of consciousness when men first began to wonder about their origins, their place in the universe, the physiological and psychological rhythms of life, the meaning of existence, and the fate of the individual after physical death. As Hearnshaw (1987) points out, evidence from the archaeological record as well as anthropological evidence from aboriginal peoples reveals that answers to these basic questions were largely expressed in what, today, we would call "animistic" terms. Animism of any sort has generally had a highly negative press among the scientific community, but its persistence to the present day may speak of an element of truth about human nature which scientists in general, and scientifically-minded psychologists in particular, would do well to heed. In Hearnshaw's words.

Animism, of course, since primeval times, has been enormously refined, particularly under the influence of high religions such as Judaism, Christianity and Buddhism, and by philosophic thinkers of idealistic persuasion. These refined forms of animism, central to religious belief, have ex-

erted a powerful influence over even the most intelligent minds, and cruder vestiges (occultism, spiritualism, witchcraft, etc.) have survived and constantly recrudesced throughout the civilized era. Even professedly materialistic regimes have been unable to suppress animistic beliefs, and in western civilization some of the most eminent thinkers have unashamedly supported animism — in psychology, for example, Fechner, McDougall, and Jung; while the recent growth in consciousness, meditation and existential philosophies is strongly coloured by animistic ideas. The collapse of materialistic and mechanical explanations within the physical sciences has certainly helped to promote an animistic revival, and forced us to consider the possibility that within the luxuriant profusion of animistic ideas there may indeed be a central core of truth.

- Hearnshaw (1987, p.12)

In Maslow's (1970) estimation, mainstream scientific psychology is demeaned if it limits itself to the tangible and concrete by removing from its domain of competence any phenomenon that could conceivably be described as transcendent or spiritual in nature. Likewise, religion, the traditional domain of such phenomena, is debased if it focuses exclusively on the abstract and intangible, refusing to acknowledge the relevance of scientific insights to its mandate. According to Maslow,

It is because both science and religion have been too narrowly conceived, and have been too exclusively dichotomized and separated from each other, that they have been seen to be two mutually exclusive worlds. To put it briefly, this separation permitted nineteenth-century science to become too exclusively mechanistic, too positivistic, too reductionistic, too desperately attempting to be value-free. It mistakenly conceived of itself as

having nothing to say about ends or ultimate values or spiritual values. This is the same as saying that these ends are entirely outside the range of natural human knowledge, that they can never be known in a confirmable, validated way, in a way that could satisfy intelligent men, as facts satisfy them.

- Maslow (1970, p.11)

For Maslow, spiritual or transcendent experiences are natural, as opposed to supernatural, phenomena, and are an essential part of the essence of what it is to be human. Such experiences, and the questions they evoke, are worthy of exploration by a suitably enlarged scientific psychology which acknowledges both the biological/material nature and the transcendent/spiritual nature of the human being. In Maslow's view,

One could say that the nineteenth-century atheist had burnt down the house instead of remodeling it. He had thrown out the religious questions with the religious answers, because he had to reject the religious answers.... But ... it is increasingly clear that the religious questions, themselves — and religious quests, the religious yearnings, the religious needs themselves — are perfectly respectable scientifically, that they are rooted deep in human nature, that they can be studied, described, examined in a scientific way, and that the churches were trying to answer perfectly sound human questions. Though the answers were not acceptable, the questions themselves were and are perfectly acceptable, and perfectly legitimate.

- Maslow (1970, p.18)

If, as Maslow (1970) argues, the religious questions are perfectly legiti-

mate questions because they are a response to a widespread and intrinsic human experience, and thereby naturalistic in character, psychology as a scientific endeavour has a responsibility to address these questions. The general reluctance of mainstream scientific psychology to assume this responsibility might be said to contribute in a significant way to the prevailing disunity in the discipline.

Of course, as Benner (1988) has noted, and as a survey of contemporary psychology will reveal, not all psychologists or systems of psychology have been averse to acknowledge or study spiritual or religious phenomena. William James, whom many consider to have been preeminent among early American psychologists, emphasized the importance of the religious experience and addressed issues of spirituality and religion in his well known volume "Varieties of Religious Experience" (1902, 1937). More recently, as Benner (1988) has pointed out, the analytical psychology of Carl Jung and his followers, the We-Psychology of Fritz Kunkel, the Existentialist Psychology of Ludwig Biswanger, Medard Boss, Rollo May, and Adrian van Kaam (heirs to the philosophical tradition of Soren Kierkegaard, Karl Jaspers, Jean-Paul Sartre, and Martin Heidigger), the contemplative Psychology of Gerald May, the psychosynthesis approach of Robert Assagioli, Victor Frankl's logotherapy, and various aspects of transpersonal psychology all incorporate elements of spirituality or religiousity to varying degrees. Moreover, many aspects of psychology as a therapeutic practice have religious or spiritual overtones. While pastoral counselling in the Christian tradition may represent the most obvious expression of this reality, Benner (1988) has argued that "the contemporary practice of psychiatry (and clinical psychology) has much more in common with religion than with medicine or science." (p.11). He goes on to document the historical role of Christianity as a provider of "soul care" millennia before the advent of psychotherapy as a "secular" profession in the late 19th and early 20th centuries. Szasz (1978) has argued that "contrition, confession, prayer, faith, inner resolution, and countless other elements are expropriated [by psychiatry] and renamed as psychotherapy; whereas certain observances, rituals, and other elements of religion are demeaned or destroyed as the symptoms of neurotic or psychotic illness." (p.188).

Covertly or overtly, therefore, it seems that issues of a spiritual, religious, or transcendent nature permeate significant aspects of contemporary psychology in both the theoretical and practical realms. Presumably in recognition of the importance of religious or spiritual phenomena to psychology, Division 36 of the American Psychological Association has been established as a forum for psychologists interested in religious issues.

Given that issues of a spiritual or transcendent nature are of substantial overt or covert importance to significant segments of the psychological community, coupled with the need to broaden the horizons of a scientific psychology, as Maslow (1970) would urge, it is appropriate for psychologists to be aware to some extent of historical inquiries into this issue. While historians of psychology are quick to point to philosophy and the natural and life sciences as the precursors of modern psychology, there is often a tendency to overlook the contributions of religion and theology to the evolution of the discipline. Like most Western intellectual traditions, psychology owes a considerable debt to Christian theology which achieved its peak dominance of Western intellectual activity in the millennium from AD 400 to AD 1450. In Hearnshaw's (1987) words,

For a thousand years or more, from roughly AD 400 to AD 1450, the intellectual life of the west was dominated by Christian theology. Whatever views may be held as to the validity and as to the future of Christian doctrine, its influence in shaping the outlook of Western man cannot be de-

nied. As Thomas Carlyle put it, Christian theology was "a great heaven -high unquestionability, encompassing and interpenetrating the whole of life." Even the rise of the physical sciences, as Hooykaas has recently shown, depended a great deal upon the world picture of the theologians. Psychology, because of its intimate connection with the subject matter of religion, was even more deeply influenced. In an age when there was retrogression rather than advance in the physical and biological sciences, psychology, because of its religious affinities, was by no means completely stagnant, but significantly extended its range.

- Hearnshaw (1987, p.33)

The extension of this range, as Hearnshaw goes on to illustrate, can be seen in the works of such eminent Christian theologians as St. Augustine (AD 354-430), St. Thomas Aquinas (1225-1274), and Jon Duns Scotus (C. AD 1266-1308), amongst others. In developing a Christian theology which incorporated an essentially Platonic view of the universe, Augustine engaged many issues which, today, would be described as psychological in nature. Also heavily endowed with psychological speculation was the Christian theology of Augustine who rejected Plato in favour of an Aristotelian view of the world. Similar comments can be offered of the works of Jon Duns Scotus in what has become known as the scholastic period of Western intellectual history. As Kelsey (1988) has observed, the special mandate of theology is to integrate spiritual or religious experiences with existing knowledge of oneself and one's place in the universe. The fact that theologians and psychologists, past and present, confront similar issues suggests that a lively dialogue between these two specialities may well be to their mutual advantage and enlightenment.

In his summary of the Christian contribution to contemporary psychology, Hearnshaw (1987) notes that Christianity has always been much more than

a philosophical perspective. It is a way of life which stresses the sanctity and freedom of the individual, the dependence of the individual on others and on God, and the responsibility of each individual for the collective welfare of society. The practical expression of these principles has been and remains an enhanced sense of responsibility for the physically and mentally disabled, an attitude to which psychology, as well as the other healing professions, eventually fell heir in the 19th and 20th centuries. As Hearnshaw (1987) observes,

Together with these changes in moral feelings and attitudes, Christianity changed the intellectual climate of psychology in more ways than one. Personality, rather than intellect alone, became the distinguishing mark of man. The individual replaced the type as that which was most real. The individual was both free (hence the new emphasis on the will and on voluntary choice) and dependent (hence the emphasis on the objectivity of the moral law). He was, moreover, essentially a member of a brother-hood which had no territorial or other limitations, and he was immersed in an historical process which had direction and meaning. Academic psychology was slow to absorb these insights, but today they can no longer be ignored.

- Hearnshaw (1987, p.47-48)

For rather different reasons, Kelsey (1988) has made a similar point regarding the relevance of Christianity to contemporary psychology. Kelsey (1988) is interested in providing an explanation for the rejection by mainstream Christianity of the healing tradition of the early church and in demonstrating the contemporary relevance of that neglected tradition in light of dramatic changes in outlook in the physical and biomedical sciences.

The most obvious current beneficiaries of the Christian heritage in con-

temporary psychology are those in the humanistic and existentialist streams with their emphasis on the transcendent nature of human existence and the need of the individual for self-expression and self-realization. The issues with which they contend have long been thought to be outside the mainstream of scientific psychology, but the promise of psychology as a "core discipline", as Fowler (1990) would have it, may well rest on the ability of scientific psychology to broaden its horizons in both the contentual and methodological spheres.

With a new view of the universe arising in the natural sciences, perhaps it is time for psychology to reassess its mandate and its options as a scientific activity by reconsidering the possibility that spiritual, religious, or transcendent phenomena of the sort described by Maslow and countless others might be amenable to scientific inquiry. By legitimizing the religious questions which Christianity, in the Western intellectual tradition, has conferred upon modern psychology, the possibility exists that psychology itself could be transformed from its present state of relative incoherence into an intellectual endeavour which, as a "core discipline", has a unique and valuable perspective to offer on the human condition.

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