

HOMERIC EPIC AND PSYCHOSYNTHESIS

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What follows is an application to Homeric epic of certain findings resulting from studies of what are currently termed "paranormal" communications. These findings suggest some new aspects of epic, and, in particular, why its audiences reacted so strongly to this art form.

Briefly, psychosynthesis is a technique used by psychiatrists, or in psychically-oriented growth groups, to reveal inner aspects of the personality.¹ Specifically, what is involved is a guided fantasy tour, using a series of archetypal symbols set in a special kind of narrative. The audience is led on this fantasy tour by a "guide," after the latter has first induced an altered state of consciousness in his or her audience. In such circumstances, the archetypal images become charged with deeply enhanced meaning of all kinds. Powerful inner experiences can be produced by this technique, given the right audience and setting.

My thesis is that Homeric epic, particularly the *Iliad*, must have acted on its audiences, especially the audiences of the Greek dark-ages, but also those of the Classical and Hellenistic (and later) periods, in a way that we moderns can only fully appreciate by reference to what happens in psychosynthesis. I will try to demonstrate how and why this is so by describing in some detail how psychosynthesis "works," and then by showing the parallel between psychosynthesis and the experiencing of a rendition of the *Iliad* by one of the *Homeridae*.

In psychosynthesis the "guide" invariably has a wide acquaintance with, and deep feeling for, myth and verbal symbolism; that is, he (or she) is what passes for a bard in our society, where, for so very many people, the television cartoon has replaced the fairy tale for children and the pop singer has replaced the folk song for adults.² The guide induces an altered state of consciousness, a light trance state.³ This is generally done by techniques of progressive relaxation, produced by instructions phrased so as to heighten suggestibility. The guides usually are skilled in hypnosis; and repeated experiencing of psychosynthesis heightens the suggestibility of members of the audience. Increasingly, at such sessions forms of music are used in the background to heighten the dream-like quality of the atmosphere.⁴

Once the audience is suitably relaxed, the guide proceeds to conduct them⁵ on a guided fantasy, usually some form of journey through a landscape and events replete with archetypal symbols.⁶ This conducting is done through a special form of language, called "subcortical linguistics."⁷ Briefly, what is involved is:

a vocabulary which avoids abstract or analytical terms and which uses simple but striking imagery referring to natural phenomena;

a syntax which avoids subordination, instead using apposition, and whose aim is to produce an easy flow, not a concentrated, organised, "scientific" description;

a style which employs recurring themes, balances, anaphora and onomatopoeia, in a rhythmical, cyclic form of presentation involving much repetitiveness of words or ideas;

a presentation that puts its archetypal symbols in loose association, so that layer upon layer of imagery and allusion is implicit, a procedure which is the opposite of setting out a logically arranged sequence of carefully defined concepts according to some formula for readability or persuasion.⁸

Readers will by this time realize the aim: to encourage right-

brain-hemisphere thinking, which is associative, intuitive and holistic, rather than the linear, sequential rationalism of left-brain-hemisphere thinking that is so much encouraged by industrial society.⁹

Now it appears that one's perception of reality is markedly affected by one's dominant brain-wave state. For most of us most of the time in our culture, this means beta-wave activity (and left-hemisphere-dominant brain functioning). Alpha, the brain-wave massively induced by psychosynthesis (which induces right-hemisphere-dominant brain functioning), produces a serene, drifting calmness wherein archetypal images assume a multi-layered splendour that they do not have in everyday life.

It is also beginning to appear that these archetypes, especially those of the Greek myths, are somehow very deeply and very potently part of the unconscious -- everyone's unconscious; that is, a form of collective unconscious does indeed exist.¹⁰ So, even in a society which denies the existence of experiences derived from psychic insight as compulsively as does industrial society, the results of psychosynthesis can be very, very striking.¹¹ For it caters to a type of experience which, as centuries-old traditions testify, is essential to a fully-experienced human life.

What does this tell us about Homeric epic and its audience's reactions? The parallels are striking, but the overall cultural background, of course, is very different. The bard, or the Homeric guildsman, was thoroughly steeped in the epic and its myth and imagery. After all, he held a poem of 200,000 words in his memory, and he was dealing with audiences to whom the trance-state came more easily than it does to moderns.¹²

In the dark ages of Greece men and women were still myth-makers; logical, analytical thinking is largely a product of writing, and particularly of the alphabet.¹³ Even in Classical and Hellenistic times, perhaps only 20% of the population was literate; later the percentage was lower. Widespread adoption of calculating, analytical modes of thought seems first to have come with print, when thinking with the tools of communication became common.¹⁴ So people were closer to the trance-experience, especially since they were used to attending renditions of Homeric epic in a setting of highly and positively charged

group-belongingness, a very potent generator of collective group-experiences.

Closeness to the trance-state is further indicated by the assumptions about human motivation revealed in, and taken for granted by, the epic.¹⁵ Homeric epic has no semantic field of psychoanalytic terminology. Such concepts were foreign to the mentality of the times, which rather thought in terms of a state of communion between men and gods. The gods were the movers, the motivators to action or inaction, in a world in which transcendental experience was commonly acknowledged and experienced. And, even among the Classical Greeks, as the importance of the mystery religions indicates, such openness to transcendental experience remained commonplace.¹⁶ Thus the cultural background of Homeric epic enhanced its effects, whereas our culture does the very opposite.¹⁷

The similarity of Homeric epic to what we call "subcortical linguistics" is striking. The language itself has a lexical balance different from that of a modern world-language (or even from Classical Greek).¹⁸ Later Greek had developed a rich and complex vocabulary of abstract and analytical terms; it had likewise evolved a grammar and syntax. The Greeks, unique in evolving the alphabet, "invented" grammar and syntax, which are impossible with pictographic scripts.¹⁹ They were also the first to evolve the concepts of logic and of systematic rhetoric.²⁰ But all of this took place after the period when Homeric epic was evolved.

It is now known that there are right-brain-hemisphere and left-brain-hemisphere scripts: a stroke to the left brain leaves you still capable of reading a pictographic script (while there is complete loss of the ability to read alphabetic scripts).²¹ All indications are that there are also right and left-brain languages. Hopi, for example, is probably a right-brain language; it has much to do with "showing" and much less to do with abstract verbalisations, reification, dogma, ideology and other such manifestations common to the left-brained world-languages of industrial society.²² The language in which Homeric epic was evolved was, in these terms, a much more right-brained language than was Classical Greek, which was possibly the world's first left-

brain language.²³

Now the requirements for holding Homeric epic in memory (for it evolved in a society without a script) produced the mnemonic devices which we saw above to be so markedly a feature of subcortical linguistics. Homeric Greek is a poetic (as opposed to a philosophical) language; hence anaphora, onomatopoeia and elaborate recurring balances. "Word perfect" memory comes only with print, while the capacious memory that was capable of Homeric feats operated by remembering themes.²⁴ These involved stock formulae, repetitious structuring in word or metrical form, or any of the other mental templates used by pre-script cultures for patterning verbal texture. Conversely, formulae could themselves involve themes, being in effect structuring outlines around which the specific, but typical, feats of, for instance, a youthful warrior were elaborated, as in the *Telemachia*. Again, the framework of the myths dealing with the passing of the seasons (absence/devastation/return) could serve as such an outline.²⁵

Such formulaic features are characteristic of forms of communication which require feats of memorisation. Analogous ones exist in the African drum "languages," for example, where by convention, a limited range of themes is "spoken of" by drum. These themes are conveyed in long stereotyped phrases marked by duplication, repetition, special word forms, tonal contrasts. They occur in specific structures of a poetic nature, which constitute an important part of the tribe's oral literature.²⁶ Musical composition, another form of communication in which the right-brain hemisphere is dominant, apparently involves similar principles: motifs and themes set in large-scale, architectonic principles.²⁷ One final point: speaking with tongues (glossalalia, the state that occurs when one is possessed, as the Homeric bard was by his Muse) turns out on examination to involve no recognisable languages, but speech in epic dactylic form.²⁸ As with its mythic content, so too in its presentational format, then, epic taps the primeval depths of the human mind and psyche.

Furthermore, a very different attitude to words prevailed in the dark ages, and even, for the mass of the people, in Classical and Hellenistic times, to that which prevails among us. To us, words are a matter

of semantics; they are conceptual tools. To the Greeks of the age of the Homeric epic, words appeared somewhat differently. Obviously, there are different levels of insight into words and their ways in the *Iliad* corresponding to the different levels visible in the epic, remnants of different stages in its development into the form which has come down to us. Still, something akin to word magic can be seen occasionally, when, e.g., a prayer acts like a shaman's incantation (*Iliad* 1.35-43; 15.377-8; cf. 14.216-7) or when a god lets loose a word or a sound that bewitches all who hear it (11.10-11; 15.321-2). At a somewhat more sophisticated level, words are sometimes viewed as having, as it were, a life of their own within the speaker, or as emanating from him of their own initiative, having been usually implanted by a deity in these cases (12.232-4; 13.732-4; 19.90-4, 136-7; 20.248-9; cf. 3.221-2).²⁹ Such views of how words "work" were to change thereafter, but only for the numerically insignificant highly educated elite.

Apparently, one's attitude to words changes when one becomes literate and is exposed to a society with an advanced technology. In such societies, words have come to be regarded as mere notational devices: people, not words, are regarded as "having" the meanings. But even for Plato among the Greeks of antiquity, a word "had" meaning: it represented, and could evoke, the true reality behind appearances.³⁰ The poet, after all, was "the maker" *par excellence* for the Greeks. There were words of power, as in spellbinding, and of celebration, as in epic. Hence the very special aura around the hallowed vocabulary of the epic.

One further point: oral communications hold a people together, whereas print, the "gunpowder of the mind," blows them apart by encouraging the solitary reader and thinker and the general radicalisation of thought.³¹ In a pre-script society, all words were *heard*. Thought must thus have been thoroughly social. The cultural idea-pool was relatively small but fairly uniformly spread through the population. Thus, the Homeric epic acted to bond Greeks together even after the evolution of the alphabet, logic, philosophy, history and rhetoric, the influence of which was most felt among educated circles and in the larger centres.³²

These, then, are some major reasons for the impact of the Homeric epic upon the Greeks of antiquity, an impact which we know from the

literary tradition to have been enormous. So many factors acted in concert to augment the power of a rendition of the *Iliad*. Audiences were readily moved to what we would regard as altered states of consciousness. Indeed, they were far more open to them than we moderns are. The form of language used, its mode of presentation, the ready availability in the collective unconscious of epic's stock of images -- all these things gave a rendition enhanced effectiveness. Audiences were conditioned to be moved by their group experiences of such renditions, and transcendental experiences were commonplace occurrences.

In fact, unless one has been through the experience of psychosynthesis, it is very difficult indeed to appreciate just *why* the Greeks of antiquity were so affected by renditions of Homeric epic. We seem to be in the throes of what Thomas Kuhn has termed "a paradigm shift."³³ That is, major changes in the "models" of how the mind (and language) "works" are in the process of being made.³⁴ In particular, the movement in transpersonal psychology to study phenomena once termed, at best, "paranormal communications" is bringing all kinds of new data, and their implications, to the fore.³⁵ Once again, the vast treasure trove that is Greek culture and literature seems about to serve as a "magic mirror," allowing us to see vistas of ourselves and of our culture to which we have been paying scant regard.

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APPENDIX

Table surveying the extent of the differences between the cultural conditioning imposed by society in Archaic Greece and that imposed by society in modern industrial times in matters touched on in this article.

<i>Item considered</i>	<i>Archaic Greece</i>	<i>Twentieth-century industrial society</i>
Dominant mode of viewing language	The poet ("maker") is a craftsman with words; invocations have magical power	Semantics; sub-modes: psycholinguistics; sociolinguistics
Script with phonetic values	The alphabet as yet in very restricted use	Alphabetised scripts used by all children from age 5
Reading	Even after introduction of alphabet, reading slow, voiced and involving much memorisation	Silent reading of print the norm; much skimming
Memory	The bard's capacious memory holds much of the culture in thematic memory	Data retrieval via computerised data-banks. Need to quote exact words necessitates elaborate filing systems

Literary expression	A few well-known literary masters writing, to strict genre rules, in a language barely out of the local language stage	A bewildering variety of art forms and media, conveyed in a world-language of over a million words
Formal analytical modes of thinking	Philosophy and history yet to be invented	"Scientific" thinking the "one best way" and massively propagated
Cultural solidarity	The age of the one dominant Great Tradition; widespread sharing of its thought-forms and expressions	Many publics, with many different sub-cultures and life-styles
Altered states of consciousness	Shamanism a fact of existence; the mysteries a potent force	ASC's regarded as mere suggestibility or as indicating a need for psychiatric treatment

NOTES

* To survey the literature on Homer produced by Classicists is not appropriate in a work of this nature. After all, its readers will mostly consist of specialists in the field. However, works that are obviously of particular relevance are given: A.G. Lord, *The Singer of Tales* (Cambridge, Mass. 1960); M. Parry, *The Making of Homeric Verse: The Collected Papers of Milman Parry* (Oxford 1971); A.C. Watts, *The Lyre and the Harp. A Comparative Reconsideration of Oral Tradition in Homer and in Old English Epic Poetry* (New Haven 1969); E.A. Havelock, *Preface to Plato* (Cambridge, Mass. 1963) and *Origins of Western Literacy* (Toronto 1976). Other background works that may be found helpful in reviewing the approach presented here are M. Pei, *The Story of Language* (1965, eighth printing of the rev. ed.), especially parts one and two, and O. Barfield, *History in English Words* (rev. ed., Grand Rapids, Michigan 1967), e.g., ch. 11.

¹ The founding father seems to be R. Assagioli, *Psychosynthesis: A Manual of Principles and Techniques* (Harmondsworth 1976).

² See B. Bettelheim, *The Uses of Enchantment; the Meaning and Importance of Fairy Tales* (N.Y. 1976) introduction; compare W. Melody, *Children's Television: The Economics of Exploitation* (New Haven 1973) esp. chs. 3 and 4.

³ The trance state involves a highly distinctive set of body conditions when brain waves, heart beat and breathing are monitored. See C. T. Tart, ed., *Altered States of Consciousness: A Book of Readings* (N.Y. 1969), esp. A.M. Ludwig, "Altered States of Consciousness," 9-22 (Tart's introduction is well worth reading: 1-6; cf. also 7-8).

⁴ Use of music or sounds to heighten suggestibility and induce shamanistic out-of-body travel experiences is by now at the state of becoming something of an advanced art. Probably the basic text on "OOBE's" (out-of-body experiences) is R.A. Monroe, *Journeys out of the Body* (1971; rpt. New York 1977). Quite recently a new technique, apparently of formidable potency, has been developed. In a progressive series, different patterns of "subaudible" sounds are simultaneously pulsed into the left and right ears through stereo headphones, inducing

a "frequency-following response" in the hearer's brainwave patterns. The most sophisticated practitioners are the Monroe Institute of Applied Sciences, P.O. Box 57, Afton, Virginia 22920, USA.

⁵ Best results seem to occur in bonded, supportive groups, owing to a phenomenon termed "social facilitation": i.e., humans appear to be small-group animals, more productive when working, without necessarily talking, in small, cooperating groups: see J.E. Baird, *The Dynamics of Organizational Communication* (New York 1977) 102-108. (It should be stated that this discussion is cast in terms of using social facilitation to improve industrial output; Baird teaches only a few miles from Detroit.)

⁶ If the "tour" is being conducted for psychiatric purposes, what the "tourist" "sees" can be compared at the subsequent debriefing to norms, developed from such experiences, for the commoner neuroses. See W. Kretschmer, "Meditative Techniques in Psychotherapy" 219-28 in Tart, *Altered States of Consciousness*.

⁷ For the term and a discussion (embedded in a book written in "subcortical language") see R. Masters and J. Houston, *Mind Games: The Guide to Inner Space* (New York 1972) 240. See further P. Watzlawick, *The Language of Change* (New York 1978) chs. 2 and 3.

⁸ For a classic example of the semanticists's view of presentation see R.S. Ross, *Persuasion: Communication and Interpersonal Relations* (Englewood Cliffs 1974) 180-181, on the "motivated sequence" (the whole of chapter eight forcefully illustrates the gulf that separates such a view of language from the view underlying "subcortical linguistics").

⁹ Most cogently put, perhaps, by R.E. Ornstein, *The Psychology of Consciousness* (New York 1972) introduction.

¹⁰ See S. Grof, *Realms of the Human Unconscious* (New York 1976) ch. 5; cf. R.A. Moody, *Life After Life* (New York 1977) 21-25, for one basis of such archetypal symbolism.

¹¹ On the blighting effects of the denial of the validity of transcendental experience by our society see R.D. Laing, *The Politics of Experience* (Harmondsworth 1967), e.g., ch. 6 on "Transcendental Experience." There is ample evidence of a midlife crisis for which, in former societies

there were rituals and agencies of passage. See G. Sheehy, *Passages: Predictable Crises of Adult Life* (New York 1974) 255-8. For another way of looking at this essentially psychic crisis see R.S. de Ropp, *The Master Game* (New York 1968) 64-8 and 75-92.

¹² Extended rigorous training in disciplined use of the left brain, as in mathematics *par excellence* (but in any form of systematic analysis in general), makes it virtually impossible for the trainee to attain trance-like states of consciousness. See Grof, *Realms of the Human Unconscious*, 28-31.

¹³ See T.F. Carney and B. Zajac, *From Fable to Cable: How Messages Shape Society* (Winnipeg 1975, since reprinted, with *From Newsprint to Print-out*, as *Communications and Society*) ch. 3, esp. 28 and 39.

¹⁴ *Ibid.* ch. 5, esp. 74-5, 89 and 93-4; cf. C. Erikson, *The Medieval Vision: Essays in History and Perception* (Oxford 1976) 16 and ch. 2. For the balance of literates to non-literates and its consequences see J. Goody, *The Domestication of the Savage Mind* (Cambridge 1977) 151-57.

¹⁵ Besides the Classicists who have written on the development of awareness of the workings of the mind among the Greeks, such as E.R. Dodds, *The Greeks and the Irrational* (Berkeley and Los Angeles 1963), B. Snell, *The Discovery of the Mind: The Greek Origins of European Thought* (Oxford 1953) and R.B. Onians, *The Origins of European Thought* (Cambridge 1951), see now J. Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Boston 1976), e.g., 257-72.

¹⁶ See G. Heard, *The Five Ages of Man: The Psychology of Human History* (New York 1963) 16 (Heard's overall thesis) and 209-24, on the Eleusinian Mysteries (on which see also G. Mylonas, *Eleusis and the Eleusinian Mysteries* [London 1962]).

¹⁷ See Laing, *The Politics of Experience*, chs. 6 and esp. 7, which graphically describe the inability of our culture and institutions to provide guidance when a person is in the throes of a psychic experience involving "rebirth." (See the Appendix to the present paper for a list of the differences in the cultural conditioning imposed by Archaic Greece and twentieth-century industrial society.)

¹⁸ On the lexical structure of tribal, prescript languages see M. Swadesh, *The Origin and Diversification of Language* (Chicago 1971)

110-113; cf. 44-48 and 74-76. Now, clearly Homeric Greek is no "simple" tribal language; it is the speech of a tribal people, successors in a dark age to a high culture with a script (the Mycenaeans). Besides, "Homeric" Greek represents many accretions to its original dark-age form, accretions added by later, alphabetised generations. But, for all this, lexically speaking, it is a different language from Hellenistic Greek, which, with its lexicon of 100,000 words, was the vehicular language of an imperial high culture.

¹⁹ Only when there is an alphabet, which was evolved by the Greeks and which spread from this invention, is whatever you can say able to be written. Previous scripts had been pictographic or, at best, syllabic. In the case of the pictographic script, only those words can be written for which conventional notations, agreed upon by the scribal community, exist. In the case of the syllabic script, approximations to the sound desired are the best that can be written. But the alphabet can encompass meanings in writings that are impossible to encompass without it. For example, a term can be coined that no one has ever previously used and yet anyone reading it will understand it, given a suitable context (for instance, many abstract terms in *-otes* were coined in fifth-century Classical Greek). With an alphabet precise and minute distinctions can be made between almost identical words. And, of course, with alphabetisation, the sheer quantity of words written, both in terms of amount of differing individual words and in the bulk of written wordage, increases enormously, as writing is so much easier (and practised by so many more people). Hence, with the alphabet comes a wholly new preoccupation with classifying words. Hence, too, it is no accident that our terms for grammar and syntax are Greek, or that languages which developed without the influence (at one and the same time both liberating and constricting) of the alphabet (e.g., the African languages or those of the North American Indians) are not easily rendered into the grammatical and syntactic conventions that "fit" languages shaped by alphabetisation.

²⁰ The Greek contribution to logic and philosophy is well known. That their contribution to rhetoric was equally epochal does not seem to be as well recognised. In a sense, "the eloquent peasant" and the "wisdom literature" of the Egyptians can be said to be the origins of

rhetoric. But the gulf that separates such works from the elaborate and systematic classifications of Aristotle's *Rhetoric* is simply enormous. See, in general, J. Schwartz and J.A. Rycenga, eds., *The Province of Rhetoric* (New York 1965). Perhaps the best way of appreciating the Greek achievement is to view it in cross-cultural or historical terms: see, respectively, R.T. Oliver, *Communication and Culture in Ancient India and China* (Syracuse 1971) esp. ch. 1, 6-11, where the contrast with Greco-Roman rhetoric is explicitly made; and W.J. Ong, *Rhetoric, Romance and Technology: Studies in the Interaction of Expression and Culture* (Ithaca 1971) ch. 1 (cf. ch. 5).

²¹ See Bob Samples, *The Metaphoric Mind* (Reading, MA. 1976) 85-88: pictographic scripts, apparently, are Gestalt or holistic forms processed by the right brain; phonetic scripts are processed by the left brain.

²² See W.D. TenHouten and C.D. Kaplan, *Science and Its Mirror Image* (New York 1973) 99-101, for a contrast of English and Hopi in terms of left- and right-brain functioning. Some semanticists are now claiming that the language of change involves right-brain-type language behaviour: see Watzlawick, *The Language of Change*, ch. 2.

²³ See Jaynes, *The Origin of Consciousness*, 285-92. The advent of the alphabet must have enormously facilitated left-brain modes of thought: see J. Goody and I. Watt, "The Consequences of Literacy," 40-68 in J. Goody, ed., *Literacy in Traditional Societies* (Cambridge 1968).

²⁴ For similar feats of memory, from another age and culture but with a similar non-alphabetical background, see M. Parry and A.B. Lord, *Serbo-croatian Heroic Songs, I. Nova Pazar: English Translations* (Cambridge, Mass. 1954).

²⁵ See A.B. Lord, "The Traditional Song," 1-15 in B.A. Stolz and R.S. Shannon, eds., *Oral Literature and the Formula* (Ann Arbor 1976).

²⁶ See R. Finnegan, *Oral Literature in Africa* (Oxford 1970) ch. 17, "Drum Language and Literature," and cf. her contribution "What is Oral Literature Anyway?" in Stolz and Shannon, *Oral Literature and the Formula*, 128-60.

²⁷ See C.F. Hockett, *The View from Language, Selected Essays 1948-74* (Athens, Ga. 1977) 204-9. (I should perhaps note that music was as prominent a feature in the background of renditions of Homeric epic as

it is in the background of psychosynthesis sessions.) See in general Jaynes' chapter, "Of Poetry and Music," 361-78 in *The Origin of Consciousness*.

²⁸ See Jaynes, *The Origin of Consciousness*, 358-9.

²⁹ See W.J. Ong, *The Presence of the Word: Some Prolegomena for Cultural and Religious History* (New Haven 1967) ch. 2, "The Transformation of the Word," esp. 17-53.

³⁰ For a penetrating and sympathetic account of how much even Plato differs from modern views on word meanings see T.D. Weldon, *The Vocabulary of Politics* (Harmondsworth 1960 [1953]) ch. 2; cf. A. Korzybski, *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics* (4th ed., Lakeville, Conn. 1958) xl-xliii, or R. M. Pirsig's bestseller, *Zen and the Art of Motorcycle Maintenance* (New York 1975) e.g., 366-68.

³¹ See Carney and Zajac, *From Fable to Cable*, 75, 86-7 and 90.

³² The importance of Homeric epic can be seen from the fact that it becomes "institutionalised" in Greek society, in the sense that there springs up a body of bards, the *Homeridae*, who recite it, and special occasions (festal and ritual) at which it is recited. Only very important literary art-forms become institutionalised like this. Examples from antiquity are: the dramatists, with their guild of actors and their formal occasions for production of the plays; Vergil, with "his" schoolmasters and their programme of studies; and, greatest of all, the Bible with its clergy and elaborate back-up systems of other works and occasions for recitation and commentary.

³³ See T.S. Kuhn, *The Structure of Scientific Revolutions* (3rd imp. of the 2nd ed., 1971) e.g., chs. 5-10. For Kuhn's further thoughts on the phenomenon of the "paradigm shift," see now *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago 1978).

³⁴ See M. Ferguson, "Karl Pibram's Changing Reality," *Human Behaviour* 7, No. 5 (1978) 28-33.

³⁵ For an up-to-date survey of what is known as the result of rigorous studies of paranormal communications see C.T. Tart, *PSI: Scientific Studies of the Psychic Realm* (New York 1977). P. Carrington, *Freedom in Meditation* (New York 1978), sets out in a similar fashion what

rigorous studies have ascertained about the process and results of meditation.