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**Structuralism and Kabbalah:
Sciences of Mysticism or
Mystifications of Science?**

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Abstract

This paper argues that Kabbalah, the generic term for Jewish mysticism, and structuralism, as articulated in anthropology by Claude Lévi-Strauss, share a number of unexpected theoretical foundations. These include the idea that surface diversity conceals underlying unity, truth is hidden within a layered model of reality, and linguistic and mathematical relationships constitute elementary structures enabling diverse and seemingly unconnected orders to be correlated with each other systematically. Yet if Kabbalah and structuralism are so similar, does this imply that Kabbalah is scientific or, as David Maybury-Lewis suggests, that structuralism is akin to mysticism? [Structuralism, Kabbalah, Lévi-Strauss, Maybury-Lewis, science and religion, hermeneutics, symbolic anthropology]

“It is a magnificent feeling to recognize the unity of complex phenomena which appear to be things quite apart from the direct visible truth.”

—*Albert Einstein*

“Structuralism uncovers a unity and a coherence within things which could not be revealed by a simple description of the facts somehow scattered and disorganized before the eyes of knowledge.”

—*Claude Lévi-Strauss*

“God’s only desire is to reveal unity through diversity. That is, to reveal that all reality is unique in all its levels and all its details, and nevertheless united in a fundamental oneness.”

—*Aharon Ha-Levi Horowitz (1766-1828)*
Founder of the Staroselye branch of Habad

Mysticism and science are usually understood to represent very different forms of knowledge. What does it mean, then, when a certain type of study commonly construed as science, and another type of understanding conventionally seen as mysticism, in fact can be shown to exhibit a number of ontological features in common? In broad terms, this is the central conundrum this paper addresses.

Kabbalah and structuralism seem about as incongruous as two systems of thought and inquiry can be. Kabbalah, the generic term for Jewish mysticism that reached a florescence in Medieval Spain and now enjoys a popularized renaissance amidst Hollywood trendsetters, on the one hand, and structuralism, an analytic tradition flowering in anthropology in the mid-twentieth century that deposed existentialism from the French intellectual scene while casting long shadows in psychology, philosophy, and literary criticism, on the other, at first glance seem to have nothing in common. Yet it is the purpose of this paper to suggest that these two apparently contrasting theories of knowledge and being in fact share some noteworthy points of contact.

Related to this claim is the observation that each of these intellectual traditions reveals aspects of the kind of knowledge system that normally is accorded to the other. Put simply, whereas Kabbalah is conventionally understood as mysticism, some of its leading advocates have portrayed it as science. Conversely, while certain proponents of structuralism have

argued that their approach is a branch of science, some of its critics have depicted it as more akin to mysticism. Among others, Daniel Matt, whose recent annotated translation of the Zohar (2004), Kabbalah's central text, is being hailed as the definitive translation of this book in English, has shown striking parallels between modern physics and Kabbalah (1996). Correspondingly, David Maybury-Lewis, ever the perspicacious critic of structuralism on empirical grounds, suggests that insofar as structuralism's scientific formalism is basically pretense, in the end the method is essentially an intellectually seductive form of mysticism (1960, 1970a, 1970b).

A clarification of terms is apropos at the outset. The version of structuralism to be examined here is as narrow as the definition of Kabbalah is wide. By structuralism, I mean "the systematic attempt to uncover deep universal mental structures as these manifest themselves in kinship and larger social structures, in literature, philosophy and mathematics, and in the unconscious psychological patterns that motivate human behavior" (Kurzweil 1980:1). More specifically, in this paper structuralism comprehends the type developed by anthropologist Claude Lévi-Strauss, his exponents, and critics. My rationale is, first, to distinguish the Lévi-Straussian theory from cognate structuralisms deployed by Foucault, Barthes, Ricouer, Althusser, Lacan, etc. and, second, to focus on the type of structuralism that was developed specifically for anthropological research.

By Kabbalah, I mean the diverse traditions in their entirety of myth, narrative, ritual, prayer, and study that go under this rubric, extending from antiquity to the present, including, in addition to classical texts, the Kabbalistic interpretations of Hasidim, secular academics, and New Age enthusiasts. While it is useful for some studies to distinguish, for example, between Hekhalot, Merkavah, and Lurianic Kabbalah, between ecstatic, theurgic, and theosophical Kabbalah, between Gnostic and Neoplatonic influences on Kabbalah, as well as between the Kabbalah of secular scholars and orthodox adepts, the rigorous differentiation of these various historical strata and esoteric strands is not germane to this essay. Rather, my intent is to encompass a wide range of methods and theories across both space and time.

Furthermore, my rationale in using a broad notion of Kabbalah is to characterize it as a form of *cultural practice* and as such make it amenable to anthropological analysis. The idea that Kabbalah, besides its manifestation in primary sources, merits investigation in its own right as cultural practice is consistent with newer scholarship on the subject, whether it is

Idel's early appreciation of Kabbalistic traditions among contemporary Hasidim (1988) or, more recently, Fine's analysis of the sixteenth-century practices of Lurianic Kabbalah in Safed, Israel as a "lived and living phenomenon" (2003:10), Dan's comments on the place of Kabbalah in the New Age movement (2005:109-110), or Huss' discussion of postmodern Kabbalah in Madonna's music (2005). None of this is to discount Gershom Scholem's seminal bibliographic emphasis on understanding Kabbalah through canonical works and abstruse manuscripts (1946), but merely to point out the need to engage an important ethnographic and contemporary dimension that largely has been ignored in the study of Kabbalah.

In this regard, special attention will be paid to writings and followers of the Habad school of Hasidism, given that this kabbalistic tradition, together with structuralism, posits a correspondence between the deep structure of reality and the unconscious structure of the human mind (Elior 1993, Mindel 1973a). Just as Lévi-Strauss maintains that an understanding of the human mind is central to structuralism when, for example, he famously announces that "ethnology is first of all psychology" (1966:131) and similarly "that the mind is able to understand the world only because the mind is itself part and product of the world" (1985:118), so Scholem, asserts that the uniqueness of "the [Habad] school is to be found in the fact that the secrets of the divine realm is presented in the guise of a mystical psychology. It is by descending into the depths of his own self that man wanders through all dimensions of the world...What gives the writings of the Habad-school their distinctive feature is that striking mixture of enthusiastic worship of God and pantheistic...interpretation of the universe on the one hand, and an intense preoccupation with the human mind and its impulses on the other" (1946:340-341). Thus, both Kabbalah, according to Habad, and structuralism, according to Lévi-Strauss, maintain that the work of interpretation engage the inner workings of the human mind.¹

A caveat is warranted at this point: Although Claude Lévi-Strauss has never denied his Jewish identity—as he put it in his conversations with Didier Eribon, "I know myself to be Jewish, and the ancientness of the blood, as they used to say, suits me" (Lévi-Strauss and Eribon 1991:156), I am hardly suggesting that similarities between his version of structuralism and Kabbalah are attributable to a specific training in Jewish mysticism. But I need not make this claim simply to suggest, albeit tentatively, that Lévi-Strauss's ethnicity and the religion of his youth *may* have something to do with the implicit kabbalistic cast to certain philosophical foundations of

structuralism. While admittedly his Jewishness (and its impact on his work) has often been of greater interest to others (e.g. Cuddihy 1974, Damrosch 1995, Diamond 1987, Feldman 2004) than it has been to Lévi-Strauss himself, he does state, among other things, that he recognizes it was his Jewish identity that necessitated his fleeing Nazi occupied France, shows a fondness for his maternal grandfather, the Rabbi of Versailles, with whom he lived as a child (residing during the First World War at his house which was attached to the synagogue) and got a Bar Mitzvah to please him, recalls the valuable collection of antique Judaica that belonged to his paternal great grandfather, and believes that being Jewish in a society dominated by others inculcates a kind of double-consciousness characterized by a particular cast of mind (Lévi-Strauss and Eribon 1991). So clearly at some level he does identify as Jewish. Still, as an admitted “nonbeliever” (as he puts it) his own hyper-logical penchant for finding the rational basis of even apparently irrational beliefs and practices ostensibly orients him in the quite opposite direction from Kabbalah. At any rate, unlike Bakan and other historians of psychoanalysis who assert that Freud’s familiarity with the Jewish mystical tradition influenced psychoanalysis (Bakan 1971), I am not out to make Lévi-Strauss into a closet kabbalist. But I am suggesting that by the 20th century certain diffuse kabbalistic ideas so pervaded the Jewish world generally, including the largely secular Jewish environment in which Lévi-Strauss was raised, that they may have influenced him, however tacitly, and therefore have left more than a trace on structuralism.

Surface Diversity Conceals Underlying Unity

In his history of anthropological theory, Alan Barnard writes: “Structuralism in its widest sense is all about pattern: how things which at first glance appear to be unrelated actually form part of a system of interrelating parts. In structuralist theory, the whole is seen as greater than the sum of its parts, and most wholes can be broken down by appeal to the idea of distinctive features or binary oppositions...The distinctive feature of Lévi-Strauss’ own contribution has been his search for the structure of all possible structures. His anthropology represents a culmination of the principle of psychic unity” (2000:127). Structural analysis discovers the latent conceptual unity beneath the empirical diversity of phenomena by aiming, as Lévi-Strauss himself says, “to elaborate a system which plays the part of a synthesizing operator between ideas and facts, there-

by turning the latter into *signs*. The mind thus passes from empirical diversity to conceptual simplicity and then from conceptual simplicity to meaningful synthesis” (Lévi-Strauss 1966:131, italics in original).

What this means concretely, is that according to Lévi-Strauss there are two levels of reality comprising a “surface structure” and a “deep structure,” not entirely unlike the Kantian notions of *phenomena* and *noumena*. Surface structures obtain in the diverse forms of empirical reality. For Lévi-Straussian ethnology, these are various manifestations of culture, things such as kinship terminologies, marriage customs, myth, ritual, art, socio-political organization, ethnobotanical classifications, and even such seemingly mundane affairs as cooking practices and gift exchanges. Lévi-Strauss maintains that despite the apparent diversity of these forms, they are but different refractions of a non-empirical, deep structure reflected in discrete binary oppositions discoverable via structural analysis. Since the ultimate deep structure Lévi-Strauss is after is nothing less than the unitary structure of the human mind, and since this deep structure is immanent in the forms it produces, that is, in the surface structures of diverse collective representations (myth, art, rules regulating kinship and marriage, etc.), Lévi-Strauss conducts structural analysis not only on specific societies but also on the logical relations between them. He therefore not infrequently engages in a globe-trotting ethnology, finding it necessary, for example, to explicate an Amazonian myth by reference to a North American one which is construed to be merely a structural permutation of the former, asserting that both belong to the same transformation set. As Lévi-Strauss writes in *The Savage Mind*, a central argument of which is to deconstruct the trenchant dichotomy between the thought processes of so-called “savage” and “civilized” peoples, “Ethnographic analysis tries to arrive at invariants beyond the empirical diversity of human societies, and, as the present work shows, these are sometimes to be found at the most unforeseen points” (Lévi-Strauss 1966:247).

However, what began innocently enough as an ethnological method “blossomed into a full fledged philosophical doctrine whose impassioned partisans insist that all human knowledge must be re-examined in its light” (Gramont 1970:4). While Lévi-Straussian structuralism is overtly a mode of anthropological analysis, rather than a branch of metaphysics—and thus in every sense is a theory of man by his own reckoning in the spirit of Rousseau, Freud, and Marx, divergent as their perspectives may be—it is also not without aspects which in fact take philosophical posi-

tions on the nature of being, causality, time and space.² As he acknowledges in *The Raw and the Cooked*, Lévi-Strauss himself accepts the well-known characterization of his works by Paul Ricouer as “Kantianism without a transcendental subject” (Lévi-Strauss 1975:11). In fact, Shalvey calls Lévi-Strauss the “last of the Scholastics,” seeking a return to a “pre-Cartesian philosophy” and as such is basically “an essentialist.” He writes, appraising Cuddihy’s (1974) psycho-historical interpretation of Lévi-Strauss, “the basic opposition in Lévi-Strauss is ultimately that of being and nonbeing; the end of *L’homme nu* (1971) and Lévi-Strauss’s citation of Hamlet’s ‘To be or not to be’ is mentioned. This is seen as ‘metaphysicization’ of Durkheim’s and Mauss’s work. At the very least, Cuddihy’s explanation sees Lévi-Strauss as a secularized metaphysician, concerned more with Being than with individual beings” (Shalvey 1979:135). At any rate, the structuralist search for “the structure of all possible structures,” as Barnard phrases it, or the “Order of Orders,” as Lévi-Strauss himself puts it (1963:312), is nothing if not metaphysical—or just plain mystical.

If, as Cuddihy suggests, Lévi-Strauss’s position is basically pre-Cartesian, it is not surprising that his outlook also represents a denial of Cartesian dualism. That is, although Lévi-Strauss believes that meaning comes about through the logic of binary oppositions, his underlying ontology is fundamentally non-dualistic. Moreover, it is basically mystical or pantheistic—in a totemic, Buddhist, or kabbalistic sense—to the extent that it posits the inter-relatedness of all things. Shalvey therefore is quite right in noting: “Both the terminology employed by Lévi-Strauss and the definitions given to these terms show us that structuralism, by its extension of science to secondary qualities, is a reversion to a pre-Cartesian stage of philosophy in which the ‘sacramental character’ of the universe—the cosmos as revealing the *vestigia Dei*, a universe in which all things are interrelated and nothing exists without some element of necessity inherent in it—is at the forefront of structuralist thought” (1979:126). The idea that behind the multiplicity of realities lies a deeper, albeit hidden, reality, on the one hand, and that nothing in the universe happens purely by chance, on the other, demonstrates that for Lévi-Strauss, contra Sartre, the cosmos is not only ordered, but meaningful. According to the mystics, it may also show, as Shalvey recognizes but Lévi-Strauss apparently fails to, “the sacramental character of the universe”—the cosmos as revealing the scattered sparks of divinity.

“‘Structuralism,’ says Lévi-Strauss, ‘is the search for unsuspected harmonies. It is the discovery of a system of relations latent in a series of

objects.’ It is based on the idea that human behavior can be classified scientifically, like a plant or a chemical element. There is nothing arbitrary in nature” (Gramont 1970:4). Certainly the notion that reality exists according to certain invariant laws and that phenomena which appear totally unconnected can be shown to have things in common when broken down into more elementary components are ideas basic to science. But it seems, besides this, something else is at stake in structuralism. Thus, using anthropology as a vehicle for the communication of more general ideas, Lévi-Strauss says: “the human sciences will be structuralist or they will not be at all...The ethnologist, faced with thousands of societies and the incredible multiplicity of facts, must do one of two things: Either he can only describe and take inventory of all this diversity, and his work will be very estimable, but it will not be scientific. Or else he will have to admit that *behind this diversity there lies something deeper, something common to all its aspects. The effort to reduce a multiplicity of expressions to one language, this is structuralism.* Maybe someday it will no longer be called that; I don’t know and I don’t care. *But the effort to find a deeper and truer reality behind the multiplicity of apparent realities, that seems to me to be the condition of survival for the human sciences,* whatever the undertaking is called” (Lévi-Strauss qtd. in Gramont 1970:18, my italics). Put simply, the essence of structuralism, given Lévi-Strauss’ passion for finding symmetries in the face of irregularities, is that “diversity becomes compatible with unity” (Almeida 1990:372).

If, as Jacob Bronowski famously contends in *Science and Human Values*, “[a]ll science is the search for unity in hidden likenesses” (1956:128), then structuralism clearly conforms to such a definition. But if structuralism is science according to this criterion, then so is Kabbalah, especially as interpreted in Hasidism. Explaining the kabbalistic system expounded by Schneur Zalman of Liadi (1745-1812) in his *magnum opus* known as *Likutei Amarim—Tanya*, a work that even today serves as the Ur-text for the Habad Hasidim (many of whom study a portion of it daily), Nissan Mindel writes, “The polarity of things is but external, the underlying reality of everything is unity, reflecting the unity of the Creator. To bring out this unity of the microcosm and macrocosm, as they merge within the mystic system of the *En Sof* (The Infinite)—that is the ultimate aim of his system” (Mindel 1973b:767). This denial of Cartesian dualism and the associated attempt to find unity in diversity, is also central to the teachings of Schneur Zalman’s great disciple, Aharon HaLevi Horowitz, who writes: “God’s only desire is to

reveal unity through diversity. That is, to reveal that all reality is unique in all its levels and in all its details, and nevertheless united in a fundamental oneness. The main point of creation...[is] to reveal the wholeness of God from the opposite perspective...For it is the nature of completeness to include all opposites in the One” (HaLevi Horowitz in Shapiro 1997:34).

The idea that the apparent diversity of things hides a deeper unity, and it is this deeper unity that constitutes the true or “real” reality, even though it may be contradicted by our sensory perceptions, is a concept basic not only to structuralism, but also Kabbalah. Over two centuries before the *Tanya* was first published in 1796, the idea was already central to the renowned kabbalists of Safed, Israel, in the 1500s, among them Moses Cordovero. “The essence of divinity is found in every single thing—nothing but It exists. Since It causes everything to be, no thing can live by anything else. It enlivens them. *Ein Sof* exists in each existent. Do not say, ‘This is a stone and not God.’ God forbid! Rather all existence is God, and the stone is a thing pervaded by divinity” (Cordovero in Matt 1996:39). Even before this, blatantly pantheistic conceptions are found in the writings of the kabbalists of Gerona and elsewhere in Spain: “Examples of this are Azriel’s pronouncement that ‘nothing is outside’ *Ein-Sof*, Meir ibn Gabbai’s declaration that ‘everything is in Him and He is in everything,’ or the recurring insistence in the Zohar that God ‘is everything’ and that everything is unified in Him” (Scholem 1978:144).

The utter pervasiveness of God throughout every facet of creation is the topic of a key section of the *Tanya* known as *Shaar Hayichud Vehaemunah* (“The Gate of Unity and Faith”). The work is an extended meditation on the verse in Deuteronomy 4:39, “Know this day and take unto your heart that *Hava’ye* is *Elokim* (G-d is the Lord) in the heavens above and the earth below; there is no other” (Zalman 1973:287), together with a line from the kabbalistic text *Sefer Tikunim* (Book of Corrections), *Tikun* 57, “There is no place devoid of Him, not in the upper worlds nor in the lower worlds” (Zalman 1973:315). The whole point of “The Gate of Unity and Faith” is to demonstrate that besides God, there is *ein od*, literally “nothing else.” The author begins by showing how even in the domain of inanimate objects everything is both suffused and encompassed by a divine life-force, and goes on to demonstrate how this similarly holds true for the rest of creation by elaborating the kabbalistic theory, known in Aramaic as *memalleh kol al’min v’sovev kol al’min*, in other words, that Godliness “fills all worlds and surrounds all worlds.”

Thus, what Matt says regarding the similarity between the models of reality employed by Kabbalah and modern physics holds equally true for Lévi-Straussian structuralism, since all “share a Platonic perspective. What we observe is only an imperfect reflection of a deeper reality that displays symmetry or unity. Only because nature’s symmetry is broken do the various elementary particles—quarks, gluons, bosons and leptons—appear to have different properties. They are like facets of a cut diamond, shining distinctly as the diamond is turned in the light but, in fact, all manifestations of the same underlying object” (Matt 1996:86).

Truth is Hidden within a Layered Model of Reality

Accusations of pantheism aside, what is noteworthy in the comparison between the epistemology of structuralism and this radically mystical monotheism, is not only that the ultimate Oneness is refracted throughout all reality, but that this unity is *hidden*. Moreover, this truth is elusive because it is concealed within the deeper level of things, a level than can be apprehended through the mind but not directly through the senses.

Traditional Hebrew blessings invariably make use of a formulaic beginning that refers to God as *Melech ha-olam*, “King of the Universe,” whose reign is said to last *le-olam vaed*, “for ever and ever.” Noting the double meaning of the word *olam*, Daniel Matt observes, “God hides within each of us, within all of creation and throughout spacetime. The Hebrew word for ‘universe,’ *olam*, originally meant ‘eternity,’ so the word spans all of time and all of space: spacetime. According to the mystics, *olam* derives from the same root as ‘hiding,’ *he’elem*. God is disguised as the world, and the purpose of the game of creation is to uncover the divine, to explore the limits of who we are, to actualize God’s self-awareness. Our very consciousness is God becoming aware of Itself. When the God within each human creature discovers that it is not separate from the God beyond, the players—or, rather, the Player in all Its guises—is overjoyed” (1996:79).

Contemporary Habad Hasidim teach that humankind is supposed to seek this hidden God of creation—reflections of the ultimate unity being concealed amidst the multiplicity of creation. As a proof text, they often take a *Tanya* and point to a compelling *gematria* in the beginning of Chapter 6 in “The Gate of Unity and Faith.” *Gematria* is a kabbalistic system of hermeneutics in which every letter in the Hebrew alphabet has a numerical equivalent. Two words having the same numerical value are

therefore regarded as being related semantically, despite having ordinary meanings that may be totally unrelated. This in itself is a hauntingly structuralist notion, i.e. that surface structures (ordinary meanings) which are in no way connected can nonetheless be shown to have a deep structure (numerical value) that is common to both. In other words, truth is discoverable by reducing phenomena at one level to more fundamental principles at another level, the latter being not only more basic or elemental but also hidden from view. In the aforementioned passage in Chapter 6, the author explicates how one of the Hebrew words for “Lord,” *Elohim*, is numerically equivalent to “nature,” *hateva*, both words having the numerical value of 86, the lesson being that Godliness is present in all creation even though the Supernal Light is concealed (Zalman 1973:301).

In a similar vein, Habad Hasidim explain that Abraham was the first kabbalist because he was able to see through the diverse refractions of reality to the ultimate unifying reality; that is, he was able to reveal God by discovering Him, peeling away the veil of illusion and thus uncovering the concealed life-force that pervades all of nature. Whereas prior to Abraham, say Habad Hasidim, people mistook discrete manifestations of Godliness for separate gods—the sun god, the moon god, the rain god etc.—they did not understand, as did Abraham, that these are just different visible creations of the one invisible Creator, even though all of them are suffused with Godliness. This leads one to think that, by the same token, it could be claimed that Abraham also was the first structuralist, albeit from a theistic perspective: he conceptually reconstructed a unitary deep structure of divinity that undergirds the many surface phenomena regarded as distinct gods by others.

Yet whereas structuralist ontology is mute on the question as to why truth is hidden, the kabbalistic tradition provides a rationale. Indeed, Habad Hasidim are explicit in pointing out *why* God is so hidden. The transpersonal psychology of discovery called for by a hidden God requires on the part of the seeker a process of self-transformation and an awakening of consciousness, similar to the Buddhist concept of “enlightenment” or, as Habad Hasidim say, “to a prospector who discovers a rare mineral or scientist who discovers a cure.” Were God not hidden there would be no transformation of consciousness. The scientist did not create the plant from which the cure was made, but in discovering or revealing it, he did create the knowledge of it and thus becomes a co-creator in the revelation of this truth. So too, the divine is concealed so that each and every one of us can

become the prospectors, the scientists, who participate in the discovery and hence, even though we did not create this life-force, we did figure it out, and thus becoming co-creators in its revelation can take ownership of the process of awakening to this pervasive illumination. Noteworthy too in this example is how Habad Hasidim choose to explicate a kabbalistic concept by way of analogy to a “scientific” process of discovery.

Not only is unity hidden in diversity, but both Kabbalah and structuralism are predicated on a theory of existence asserting that reality is comprised of various layers—a phenomenally apprehensible external layer covering a more difficult to sense but truer, or more elementary, inner nature. Lévi-Strauss is quite explicit in his use of a layered model of existence, claiming that his intellectual handmaidens have been geology, psychoanalysis, and Marxism, all of which, like structuralism, are not only envisioned as sciences, but rest on an imbricate ontology wherein deeper, subterranean cores are encrusted or covered over by other layers at the surface (Lévi-Strauss 1977:48-50).

For Marx, in his analysis of economy, society, and history, this is the distinction between superstructure and infrastructure, the latter being the site of the critically important mode of production. However, it will be recalled that according to Marx, the mode of production, like Lévi-Strauss’s deep structure, is actually a conceptual reconstruction, not an empirical entity. So too, in psychoanalysis there is a layered model: the Freudian distinctions between manifest and latent behavior; the conscious and unconscious properties of the mind; and the super-ego, ego, and id. In all cases, the latter in each of these sets of terms represents not only the more primitive, elementary, or instinctual aspect of the personality, but also the one most difficult to apprehend. The geological model of depth and layering hardly needs comment. The deeper the strata, the more primordial and inaccessible from the surface, except where the earth has been laid open by chasms or along escarpments, in which case the archaic and the recent are equally present, the diachronic scale here being translated into synchrony. When fossils are involved, those that are deeper are not just older and more primeval, but also simpler, in the sense of having fewer and less differentiated structures, being closer on the evolutionary ladder to their elemental source, in a metaphysical sense moving from diversification back towards an original unity, whatever that may be. Of the comparability of Marxism, psychoanalysis, and geology, and therefore their kinship with structuralism, writes Lévi-Strauss: “All three demonstrate that under-

standing consists in reducing one type of reality to another; that the true reality is never the most obvious; and that the nature of truth is already indicated by the care it takes to remain elusive" (1977:50).

Kabbalah too makes use of a similar theory. In the Kabbalah of the Holy Arizal, also known as Isaac Luria (1534-1572) of Safed, a fundamental idea is that reality is composed of external vessels that conceal more delicate interiors or "sparks" (*Nitzot*) of Godliness. This theory was refined and further elaborated in the *Tanya* by Schneur Zalman in terms of the kabbalistic concepts of *Kelipot*, external coverings represented as "husks" or "shells" (also associated with the conception of *Hitzoniut* or "outer side") and *Pnimityut*, a notion of innerness analogized to "kernels" or "seeds." *Kelipot*, from the word *keli* or "vessel," are euphemized as the *Sitra Achra*, literally "the other side," the side of impurity or evil, while the *Pnimityut* are called the *Sitra D'Kedusha*, or the "side of holiness." However, recalling Kabbalah's non-dualistic pantheism, since there is no part of existence devoid of God, then even the *Kelipot* have their Godly aspect, their purpose in the world. A primary goal of human existence is to liberate these sparks of holiness through the performance of *mitzvot*, divinely commanded actions and ethical behavior, which elevate the sparks "trapped" in the *Kelipot* back to their source.³

Hasidim explain this layered but integrated paradigm by analogy to a nut or fruit. Just as the husk or skin protects the more tender inner seeds and fruit, and thus perform a vital, life-giving function, preserving the fruit, so the *Kelipot* are necessary containers for spiritual essence in our physical world, whose very existence would be impossible without them. But, our eyes detecting only the *Kelipot* of reality, if we were to mistake externalities for the inner, yet more elusive, truth, we would live in a world of surface appearances, condemned forever to perceive only material coverings without ever knowing the sweet satisfaction of the true reality lying just below the surface. As in structuralism, the significance of this layered ontology is that because the essence of things is never obvious, truth is apprehended not by relying solely on empirical realities perceived directly through the senses but by penetrating mentally to their more authentic inner natures which relate back to a concept of concealed unity.

Lurianic Myth, Structural Analysis, and the Big Bang

Both Kabbalah and structuralism resolve the ancient philosophical conundrum of the One and the Many by recourse to similar spatial as well as

temporal metaphors. As demonstrated above, the spatial metaphor asserts that surface diversity conceals underlying unity—truth is hidden within three-dimensional space yet is discoverable at deeper levels of being. The temporal corollary to this is that the fragmentary nature of existence devolved from an original state of undifferentiated unity. Moreover, the notion that we inhabit a universe of essentially scattered shards is a mythos that structuralism and Kabbalah both share with the cosmology of contemporary physics.

Just as structuralism is fundamentally concerned with the analysis of myth, so Kabbalah is a hermeneutic discipline invested, among other things, in the exegesis of Biblical and Talmudic narratives. But structuralism and Kabbalah not only interpret myths, they also generate them. Since both entail their own worldviews, each is based on foundational myths explaining nothing less than the structure and process of the universe of meanings within which each operates. Lévi-Strauss admits in *The Raw and the Cooked*, the first of his four volumes explicating his structural method of analyzing myths (which explains, in a startlingly kabbalistic fashion, the harmony between cultural, zoological, and cosmological orders) that “it would not be wrong to consider this book itself as a myth: it is, as it were, the myth of mythology” (Lévi-Strauss 1969:12). So too, building on pre-existing ideas in the 16th century, Isaac Luria developed a radically innovative cosmology and cosmogony that differed substantially from the account of creation given in Genesis, because it purports to explain the ultimate origins of the universe that antedate the canonical Biblical story. The cosmology of Lurianic Kabbalah so saturated the Jewish world that at least parts of it subsequently became incorporated into normative Jewish ethos. Besides similarities between structuralist notions of fundamental organizing principles and the Lurianic creation myth, both systems bear an uncanny resemblance to the origin of the universe and associated cosmology as articulated by modern physics in the theory of the Big Bang. Thus, in order to consider possible connections between science and mysticism, which is a central concern of this paper, we must now discuss the way both structuralism and Kabbalah share affinities with modern cosmology.

Below is outlined a simplified version of the well-known Lurianic theory of creation (Drob 2000; Fine 2003; Schochet 1973; Scholem 1946, 1978). In this scheme, God is *Ein Sof*, literally, “without end,” sometimes also referred to as *Ayin* or divine Nothingness (Matt 1995)—an original, albeit occluded, infinite source of energy that both fills and encompasses

all time and space. In order to make “room” for the finite universe, God’s first act of creation was negative; that is, He contracted himself away from a small point in the center thereby forming a *tehiru* or “empty space.” This movement, variously described as contraction, withdrawal, condensation, or concealment, is known as *tzimtzum*. However, there still remained a residue or “trace” of the divine essence, known as *reshimu*. Into the space created by the *tzimtzum*, said to be no bigger than a seed or the head of a needle yet large enough to house what would become the entire cosmos, God radiated his divine energy that formed “vessels” (*kelim*) in stages, each characterized by distinct qualities. These vessels and their distinctive array become the *sefirot*, regarded by kabbalists as displaying the essential structure of reality, spiritual and material—a blueprint of both creation and the Godhead. Next, the Supernal Light filled each of the *sefirot*. But as this was occurring, the energy was too intense to be contained in the vessels and, due to the expansion caused by the heat, the *sefirot* began to crack—a stage known as the *shevirah kelim*, or the “Breaking of the Vessels.” The fragments fell through the abyss, the shards of divine light being scattered as “sparks” (*nitzot*), which in turn are contained in “husks” (*kelipot*), explained as being like beads of olive oil that adhere to the sides of a jar after the vessel has been broken. Tumbling through the void into the lower worlds, these spread throughout matter in the universe. Consequently, not only is all of reality in a state of existential separation, it also is all composed of the same cosmic fragments. The ultimate goal of creation is to elevate the divine light and thus restore the fractured universe to its original state of wholeness—a process known as *tikkun olam*, or “Repairing the World.” Since humans play a critical role in effecting this repair, it is a task that consequently makes them, with God, partners in the restoration of the cosmos.

Daniel Matt, among other contemporary kabbalists and scholars, notes affinities between the Lurianic and scientific versions of creation. In *God and the Big Bang* (1996), Matt opens his book by writing: “In the beginning was the big bang, fifteen billion years ago. The primordial vacuum was devoid of matter, but not really empty. Rather, it was in a state of minimum energy, pregnant with potential, teeming with virtual particles. Through a quantum fluctuation, a sort of bubble, in this vacuum there emerged a hot, dense seed, smaller than a proton, yet containing all the mass and energy of our universe. In less than a trillionth of a second, this seed cooled and expanded wildly, faster than the speed of light...as the

expansion slowed down, energy latent in the vacuum, precipitated as particles and antiparticles...The ball of the universe continued expanding—and has never stopped” (Matt 1996:19-20).

The connection with kabbalistic concepts is unmistakable. Moses de León, a thirteenth century kabbalist, makes the similarities between classical big bang theory and classical medieval Kabbalah even more obvious: “The beginning of existence is the secret concealed point. This is the beginning of all hidden things, which spread out from there and emanate, according to their species. From a single point, you can extend the dimension of all things. Similarly, when the concealed arouses itself to exist, at first it brings into being something the size of the point of a needle; from there it generates everything” (de León in Matt 1996:41). Or again, according to the Zohar: “A blinding spark flashed within the concealed of the concealed, from the mystery of the Infinite, a cluster of vapor in formlessness...Under the impact of breaking through, one high and hidden point shone. Beyond that point nothing is known. So it is called Beginning” (de León in Matt 1996:42).

The essence of both scientific and kabbalistic cosmogonies is that the universe begins as an infinitesimal singularity that bursts in a primordial vacuum and expands with space, differentiating into particles that disperse as diverse forms of matter and energy throughout the universe. It is unlikely that Timothy Ferris, a contemporary science writer, had in mind sixteenth century Jewish mysticism when he penned the following words, but their harmony with the kabbalistic imagery of the shattering of the vessels (*shevirah kelim*) and the discovery and restoration of cosmic unity through specific human actions (*tikkun olam*) is striking: “Physicists, in identifying the various elementary forces as having arisen from the breaking of a more symmetrical unified force, or in finding concealed symmetries cowering in the cramped nuclear precincts where the strong force does its work, are in effect piecing together the shattered potsherds of that perfect world” (Ferris in Matt 1996:87).

Ideas that echo the key Lurianic conceptions of *shevirah kelim* and *tikkun olam*, the “shattering” and “repair” of a fragmented world, are also prominent in structuralist theory and method. The sentence that Lévi-Strauss chooses for the epigraph to his seminal essay “The Structural Study of Myth” basically sums it all up. The sentence comes from Franz Boas who, besides being the “Father of American Anthropology” and dying just a few feet from the young Lévi-Strauss at a luncheon both attended in 1942, was a German Jew—an identity that has been examined in terms of the influ-

ence it exerted on the field (Glick 1982, Frank 1997). The critical epigraph reads: “*It would seem that mythological worlds have been built up only to be shattered again, and that new worlds were built from the fragments*” (Boas in Lévi-Strauss 1963:206, my italics).

The imagery of Lurianic cosmology is so conspicuous here as to make one wonder what Boas and Lévi-Strauss were reading on the side. The notion that the cosmos goes through cycles of creation and destruction, besides being basic to Aztec, Mayan, and Hindu worldviews, was also known to kabbalists centuries before Luria as the doctrine of *shemithoth* (Scholem 1965:77-86). As early as the Talmud’s Aggadic literature (0-200 C.E.), one encounters “R. Abbahu’s saying, that before making this world God made many others and destroyed them because he did not like them” (Scholem 1946:32). In Lurianic Kabbalah, this becomes an ongoing world historical process. After the primordial *shevirah kelim* or “Breaking of the Vessels,” the creation of Adam was an attempt to overcome cosmic alienation and divine separation, but Adam transgressed and the *shevirah* happened again. The giving of the Law at Sinai was another attempt at restitution, but the Israelites worshipped the golden calf instead and another *shevirah* occurred, and so on throughout history (Dan 2006:77).

In any event, that Boas’s pithy statement captured what Lévi-Strauss felt was the very essence of the structuralist approach is evident from the fact that Lévi-Strauss chose it as the epigraph to his essay that lays down the method for the structural analysis of myth. In fact, he was so enamored with this line that he cites it again in “The Science of the Concrete,” the opening chapter of *The Savage Mind* where he argues for the comparability of scientific and mythological cognitive operations. His point there is the same as in the programmatic essay on myth analysis: “the kind of logic in mythical thought is as rigorous as that of modern science, and...the difference lies, not in the quality of the intellectual process, but in the nature of the things to which it is applied” (Lévi-Strauss 1963:230), namely, abstract concepts in the case of science and concrete objects or sensory contrasts in myth, totemism, and magic.

Still, when he quotes Boas’s statement in *The Savage Mind*, Lévi-Strauss continues with an emendation of his own. “Penetrating as this comment is, it nevertheless fails to take into account that in the continual reconstruction from the same materials, it is always earlier ends which are called upon to play the part of means: the signified changes into the signifying and vice-versa” (Lévi-Strauss 1966:21). This is what Lévi-Strauss means by *bricolage*,

the so-called “science of the concrete,” which characterizes mythical thought as well as, quite frankly, the structural study of it, wherein the operator or *bricoleur* cobbles together bits of previous structures at hand in order to construct novel patterns and thus new meanings. The connection between this and the kabbalistic edict that we must reconstruct the world from the broken pieces of a previous one is striking. Lévi-Strauss avers, “the characteristic feature of mythical thought, as of ‘bricolage’ on the practical plane, is that it builds up structured sets, not directly with other structured sets but by using the remains and debris of events” (1966:22).

He makes this same point, again reminiscent of “Breaking of the Vessels” imagery, in his structural analysis of totemic classifications: “This logic works rather like a kaleidoscope, an instrument which also contains bits and pieces by means of which structural patterns are realized. The fragments are products of a process of breaking up and destroying, in itself a contingent matter, but they have to be homologous in various respects, such as size, brightness of colouring, transparency” (Lévi-Strauss 1966:36). The salient point is that the structuralist shares with kabbalist and physicist alike a view that the universe is meaningful because, although it is fragmented, the shards are not only refracted signs of an original unity, but also the means for its imaginative reconstruction.

Bricolage as Tikkun Olam

Boas’s statement, together with Lévi-Strauss’s explication of it in terms of the structural study of myth and totemism, expresses a redemptive philosophy. Namely, it is that *bricolage*, as well as the structuralist project that imitates it—a process whereby the operator “builds ideological castles out of the debris of what was once a social discourse” (Lévi-Strauss 1966:21)—is basically *tikkun olam*, the bold conviction that, through ritual action and the imperative of moral responsibility, the broken universe can be corrected by rearranging its fragments. Moreover, just as *bricolage* is perhaps Lévi-Strauss’ single most celebrated concept, with intellectual currency not only in the social sciences but in cultural studies, literary criticism, and beyond, so the notion of *tikkun* not only is basic to all post sixteenth-century Kabbalah, but its fundamental message of healing a fractured world so permeated Jewish culture generally that today it is a core concept in all branches of Judaism, animating everything from the charismatic discourses of Hasidic Rebbes, to the sober writings of the Chief Rabbi of Great

Britain and the Commonwealth (Sacks 2005), from Orthodoxy to Reform, Reconstructionist, and Renewal movements throughout the US (Shachter-Shalomi 2005) and to even a good deal of politically liberal, non-denominational, acts of social justice (Lerner 1986, 1994).

My point here is that there is an important connection between the structuralist notion of *bricolage* and the kabbalistic theory of *tikkun* (encompassing both *tikkun ha-olam*, “repairing the world” and *tikkun ha-nefesh*, “repairing the soul”). As Scholem announces: “The laws by which the process of cosmic restoration and reintegration (*tikkun*) works itself out constitute the largest part of Lurianic Kabbalah, for they touch on all the realms of creation, including the ‘anthropological’ and ‘psychological’ ones” (1978:140). From a structuralist perspective, the message is that, in addition to the engineer’s “science of the abstract,” the quotidian yet humble *bricoleur’s* “science of the concrete” also holds the promise of restoration—the idea that although the fragments with which ordinary folk must work are always the remnants of prior creations, new worlds can be made from the shards and debris of previous ones. Furthermore, this *Weltanschauung* not only describes the way the world is, but reserves a critical role for humans in helping it become the way it ought to be. As Geertz (1973) might say, such symbolism is not just a model *of* reality but also a model *for* reality. It entails a call to action, intellectual as well as practical. Thus, although we inhabit a broken world, it does not free us from the moral obligation to repair it. The sacred work of restoring the shattered unity is accomplished in structuralism via intellectual labor and the *bricoleur’s* craft, in Kabbalah through *tikkun olam*, the performance of ethical behavior and divine commandments. But in both cases there is a moral imperative to rectify creation. Here too the parallels between structuralism and Kabbalah are noteworthy. The apothegm of the Talmudic Sage, Rabbi Tarfon, “You are not obliged to complete the work, but neither are you free to evade it” (Pirke Avot 2:16), finds an echo in the words of Lévi-Strauss, “The ‘bricoleur’ may not ever complete his purpose but he always puts something of himself into it” (1966:21).

In fact, for Lévi-Strauss the whole field of anthropology is explicitly conceptualized as the study of fragments, disintegration, and the general dispersal of matter and energy—in a word *entropy* (Almeida 1990). “What is called a ‘culture’ is a fragment of humanity which, from the point of view of research at hand and on the scale on which the latter is carried out, presents significant discontinuities in relation to the rest of humanity”

(Lévi-Strauss 1963:295). This is the familiar imagery of *shevirah*, the broken world of that ideal universe that nevertheless supplies the diverse empirical data with which anthropologists must contend. Yet structural analysis carries anthropology beyond, to the redemptive stage of *tikkun*, the piecing together of these bits to construct a paradigm laying bare the subterranean structures that potentially bind all humans back together, thereby revealing our common psychic unity. Hence a few lines later Lévi-Strauss announces, “these discontinuities can be reduced to *invariants*, which is the goal of structural analysis” (Lévi-Strauss 1963:295, original italics).

He makes this same point in *Tristes Tropiques*. After describing history as an inexorable process of destruction—“what else has man done except blithely break down billions of structures and reduce them to a state in which they are no longer capable of integration”—he states, “Anthropology could with advantage be changed into ‘entropology,’ as the name of the discipline concerned with the study of the highest manifestations of this process of disintegration” (1977:472). Nevertheless, as elsewhere in Lévi-Straussian structuralism, the symbolism of *shevirah* is balanced by the vision of *tikkun*. Thus, the paragraph starts: “The world began without man, and it will end without him. The institutions, morals, and customs that I shall have spent my life noting down and trying to understand are the transient efflorescence of a creation in relation to which they have no meaning, *except that of perhaps to allow mankind to play its part in creation*” (1977:472, italics mine).

Again Lévi-Strauss is using ideas and metaphors central to Lurianic Kabbalah, for it is precisely the ability to permit humans a role in being partners in creation that is the very essence of *tikkun*, especially in the way this idea recently has become a root metaphor in a Jewish version of liberation theology. Indeed, Lévi-Strauss’s humanist position that anthropology, besides having a scientific role, has a moral responsibility—for example, in what it can contribute to the fight against racism (1976, 1985)—parallels the current appeal of a demystified notion of *tikkun* in Jewish moral imagination. “Jewish philosophers have adapted this concept for their own use and a major Jewish periodical, *Tikkun*, has emerged, which identifies *Tikkun ha-Olam* with a liberal but family and religiously oriented political stance that its editor [Michael Lerner] has referred to as ‘neo-compassionism’” (Drob 2000:363). *Tikkun* is about “the metaphysics of social transformation,” writes Lerner, because “Judaism places transcendence on the agenda of the human race...Transcendence is not transcending *this* world, but

rather our ability to bring more fully into being *in* this world aspects of ourselves and aspects of reality that surround us but to which we have become tone deaf... Many other religions had the intuition that something was fundamentally missing from human experience, but then they created “spiritual” experience by pointing to some higher reality in a different or spiritual world that was necessarily divorced from the world of daily life. Judaism insists that this split is not an ontological necessity, that God’s absence from the world can be repaired and that human beings are partners with God in the process of repair (*tikkun*)” (Lerner 1994:29).

Although Sacks critiques such contemporary popularizations of the concept, maintaining that in its original Lurianic context, *tikkun* was more about the state of one’s soul than the condition of the world and therefore is technically a mystical concept rather than a type of social action, having more to do with prayer and fastidious observance of commandments “than healing the sick or feeding the hungry,” he readily admits that *tikkun* “remains a compelling metaphor none the less. It suggests that our acts make a difference. They repair fractures in the world. They restore a lost order. They rescue fragments of the divine light. They mend the damage done by the evil men—even the imperfections that are part of creation itself. Our moral imagination is shaped by such metaphors. Lurianic kabbalah is not afraid to look at catastrophe without concluding that the world is irreparable, evil endemic, that history is a meaningless sequence of events and the human situation irredeemable. Out of the broken fragments, it shapes a mosaic of hope” (Sacks 2005:78).

It is this mosaic of hope predicated on the interplay of liberty and responsibility, the artists of which forever reworking the debris of history to construct new possibilities from the broken pieces of shattered realities, which marks *bricolage* as *tikkun*, according humans an unrivaled partnership in repairing creation. Thus, for Lévi-Strauss, anthropology in general and structural methodology in particular has, as part and parcel of its scientific mission, a moral charge in restoring universal value to the scattered fragments of humanity that comprise the subject matter of ethnology. At bottom, this is what animates his philosophical writings, for example, his fight against prejudice and defense of cultural diversity in “Race and History” (1976), his critique of sociobiology in “The Anthropologist and the Human Condition” (1985:25-36), his stance on the balance between freedom and constraint in “Reflections on Liberty” (1985:279-288), and, in his famous debate with Sartre, his positioning “anthropology” as superior to

“history” by reclaiming meaning from the otherwise seemingly arbitrary, irregular, and meaningless aspects of human existence (1966:245-269). Throughout these threads and skeins of argument there runs an unchanging theme: structural analysis, through its focus on the most far-flung and eccentric manifestations of culture is, paradoxically, uniquely able to reveal the essence of the human condition. As such, by insisting on the psychic unity of all humans everywhere, it repairs the fractured unity of mankind through intellectual and social praxis, that is, through a process of secular, humanist, anthropological *tikkun*.

The clearest statement that it is structural anthropology’s preeminent task to creatively reconstruct a lost order from broken parts is most eloquently expressed in the conclusion to Lévi-Strauss’s essay on “Social Structure” where he writes: “Though it is not our fault, we [anthropologists] have been behaving like amateur botanists, haphazardly picking up heterogeneous specimens, which were further distorted, and mutilated in our herbarium. And we are, all of a sudden, confronted with the need of ordering complete series, ascertaining original shades, and measuring minute parts which have either shrunk or been lost...It looks almost as though cosmic physics were asked to work with Babylonian observations...Nevertheless, such is the challenge to modern anthropology” (1963:315). The challenge, of course, is to employ the evanescent facts of ethnology, despite their overwhelming diversity, disintegration, and dispersal among the remnants of the world’s indigenous peoples to discover the underlying structures that reveal the irrepressible though hidden unity of all humankind without, of course, diluting the categories of difference that engender these identities in the first place.

The Logic of Structural Correspondences

There is still another reason why the metaphysics of *bricolage* as practiced by the architects of myth and magic in traditional societies parallels the Lurianic applications of *tikkun* as “healing the cosmos” (Fine 2003:187-258). Both are predicated on the idea that formal *correspondences* exist between different orders of reality, and once the proper classificatory formulae are discerned, alignment and harmony among the diverse parts of creation can be achieved through proper ritual action. Structuralism and Kabbalah, therefore, are different but related instantiations of the ancient Greek schema holding that the structure of the macrocosm is mir-

rored in the structure of the microcosm—that similar patterns are replicated throughout all facets and levels of the universe. Consequently, the arts of *bricolage* and *tikkun* can bring about harmonic reconfigurations because, although reality is fragmentary, there is a hidden correspondence between its parts, and thus repair is possible through creative action that makes use of latent symmetries. The task of the *bricoleur*, like that of the kabbalist, is to manipulate the underlying pattern—the deep structure—that connects the different levels, translating correspondences from one frame of reference into another.

Lévi-Strauss observes that in “inquiring into the nature of mythical thought Boas came to the conclusion in 1914 that the ‘essential problem’ was to know why ‘human tales are preferably attached to animals, celestial bodies, and other personified phenomena of nature’” (Boas in Lévi-Strauss 1966:135). The solution to this problem forms the basis of Lévi-Strauss’ work on the logic of symbolism and totemic classifications, namely that the elaborate but seemingly illogical systems of plant and animal taxonomy found in small scale societies adhere to a concrete logic and correspond in distinctive ways to the classification of other aspects of the universe, such as social structure, types of minerals, colors, celestial constellations, parts of the body, etc., in other words, taxonomies of things with which they seemingly have no connection. On cursory appraisal, there “is certainly something paradoxical about the idea of a logic whose terms consist of odds and ends left over from psychological or historical processes and are, like these, devoid of necessity” (Lévi-Strauss 1966:35), but it is in the *bricoleur’s* rearranging of these heterogeneous parts, diverting them from their original usages and putting them in new orders, that their necessity and homologous relations become apparent. Lévi-Strauss likens the process of *bricolage* to the patterns formed by bits of broken glass in a kaleidoscope: new configurations forming with each tumble caused by the turning of the device, but always with the same pieces, or again, the *bricoleur’s* detaching of cogwheels from an old alarm clock in order to repair it (1966:35). In both of these models, the universe appears as a device or machine that is first broken down or somehow disassembled, thereby laying bare the hidden symmetries among its dissimilar parts, and then subsequently put back together or restructured. The logic of totemic classifications therefore is like the intermeshing of these hidden gears and concealed interconnected parts: it reveals secret conjunctions between disparate facets of reality.

Thus, for example, Lévi-Strauss observes that in such systems, “each animal or plant corresponds to a natural element, itself dependent on rites whose extreme complexity among the Navaho is well known. The following correspondences are found in the ‘Flint Chant’: crane—sky; red songbird—sun; eagle—mountain; hawk—rock; bluebird—tree; hummingbird—plant; cornbeetle—earth; heron—water” (1966:40). An even more complex system appears among the neighboring Hopi who “classify living creatures and natural phenomena by means of a vast system of correspondences” (1966:40). In their system, each inter-cardinal point is correlated with a specific color, animal, bird, tree, bush, flower, corn, and bean; such that northwest, for example, pairs with yellow, puma, oriole, Douglas-fir, green rabbit bush (*chrysothamnus*), mariposa lily (*calochortus*), yellow corn, and French bean (*Phaseolus vulg.*) respectively (1966:41). So too in Africa: “The Fulani of the Sudan class plants in series, each being related to a day of the week and to one of eight directions” (Lévi-Strauss 1966:43). Similar ethnographic examples illustrating correspondences between diverse elements of creation could be adduced for societies on every continent. When these taxonomies are further correlated with moieties, phratries, clans, and so on, as they are in many societies throughout Australia, North and South America, such that the reciprocities among these social groupings are analogous to those found in the classification of nature, then one is in the presence of totemism proper, in other words, “classificatory schemes which allow the natural and social universe to be grasped as an organized whole” (Lévi-Strauss 1966:135). Because humans too are an integral part of this interlocking system of classifications, they can mystically affect seemingly disconnected elements in the world through magic and ritual action.

The idea of correspondences is also basic to Kabbalah, and it is only because of this that the ritual repairs achieved through *tikkun* are likewise made possible. From the times of its early development in Provence and Catalonia (Dan and Kiener 1986), down to the divergent forms of its popular dissemination in the present (Ashlag 2002, Berg 2001, Cooper 2005, Ginsburgh 2003, Kaplan 1990, Kushner 1977, Laitman 2006, Steinsaltz 1980, Wolf 1999), the notion that there are structural correspondences between different facets of existence is nonetheless fundamental to all kabbalistic thought and practice. Just as in Lévi-Straussian structuralism the totemic operator discovers a common logic in diverse classifications revealing unanticipated correspondences between man, nature, culture, and the heavens, so, according to Scholem in his assessment of mystical

symbolism, “for the Kabbalist, too, every existing thing is endlessly correlated with the whole of creation; for him, too, everything mirrors everything else” (1961:27). Or again, in the words of a contemporary Israeli *mekubal* (kabbalist) of the Habad tradition, whose classes attract students from around the world: “To uncover God’s signature, Kabbalah uses models that form the basis for setting up correspondences. A correspondence may be made between parts of the human body and the letters of God’s name, between the ten plagues in Egypt and the ten *sefirot*, and so forth...In fact, correspondences are so integral to the study of Kabbalah, that it is impossible to engage in its study at even the most basic level without learning about them, their formulation, and their use...Every correspondence seeks to both order and translate (or map) elements from one frame of reference to another” (Ginsburgh 2006:61).

While over the centuries kabbalists have written of innumerable correspondences, some are more basic than others. A key correspondence involves an association made between the structure of time, the human body, and the Torah, which in turn becomes the basis for the correspondence between ritual action and *tikkun*. According to Rabbinic tradition, the original Ten Commandments are extrapolated into a corpus of 613 *mitzvot* or divine commandments listed throughout the Torah. Of these, 248 are positive commandments, enjoining the Children of Israel and their descendants to do certain things or engage in certain observances, whereas the other 365 are negative commandments or prohibitions. This was established in Talmudic times, but later taken up enthusiastically and elaborated further in Kabbalah. “Here the 248 positive commandments correspond to the 248 members of man and the 365 prohibitions to the 365 days of the year (or the 365 blood vessels in the body.) Thus each member of man’s body was made to fulfill one of the commandments, and each day of the year to sanctify man through his self-restriction to the realm of the permissible” (Scholem 1965:128).

The correspondence between the 613 *mitzvot* and the 613 “members” and “vessels” in the human body is central to the kabbalistic system developed by Schneur Zalman of Liadi, founder of the Habad school of Hasidism, as he demonstrates in the *Tanya*, for example in Chapter 37 (1973:167-179). Not surprisingly, in the yeshivas of Habad, these connections are likewise made explicit. There the *bochrim* (students) are taught: “the *mitzvos* (commandments) are the *tzavsa* (connection) between the *m’tzuveh* (the commanded) and the *m’tzaveh* (the commander).” From this perspective, it is

quintessentially through the *mitzvot* that Jews can be connected to God—and, thus, so to speak, participate in manipulating the latent connections that repair creation, heal the cosmos, and bring about *tikkun*.

Kabbalists also elaborated these correspondences further by positing an isomorphism between a mystical structure comprising the roots of the 613 *mitzvot*, the array of the ten *sefirot* (a diagram also known in Kabbalah as the Tree of Life, constituting the essential blueprint of creation as well as a schematic of the metaphorical “garments” or “attributes” of an incorporeal Creator, see Figure 1), and the body of *Adam Kadmon*, or Primordial Man, which contains all the elements from which the universe is made. Thus, when it says in Genesis 1:26 “Let us make Man [*Adam*] in Our image [*tzelem*],” the image being referred to is the specific structural array of the ten *sefirot*. This too is anthropomorphically equated with the structure of the human body, and not only as a point of passive study but additionally as an actual ritual activity. The prayer book (*siddur*) used today by the Habad Hasidim is an adaptation, according to the 1803 text of Schneur Zalman, of the *Nusach Ha-AriZal*, in other words, the arrangement of prayers developed by the preeminent kabbalist Isaac Luria nearly five centuries ago.

Thus, using this *siddur*, the followers of Habad recite a prayer in preparing for the Sabbath every Friday evening that metaphorically maps each of the ten *sefirot* onto a corresponding body part: “*chesed* (kindness)—the right arm; *gevurah* (severity, power)—the left arm; *tiferet* (beauty)—the torso; *netzach* (eternity, victory) and *hod* (splendor)—the two thighs; *yesod* (foundation)—the end of the torso, the sign of the Holy Covenant [the circumcised penis]; *malchut* (kingship)—the mouth, which

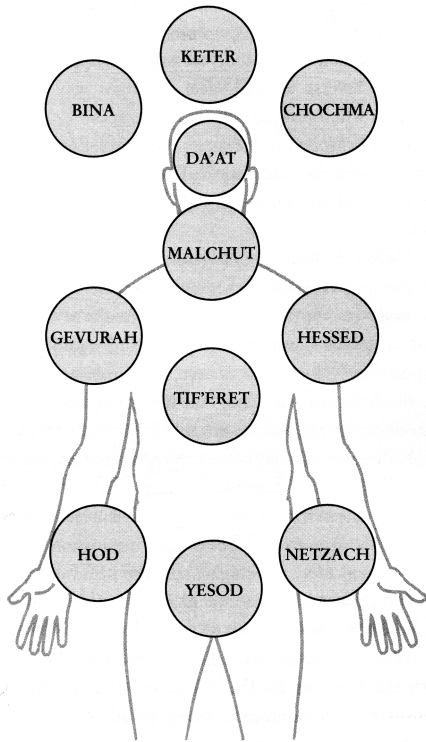


FIGURE 1: Human Metaphor of the Sefirot (from Wolf 1999:165)

we call the Oral Torah; *chochmah* (wisdom)—the brain, that is, the thought within; *binah* (understanding)—the heart, by means of which the heart understands; and concerning the latter two (*sefirot*) it is written, ‘The secrets belong to the Lord our God’ [Deuteronomy 29:28]; supernal *keter* (crown) is the crown of kingship, concerning which it is said, ‘He declares the end from the beginning,’ [Isaiah 46:10] and it is the skull (upon which the) *tefillin* [phylacteries] (are placed)” (Zalman 2003:150). Figure 1 shows how the aforementioned array of the *sefirot* corresponds metaphorically to the human form, although here, displaying an alternate version of this arrangement, *chochmah* and *binah* are associated with the right and left hemispheres of the brain, rather than the head and the heart, and adds the *sefirah* of *da’at* (knowledge), representing the balance between *chochmah* (wisdom) and *binah* (understanding).

An even more encompassing example of the correspondences between God, Man, and the Cosmos is found in the earliest and in many ways most enigmatic kabbalistic text, known as the *Sefer Yetzirah*, or Book of Creation (Kaplan 1997). Yet in order to comprehend this, we must first turn to a discussion of how Kabbalah, as well as structuralism, are both predicated on linguistic models of reality that in turn are correlated with analogous mathematical structures.

Linguistic and Mathematical Models

Structuralism and Kabbalah both are based on linguistic representations of reality that have mathematical corollaries. These commonalities have far reaching implications. The centrality of linguistic analysis to ancient as well as modern iterations of Kabbalah is well established (Idel 1989; Kaplan 1997; Scholem 1972, 1973; Wolfson 2005). Similarly, Lévi-Strauss’ love affair with linguistics, and the inspiration this discipline provided to the development of structuralism, is likewise well known. According to Lévi-Strauss, structuralism is a semiological discipline concerned with the study of signs and symbols. He argues that, “in both anthropological and linguistic research, we are dealing strictly with symbolism” (1963:1951). In linguistics, each phoneme is identified by its own symbol, when alphabets develop the phonemes (ideally) are represented by different letters. Lévi-Strauss maintains that anthropology likewise needs to isolate discrete units of meaning in the analysis of culture and similarly develop a method of symbolic notation to transcribe them; for example, he pro-

posed in the study of mythology, the concept of the *mytheme* as analogous to the phoneme in linguistics. So too, Kabbalah is fundamentally concerned with the interpretation of symbolism (Scholem 1965) and correspondingly recognizes that such analysis is inexorably tied to a linguistically inspired appreciation of it. Indeed, the essentially linguistic nature of signification is explicit in Hebrew; the very word *otiyot* which in Hebrew means “letters,” is also the word for “signs” or “symbols.”

Put briefly, as I have shown elsewhere, Lévi-Strauss’ linguistic and mathematical approach to the study of symbolism can be summed up in the following manner:

For Lévi-Strauss...symbols cannot be interpreted as having meaning in themselves but only in terms of structural opposition, a binary logic that exists in culture because it is in fact a reflection of the binary structure of the human mind. Drawing intellectual capital from the structural linguistics of Saussure (1966) and Jakobson (1956), as well as mathematics and the natural sciences, Lévi-Strauss reasoned that meaning was created symbolically in culture in a way that was analogous to the way it was created in information theory and in language. In the digital world of computers, everything from words to pictures to music is based on a binary logic that involves only two symbols, “1” and “0.” In linguistic phonemic analysis, meaning comes about through discerning phonetic differences within minimal pairs. For instance “*b*” and “*p*” in English are both labial stops, the only difference being that the former is voiced and not the latter, yet it is that minimal difference that allows us to differentiate between a *bat* and a *pat*. So too, in culture, symbols have meaning because they also are based on binary oppositions: raw/cooked, hot/cold, high/low, rough/smooth, light/dark, right/left, and so on that reflect sensory contrasts and ultimately relate back to the primary symbolic opposition between nature and culture. Moreover, not just oppositions but also the logical relations between sets of oppositions are important to the analysis of symbolic systems. These logical relations may be expressed in terms of reciprocity, analogy, homology, reflection, inversion, isomorphism, and so on (Levi 2007:252).

Just as Lévi-Strauss announced, when interviewed by Charbonnier: “I think all problems are linguistic ones” (Lévi-Strauss in Charbonnier

1969:150), so too in Kabbalah the structure of reality is founded on a linguistic model. Abraham Abulafia, one of the luminaries of thirteenth-century Spanish Kabbalah, not only believed, along with most kabbalists since the time of the Mishna, that “language contains a structure that conveys the true form of reality” (Idel 1989:1) but promulgated a theory of language that some see as similar to modern ideas about phonemes and allophones (Idel 1989:3).

Mathematics too is as fundamental to Kabbalah as it is to structuralism. Even recent popular culture has celebrated the association between Kabbalah and number theory through films such as *Pi*, about a psychologically disturbed mathematical genius who abandons his search for mathematical order in the world to assist a Hasidic Jew in discovering mathematical codes in the Torah, and books such as *The Mystery of the Aleph: Mathematics, the Kabbalah, and the Search for Infinity* (Aczel 2000), which attempts to explain Cantor’s theorem in layman’s language. The specific connections between structural anthropology and algebraic formulations were early articulated by Lévi-Strauss himself in his essay “The Mathematics of Man” (1954). Noting that Lévi-Strauss, throughout his *oeuvre*, bases his analyses on mathematical “terms such as ‘transformations,’ ‘inversions,’ ‘*n*-dimensional spaces,’ ‘Boolean algebra,’ ‘Klein bottles,’ and ‘groups,’” Almeida argues that “[m]athematical and physical tropes carry a heavy burden in Lévi-Strauss’s texts. They express basic ideas about human society. It is vital to him that these metaphors should come from physics and mathematics, for they imply the continuity of the human with the natural order” (1990:370).

The linguistic, as well as mathematical, assumptions and procedures of kabbalistic hermeneutics echo Lévi-Straussian epistemology. This worldview—holding that the elements of creation are basically sounds and numbers—is presented in the “oldest and most mysterious of all Kabbalistic texts” (Kaplan 1997:ix). Composed sometime between the third and sixth centuries, the *Sefer Yetzirah*, or Book of Creation, presents a mystical cosmology and cosmogony based upon the twenty-two letters of the Hebrew alphabet and the structural array of the ten *sefirot* (Figure 2). Recalling that in Hebrew the letters of the alphabet can be used conventionally to represent either phonemes or numbers, on the one hand, and that in the first passage of the *Sefer Yetzirah* the word *sefirah* (i.e. the singular for *sefirot*) is shown to be etymologically related to “text” (*sepher*), “number” (*sephar*), and “communication” (*sippur*) (Kaplan 1997:19), on the other, one can see from the

outset that in Kabbalah there is a mutual convertibility, or fundamental equivalence, between linguistic and numerical expressions of reality. Taken together, the ten *sefirot* and twenty-two letters comprise, as it says in the first line of the *Sefer Yetzirah*, the “32 mystical paths of wisdom,” regarded as the essential building blocks of all existence through which God emanates his divine energy thus creating the world on a continuing basis. “Because each of the ten *sefirot* represent a vowel, and every connecting link is a consonant, we can readily see that every word in the Hebrew language is a combination of different paths in this scheme. This opens up a huge potential for analyzing words” (Cooper 1997:86), from either linguistic or mathematical perspectives. These identities are illustrated in Figure 2.

Explaining the hidden network of relationships existing between the universe and these 32 Paths of Wisdom as articulated in the *Sefer Yetzirah*, Scholem writes: “All the real beings in the three strata of the cosmos: in the world, in time, and in man’s body (in the language of the book: world, year, soul) came into existence through the interconnection of the 22 letters, and especially by way of the “231 gates; i.e. the combinations of the letter into groups of two perhaps representing the roots of the Hebrew verb” (Scholem 1978:25). Besides stressing the irreducible interconnectivity of language and number in both kabbalistic and structuralist thought, the first observation that merits special comment is that in the *Sefer Yetzirah*, as for Lévi-Strauss, “meaning,” in the most elementary sense, arises not through individual units but only in combination, specifically in *binary* combination, with other units within the same system.

Following Saussure, Lévi-Strauss distinguishes between linguistic sounds and their references, recognizing “that it is the combination of sounds, not the sounds themselves, which provides the significant data” (1963:208). Similarly, “[n]one of the twenty-two letters of the Hebrew language bears any specific linguistic meaning when standing on its own. In order to generate meaningful units of language in Hebrew, there must be a minimum of two letters together...In Kabbalah, the two letter units are called *sha’arim*, gates, since if one would perceive each of the letters of the unit as a pillar on each side of a gateway, one can pass through the gateway from either direction, thus obtaining two different permutations of the two-letter units from one gate” (Ginsburgh 2005:2).⁴ Thus, when the *Sefer Yetzirah* reads, “Twenty-two foundation letters: He placed them in a circle like a wall with 231 Gates. The Circle oscillates back and forth” (Kaplan 1997:108), the reference is to the complete series of combinations of these

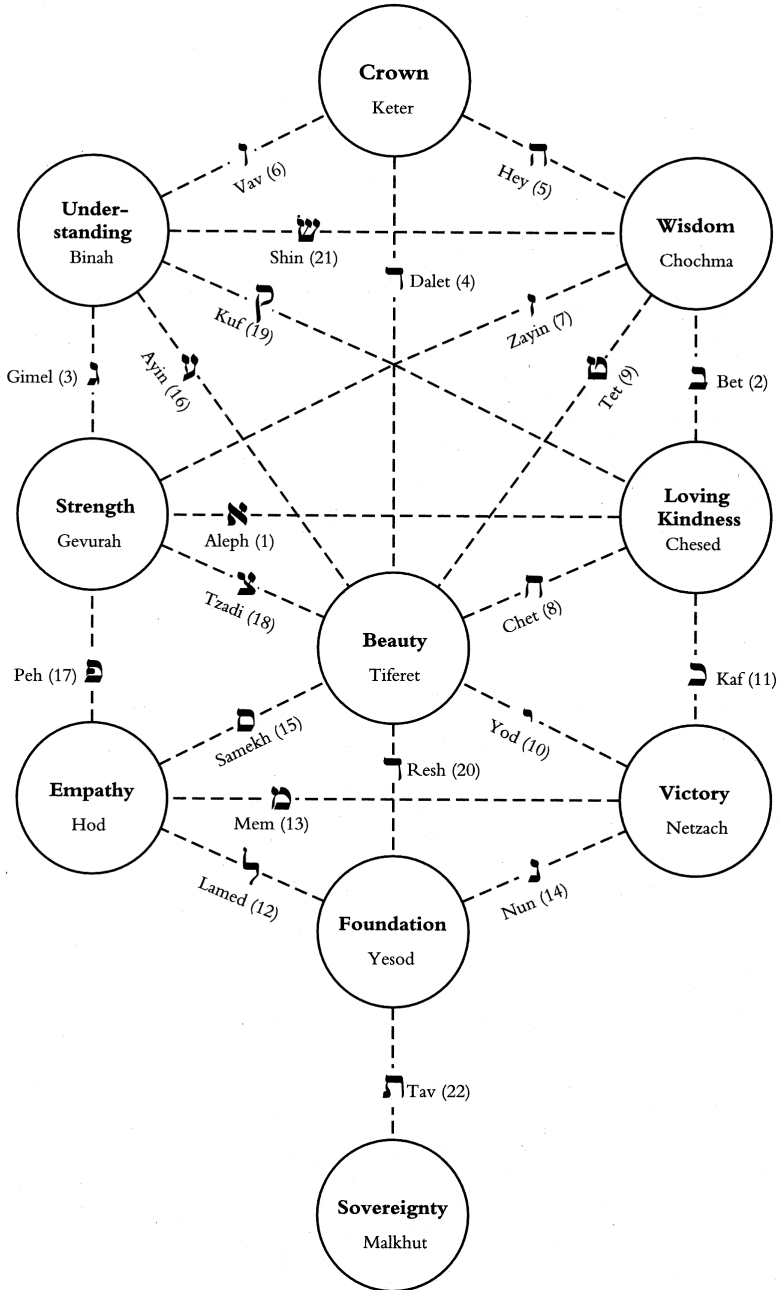


FIGURE 2: The Tree of Life, or 32 Mystical Paths of Wisdom, linking the 10 sefirot with the 22 letters of the Hebrew alphabet, according to the Arizal (from Cooper 1997:87)

two-letter units that are the elements of meaning in Hebrew (Figure 3). Why does the *Sefer Yetzirah* specify that there are 231 Gates? “This can be calculated mathematically: since there are 22 letters we take one of the 22 and match it with one of the 21 remaining letters, which results in 462 ($22 \cdot 21$) possible matches. This gives us all the possible permutations of two-letter units including both permutations of the same *sha’ar*, gate. In order to arrive at the exact number of *sha’arim*, we must divide the result by the number of permutations available for the same two letters (2!) by which we arrive at the number 231” (Ginsburgh 2005:2-3).

Noteworthy for the purpose of this article is that this type of permutation relating to the combinatorial design that exhausts the possibilities within a series is one of the recurring mathematical metaphors basic to the works of Lévi-Strauss. It is central to his notion of the algebraic structure of the “transformation group” (Almeida 1990:367-372): an invariance theory, which he uses to analyze generalized exchange, in the field of kinship, and different versions of a myth, in the domain of mythology, asserting “when we have succeeded in organizing a whole series of variants into a kind of permutation group, we are in a position to formulate the law of that group” (Lévi-Strauss 1963:228).

Yet Lévi-Strauss maintains that meaning arises not just through binary oppositions (and their permutations) but furthermore through their mediation. According to him, “mythical thought always progresses from the awareness of oppositions toward their resolution” (1963:224). Thus, the logical contradictions and ambiguities that emerge via the juxtaposition of polar opposites find resolution through a third term or triadic structure; for example, Lévi-Strauss suggests this is the role of tricksters and bisexual beings in Pueblo creation myths, which in various ways resolve the contradictions generated via the initial opposition between life and death (1963:224-226).

Kabbalah too holds that binary oppositions are resolved through intermediaries. This is illustrated graphically in the very structure of the ten *sefirot* displayed in the Tree of Life, in both lateral (or vertical) and horizontal dimensions. Thus, there are three vertical axes in the Tree of Life (Figure 2). According to the psychologically inclined interpretations of Habad, the right side, coded as “male,” is associated with consciousness in terms of an initial flash or insight, and love expressed as non-restriction, flow, and mercy. By contrast, the left side, coded as “female,” is associated with consciousness in terms of structure or development and love expressed as discipline, containment, and judgment. The integration of these attributes is manifested

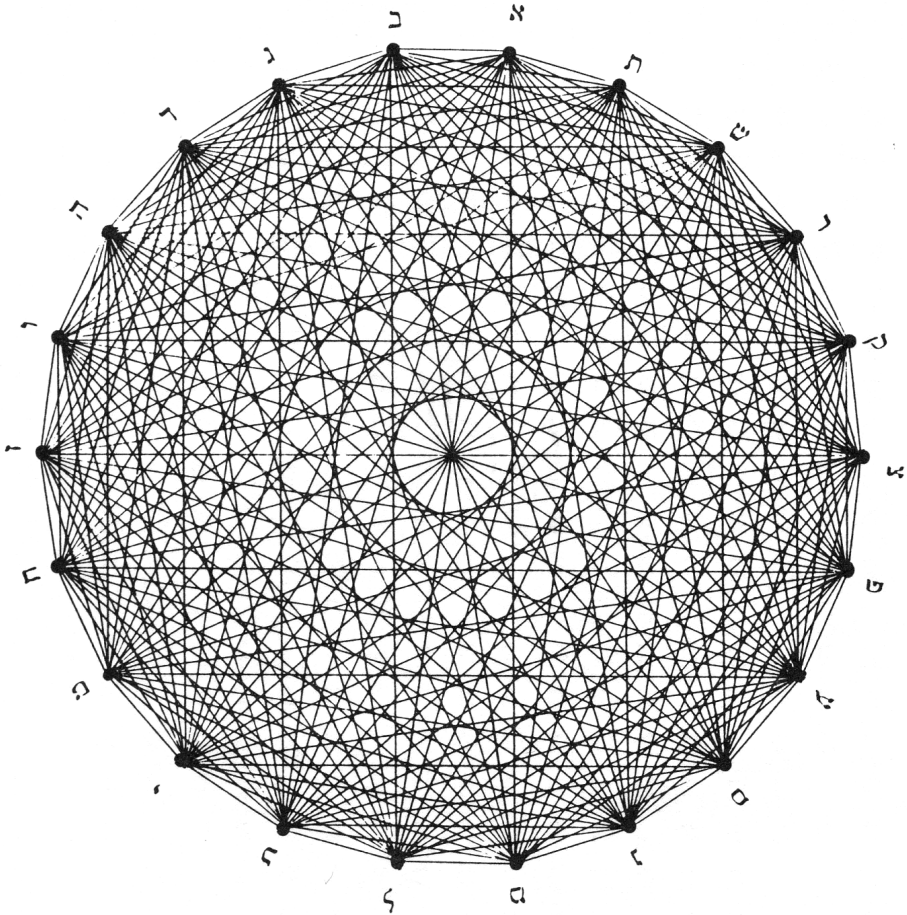


FIGURE 3: 22 points, 231 lines. The 231 lines connecting the 22 letters are the 231 Gates (from Kaplan 1997:111).

through the *sefirot* of the central or mediating axis. There is also a horizontal bifurcation of this array in terms of ‘upper’ and ‘lower.’ The top three *sefirot* are called Intellect (*sechel*), whereas the lower seven are termed Emotions (*middot*). However, in some systems, since the highest *sefirah* is ‘crown’ (*keter*) which is *above* the head, rather than within it, in the configuration according to Habad (Figure 1), a third intellectual *sefirah*, ‘knowledge’ (*da’at*), is counted instead of ‘crown’ and, located on the medial axis, forms a triadic structure beneath and between ‘wisdom’ (*chochmah*) and ‘understanding’ (*binah*), just as ‘beauty’ (*tiferet*) indicates a balance between ‘kindness’ (*chesed*) and ‘strength’ (*gevurah*), and—moving from

internal mental and emotional states outward into the world of action—“foundation” (*yesod*), is the mediating term between “victory” (*netzach*) and “empathy” (*hod*), which finally manifests through “kingdom” (*malchut*). The point is that in Kabbalah, as in structuralism, the seeming paradoxes and antinomies of life formed through an initial pair of opposites are resolved, harmonized, or balanced dialectically via conceptual intermediaries and structural triads.

Returning to the *Sefer Yetzirah*, the 22 letters of the Hebrew alphabet are divided into three groups, according to the work’s distinctive system of mystical phonetics. The first, called the *immot* (mothers) or *ummot* (elements), contain three letters representing air, water, and fire and constitute not only the sources from which the rest flow but also correspond to tripartite divisions in nature, such as the three seasons of the year, the three parts of the body, etc. The second group consists of the seven “double” letters, which can take either a hard or soft sound depending on whether they are written with or without a *dagesh*, a diacritical mark indicated by a dot. “Through the medium of the ‘double’ letters were created the seven planets, the seven heavens, the seven days of the week, and the seven orifices of the body (eyes, ears, nostrils, mouth) and they allude to the basic opposites (*temurot*) in man’s life” (Scholem 1978:25). The phonetic observation concerning the seven “double” letters is identical to the one made in structural linguistics, which Lévi-Strauss further develops for structural anthropology, namely, that *meaning* comes about through the discernment of distinctive features within minimal pairs, i.e. *b* and *p*, *d* and *t*, or *g* and *k*—the phonemes being distinguished by the fact that the former phoneme in each pair is voiced whereas the latter is not, otherwise they are phonetically identical. That the *Sefer Yetzirah* uses these linguistic oppositions, which give rise to different phonemes in Hebrew, and then relates these cosmologically to other binary structures in the natural world, is a thoroughly structuralist move.

Continuing with the third and final phonetic grouping, Scholem writes: “The 12 remaining ‘simple’ letters (*ha-peshutot*) correspond to what the author [of the *Sefer Yetzirah*] considers as man’s chief activities: the 12 signs of the zodiac in the heavenly sphere, the 12 months, and the 12 chief limbs of the body (*ha-manhigim*)” (1978:25). To which should be added the 12 permutations of YHVH, i.e. the Tetragrammaton, the unutterable holy four letter name of God, as well as being correlated with the 12 Tribes of Israel, which in turn are divided into four groups of three and correlated with the four cardinal directions (Kaplan 1997:197-202). The

point here is that this shows not only a structural correlation between cosmology and divinity, but also a correspondence with the basic tribal units of ancient Israelite social organization.

All of this begins to look strangely like Lévi-Strauss' explanation of the mutual convertibility of numbers, seasons, directions, plants, and animals among the Osage tribe who, as if they were kabbalistic adepts, correlate the divisions of their society with cosmological phenomena uniting the cultural, natural, and supernatural in a single, albeit complex, overarching scheme:

“In Osage thought, the most important opposition, which is also the simplest and has the greatest logical power, is that between two moieties: *Tsi'-zhu*: sky, and *Hon'ga*; subdivided into *Hon'ga*, properly speaking: dry land, and *Wa-zha'-zhe*: water. Starting from here a complex grammar is developed by means of a system of correspondences...the opposition between odd and even gives rise to a mystic numerology...the number six belongs to the sky moiety, and the number seven to the land moiety, and their sum, thirteen, corresponds, on the cosmological plane, to the number of rays of the rising sun...and, on the social plane, to the notable actions which may be counted to his credit by an accomplished warrior (Lévi-Strauss 1966:143). [He continues]...the number thirteen...is first of all the sum of the two social groups, right and left, north and south, winter and summer...In the image of the rising sun...the number thirteen can symbolize the union of two terms: six and seven, sky and land, etc. But when it relates to a star the solar symbolism is particularly attached to the sky moiety. Hence there come to be other concrete specifications of the number thirteen, in this case reserved to subgroups of the other moiety: thirteen footprints of the black bear to represent the notable actions of the land clans and thirteen willow trees to represent those of the water clans...As a totality, this union of even and odd, of collective and individual, social and organic, is geared to the ternary cosmological scheme: there is a ‘thirteen’ of sky, a ‘thirteen’ of land, a ‘thirteen’ of water” (1966:145-146).

The structure of this Osage “mystic numerology” recalls an analogous type of correlation in the *Sefer Yetzirah* between the 12 “simple” letters and the 12 signs of the zodiac, the 12 tribes of Israel, the 12 months of the year, etc. or the seven “double” letters and the seven days of the

week, the seven planets, the seven orifices of the body, and so forth. Given the correspondences between numbers, directions, social divisions, and the natural order in both Jewish and Osage mysticism, one wonders if it is more appropriate to view Lévi-Strauss as having concocted *gematria*, (kabbalistic numerology) for an American Indian tribe, or instead see the *Sefer Yetzirah* as a system of totemic classification.

Central to this identity is the fact that in both systems, the concept of *language*, viewed as a code consisting of units combined according to specific rules, is expressible either in terms of *speech* or *numbers*. In Kabbalah, there is a reliance on the dictum that God created the world by “speaking” it into existence—as it says in the Mishnah, “the world was created through ten utterances” (Pirke Avot 5:1)—representing not only an archetypal example of what Austin (1962) would regard as an illocutionary speech act wherein “saying is doing,” but also instantiating a critical connection between language and myth (Cassier 1946). It furthermore provides a rationale for why in ancient Hebrew the term for “word” (*devar*) also means “thing.” From a kabbalistic perspective, Hebrew words are not just random combinations of sounds assigned to things, but rather manifest a necessary and consubstantial identity with them related to the creative act that brought them into existence in the first place. Through the referencing of the specific vowels and consonants that comprise a word, specific *sefirot* and connecting links are being invoked, and since the whole array of the 32 mystical paths are contained within each of the *sefirot*, the entire Tree of Life and template of Creation through which God sustains the world is, in a sense, manifest in each thing through the Hebrew word for it. Indeed, the language of holy texts is merely speech waiting to be spoken. “For the Kabbalist, linguistic mysticism is at the same time a mysticism of writing. Every act of speaking...is at once an act of writing and every writing is potential speech, which is designed to become audible (Scholem 1973:167).

These principles are essential to theurgic Kabbalah. It explains, for example, how the golem was created—according to legend made by Rabbi Judah Loew of Prague in the 16th century to protect the Jews when they were in peril. A giant lump of clay was animated when the Hebrew letters *alef-mem-tav*—spelling the word *emet*, or “truth”—were inscribed on the creature’s forehead. The golem was deactivated when the *alef* was erased, thus spelling *met*, or “death.” Not only is language an animistic code, it is furthermore part of a numerical template. Since in Hebrew each letter is also a number, every word therefore has a numerical equivalent and corre-

spondingly every thing (*devar*) a numerical formula. For instance, the number 18 is a numeric code for “life,” since the word for life in Hebrew is *chai*, spelled *chet-yud*, which is the sum of the letters *chet*, equal to 8, and *yud*, 10. That the number 18 mystically connotes a formula for life-giving, rectifying, potencies is also expressed through ritual actions: Habad Hasidim often give “charity” (*tzedakah*, from a stem literally meaning “justice”) in multiples of 18, just as the central prayer of the worship service is known as the *Shmoneh Esreh*, which means “18,” named for the 18 benedictions that comprise the original prayer and corresponding, among other things, to the 18 vertebrae in the spine, the recommended age of marriage for a man, and the number of times the Tetragrammaton is mentioned in the three paragraphs of the Shema, which is the Jewish credo. None of these, according to Kabbalah, are coincidences, but instead reflections of essential correspondences between words, numbers, and things.

Hermeneutics as Algebra and Phonology

In different but related ways, structuralism and Kabbalah are both hermeneutic disciplines, the former fundamentally concerned with the analysis of myths and systems of symbolic classification, and the latter with Biblical exegesis and interpretation of related texts. The kabbalistic stress on the reciprocity between written and verbal dimensions of language and the mutual convertibility of both into numbers, recalls Lévi-Strauss’ deployment of the Saussurean distinction between *langue* (language) and *parole* (speech) which, at the level of myth, can likewise be expressed in the form of algebra. The Saussurean distinction becomes important for Lévi-Strauss in his differentiation between code, the paradigmatic structure representing all variants of a myth, and message, the syntagmatic chain represented in a particular telling: the former “being the structural side of language, the other the statistical aspect of it, *langue* belonging to a reversible time, *parole* being non-reversible” (1963:209). Lévi-Strauss holds that myth partakes of this double structure. On the one hand, myths have a historical dimension to them, the events relate to a particular time in the past and their recitation in the present requires that the episodes be narrated in a certain order. This is the message, speech, or *parole* aspect. On the other hand, myths also have an ahistorical structure: “the specific pattern described is timeless; it explains the present and the past, as well as the future” (Lévi-Strauss 1963:209). In this sense, myths exhibit the characteristics of *langue*; they

exhibit a code that in fact can be expressed mathematically. Indeed, Lévi-Strauss states, “it seems that every myth (considered as the aggregate of all its variants) corresponds to a formula of the following type:

$$f_x(a): f_y(b) \approx f_x(b): f_{a^{-1}}(y)$$

Here, with two terms *a* and *b* being given as well as two functions, *x* and *y*, of these terms, it is assumed that a relation of equivalence exists between two situations defined respectively by an inversion of *terms* and *relations*, under two conditions: that one term be replaced by its opposite (in the above formula *a* and *a*⁻¹); (2) that an inversion be made between the *function value* and the *term value* of the two elements (above *y* and *a*)” (1963:228).

Not only does this show that in structuralism, as in Kabbalah, sacred narratives—in other words, myths—are actually codes that can be reduced to mathematical form, but that in order to grasp the paradigmatic or deep structure of a myth its narrative flow must be interrupted, deconstructed, and rearranged into smaller units or “mythemes,” which are “bundles of relations” (Lévi-Strauss 1963:211). The underlying message of the myth can be grasped only when the surface structure, its plot line, or syntagmatic non-reversible flow is broken down into mythemes and rearranged into a matrix of rows and columns. In this way, different parts of a myth can be seen as semantically equivalent regardless of where they occur in the story line. At the level of the paradigmatic deep structure, meaning is a function of symmetrically logical relations, not relations of before and after. Significantly, the Hebrew adage that guides traditional Biblical hermeneutics, *ein mukdam v-me’ohar ba-torah*, “there is no before or after in the Torah,” holds equally for the structural study of myth.

Thus, the Lévi-Straussian distinction between surface structure and deep structure in myth analysis, as well as the idea that narrative historical sense (*parole*) acquires an expansion of meaning at the level of reversible, timeless, algebraic logic (*langue*)—expressed in terms of analogy, inversion, symmetry, etc.—are concepts also expressed in Kabbalah, particularly in specialized hermeneutic techniques such as *gematria*, *atbash*, *notarikon*, and *temurah*. Each of these exegetic methods stipulate ways to recombine the letters of words and phrases to form new ones according to systematic rules of permutation in order to reach deeper levels of meaning. In each case, the plain sense or surface structure of a text is deconstructed in order to reconstruct a more profound reading that

otherwise is covert. Moreover, each corresponds to a specific hermeneutic practice deployed by Lévi-Strauss in the analysis of myth.

Hence, in the exegetic method known as *notarikon*, the first (or last) letters of each word in a series of words can combine to form a new word or sentence—a process that is analogous to Levi-Strauss's penchant for interrupting the plain meaning of a myth by rearranging its elements into bundles of relations that constitute new packets of meaning (1963:213-214). To cite one famous example, the Hebrew term *pardes*, meaning “orchard,” and associated with “paradise” in Jewish oral tradition, is upon closer inspection shown to be an acronym formed of the initial letters of words standing for four levels of Biblical interpretation, each one deeper than the one that preceded it: the literal meaning (*pshat*), the allegorical meaning (*remez*), the homiletic meaning (*drash*), and the hidden or mystical meaning (*sod*). Taken together, the initial letter of each word spells *pardes* (PRDS) in Hebrew. In the Talmud, this is the term used for the grove in the famous *baraita* known as The Four Who Entered Paradise, where the term alludes to the dangers implicit in searching for deeper meanings by describing the consequences that befell four leading Mishnaic period rabbis who entered a sacred orchard—that is, began to pierce beneath the surface meaning (*pshat*) in their textual interpretations. “Four men entered paradise [*pardes*]—Ben Azzai, Ben Zoma, Acher [literally, the “Other One,” i.e. Elisha ben Abuyah], and Akiba. Ben Azzai looked and died; Ben Zoma looked and went mad; Acher destroyed the plants [that is, became a heretic]; Akiba entered in peace and departed in peace” (Babylonian Talmud, Hagigah, 14b). Significantly, this is one of the proof texts that traditionally was used to dissuade people from kabbalistic study and warn against penetrating to hidden levels of Torah analysis.

As mentioned previously, in the exegetic technique known as *gematria*, two words or phrases are asserted to have related meanings if they have the same numerical value despite having unrelated surface connotations—an idea that is formally equivalent to Levi-Strauss' method of demonstrating the underlying relatedness of two or more different myths, or variants of the same myth, if they can be demonstrated to exhibit the same algebraic deep structure; for instance, as he shows in relating the deep structure of the ancient Greek Oedipus myth to that of creation myths among the Pueblos in the Southwestern United States (1963:214-226). “Indeed,” writes Lévi-Strauss, “progress in comparative mythology depends largely on the cooperation of mathematicians who could undertake to express in symbols multi-

dimensional relations which cannot be handled otherwise” (1963:219). A straightforward kabbalistic example of this mathematical principle, demonstrating the interrelationship of ostensibly unrelated things given their algebraic equivalence, is shown in that the word for “strength” (*gevurah*) (which is also the name for the fifth *sefira*) and the word for “lion” (*aryeh*) reveal a consubstantial connection since the sum of the letters in each word equals 216. Beyond these associations, 216 is also the *gematria* for *Davir* (related to *davar*, “word”), that is, the Oracle, the Holy of Holies. Furthermore, it is the numerical expression of a perfect cube ($6 \cdot 6 \cdot 6 = 216$), which is significant because the Holy of Holies itself was indeed designed as a cube (I Kings 6:20). Or again, the idea that unity and compassion are interconnected is shown through the *gematria* for “one” (*echad*) and “love” (*ahavah*), since each total 13, which is also the number of God’s attributes, thereby demonstrating that oneness and compassion constitute the essence of Godliness.

Finally, in the exegetic system known as *atbash*, the order of the alphabet is reversed in a method that parallels Lévi-Strauss’ prevalent use of “inversion” and “reversal” as hermeneutic techniques. In mathematical terms, *atbash* represents “simple reflective transformation. The first letter of the alphabet is paired with the last, the second with the second-to-last, and so on. These letters of these pairs may then be interchanged” (Ginsburgh 2003:259), such that the last letter, *tav*, is substituted for the first letter, *alef*, the penultimate letter, *shin*, is substituted for the second letter, *bet*, etc. and the letters are then enumerated that way. Were it not for *atbash*, several passages in the Book of Jeremiah, for example, would be completely incomprehensible. Thus, the Lord announces through his prophet, “Behold I am stirring up a destruction against Babylonia and against the inhabitants of *Lev-kamai*” (Jeremiah 51:1). *Lev-kamai* literally means “the heart of those who rise against me,” but who are these people? Rashi, the canonical 11th century commentator, explains that the unknown term refers to the Chaldean people, since *Lev-kamai* is *atbash* for *Kasdim*, or Chaldea. Later in the same chapter, Jeremiah says, “How has *Sheshach* been captured, and the glory of the whole world seized? How has Babylonia become a desolation among the nations?” (Jeremiah 51:41-42). But who or what is *Sheshach*? Again, the answer is provided via *atbash*, as Rashi notes that *Sheshach* is merely the reversed alphabet code for Babel, i.e. Babylonia.

The above exegetic techniques clearly illustrate that in kabbalistic hermeneutics, as in structuralism, timeless truths are discoverable at deeper levels either when surface meanings are reduced to their algebra-

ic scaffolding or conventional relations of before and after give way to reversible forms of paradigmatic structure. In both systems, analysis proceeds by deconstructing the plain sense of words, concepts, sentences, and texts in order to reveal latent relationships and hidden codes.

The linguistic and mathematical models discussed above also find important analogies in music, as structuralists and kabbalists have each observed in their different ways. Hence, in addition to *gematria*, *notarikon*, and *atbash*, the medieval Spanish kabbalist Abraham Abulafia developed another phonological technique into a system he called the “science of the combination of letters,” (*Hokhmat ha-Tseruf*) which was employed as a form of meditation that he specifically likened to the sensation of listening to music, in terms of both melody and harmony. Here, the letters of the Hebrew alphabet, taking the place of the musical scale, are arranged in many permutations, though once combined they need not form words. According to Abulafia, “Know that the method of *Tseruf* can be compared to music; for the ear hears sounds from various combinations, in accordance with the character of the melody and the instrument. Also, two different instruments can form a combination, and if the sounds combine, the listener’s ear registers a pleasant sensation in acknowledging their difference” (Abulafia in Scholem 1946:133-134).

Of course, this analogy to music takes us back to Lévi-Strauss’ analysis of myth and the overt parallels he draws between the structure of myth and the structure of music in *The Raw and the Cooked*, where the chapter titles themselves betray these connections: the introduction is called “Overture” and subsequent chapters are titled, among others, The Bird-Nester’s Aria, The ‘Good Manners’ Sonata, Fugue of the Five Senses, The Opossum’s Cantata, and Rustic Symphony in Three Movements” (1969:viii-ix). That the analogy to music is not mere stylistic flair but rather an essential feature of the structural analysis of myth is made clear by Lévi-Strauss when he sums up the comparison to music by asserting: “Its justification lies in my intention to treat the sequences in each myth, and the myths themselves in respect of their reciprocal interrelations, like the instrumental parts of a musical work and to study them as one studies a symphony” (1969:26). Leach explains that this means one can imagine a corpus of myths as being like an orchestral score, such that as one reads across the page, identical elements in different versions of the myth can be interpreted to resonate with each other like chords for different instruments (1970:59).

The idea here is that music, like myth, exhibits a structure akin to language in a double sense. On the one hand, there is the melody, indicating

the serial or “horizontal” aspect, and on the other hand, there is the harmony, denoting the “vertical” aspect or the playing of different pitches or instruments simultaneously. Lévi-Strauss maintains that this relation is analogous to the relation between *parole* and *langue*, whereby melody stands in the same relation to diachrony, irreversibility, and the syntagmatic chain as harmony is to synchrony, reversibility, and the paradigmatic, deep structure. For our purposes, the key point is that the aforementioned parallel structure of language and music is virtually identical to Abulafia’s method of *Tseruf*, that is, his “science of the combination of letters,” which likewise contained both melodic and harmonic dimensions.

But Is It Science?

Granted that it has been demonstrated that there exist a number of striking parallels between structuralism and Kabbalah, the question arises: Does this mean that structuralism is a form of mysticism or that Kabbalah is a kind of science? To begin, one notes that just as Lévi-Strauss is convinced that structuralism is a form of science, so some modern day kabbalists unflinchingly assert that: “the wisdom of Kabbalah...offers...a scientific worldview that Kabbalists discovered thousands of years ago” (Laitman 2006:12). But can mysticism, in the case of Kabbalah, or the study of it, in the case of structuralism, be so easily identified with science? Lévi-Strauss and certain contemporary kabbalists certainly think so and assert that their respective paradigms are akin to models used specifically in physics, chemistry, and biology. The structuralist axiom that, “the ability to reconstruct the whole from a fragment, as well as later stages from previous ones” (Lévi-Strauss 1963:211), parallels theories of fractals and holography (the idea that the structure of the whole is discernable or replicated in its parts) which is manifested in Kabbalah through the concept that the original configuration of the whole structure of creation, an entire Tree of Life, is coded in each of its fragments (Cooper 1997:86-88). Similarly, the disintegration and dispersion explicit in the “breaking of the vessels” image in Lurianic cosmology is consistent with the second law of thermodynamics, or entropy, the latter of which (along with the mathematical concept of symmetry) is, according to Almeida (1990), the master trope throughout the works of Lévi-Strauss.

So too, the models of molecular biology have proven to be irresistible to the gurus of structuralism and New Age Kabbalah. Both reference the quadripartite molecular structure of DNA as a model for explaining how an

infinite diversity of higher order phenomena can emerge from combining a limited number of elements. In stressing the irreducibility of the concept of species as a totemic operator capable of generating unlimited forms of classification, Lévi-Strauss reminds us that “the anatomical, physiological, and ethnological diversity of some two million living species may be analyzed in terms of variations of the chromosomes which are reducible to a periodicity in the distribution of four distinct groups on the molecular chain” (Lévi-Strauss 1966:137). Correspondingly, Cooper suggests that the four amino acids in the DNA sequence is comparable to four key *sefirot* in the Tree of Life: “DNA researchers have discovered that four amino acids—adenine, thymine, guanine, and cytosine—form themselves in various combinations that are sequenced into patterns upon which all life is built...Each amino acid always works in a pair, and each always pairs with the same partner: adenine pairs with thymine (A-T), and guanine pairs with cytosine (G-C)...Thus only four amino acids, coupled into two pairs, offer an almost unlimited prospect for variation. This is precisely the same model that Kabbalists have used for a thousand years. Rather than amino acids, the Kabbalists have described four key elements of creation: expansion (*chesed*), which always pairs with contraction (*gevurah*); and giving (*netzach*), which always pairs with receiving (*hod*)” (Cooper 1997:84-85).

Adherents to structuralism as well as modern Kabbalah have also found it necessary to cite quantum physics, the Heisenberg Uncertainty Principle, and the subatomic theory of light in order to express paradoxical truths discovered by their respective fields. Matt specifically makes reference to the paradoxical behavior of light according to quantum mechanics to communicate the kabbalistic idea that—like an infinitely bright light that must be veiled in order for us to perceive it at all (since there is no way to look at it directly without going blind)—so God is revealed through forms that, paradoxically, conceal. “According to Heisenberg’s uncertainty principle, which lies at the heart of quantum theory, the position and velocity of subatomic particles cannot both be determined simultaneously...The more precisely you measure either position or velocity the more indeterminable the other one becomes...The very nature of the particle is uncertain; it behaves as both a particle and a wave...In a sense it is neither until it is observed. The observer participates in the construction of reality...We cannot behold the infinite, but its power is displayed through everything that exists. Creation is a form of revelation. The underlying oneness is not apparent, but it is real” (Matt 1996:44-45). In like manner, Lévi-Strauss refers to the quantum theory

of light as both wave and particle when he maintains how anthropologists need to communicate structuralist discoveries that similarly contradict ordinary sense experience. He writes, “In order to resolve the problem of objectivity, which is imposed upon it by the need of a common language where-with to communicate heterogeneous social experience, anthropology is beginning to seek the help of mathematics and symbolic logic...We must resort to symbols, like the physicist when he wishes to show what is common between say, the corpuscular theory and the wave theory of light; here, in the language of the ordinary man, the two notions are contradictory, but, since science regards them as equally ‘real,’ it is necessary to employ new symbols in order to proceed from one to the other” (1963:368).

Yet what are we to make when structuralism and Kabbalah repeatedly resort to branches of science that border on the language of mysticism to articulate truths that apparently defy Aristotelian logic—even if we admit, along with the authors, that the analogies to scientific models are only used metaphorically (Lévi-Strauss 1966:30, Matt 1996:12-13)? On the one hand, we might conclude, with Capra in his wildly popular *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism* (1975), that there is little difference between the essence of science and the heart of religion. On the other hand, with the critics of such works, we may surmise that these popularizations lead neophytes untutored in the finer points of science and/or mysticism to assert commonalities where in fact none exist.

To be sure, the distrust of surface appearances and search for a unified set of laws that underlies nature, revealed in hidden codes and mathematical patterns, is a *Weltanschauung* common to Kabbalah and structuralism alike. But while this view does suggest a type of monism, it does not necessarily make it science. Indeed, there are many who would claim that rather than exemplifying science, structuralism and Kabbalah, when presented in this scientific guise, instead represent mystifications of science. As one astute interpreter of structuralism has remarked: “We thus can appreciate the confusion of a reader who notes that ‘one can’t be certain whether, fantasy-like or fantastic, [Lévi-Strauss] is really real or for real, or whether it really matters if he’s wearing the cape of magic or the mantle of science’” (Schweder in Champagne 1987:72). Nevertheless, I believe it matters greatly, for the failure to differentiate science from mysticism is to confuse chemistry with alchemy, conflating atom with Adam.

It is also at this point that Kabbalah and structuralism, in important ways, part company. Most contemporary kabbalists who note affinities between Kabbalah and science do so while maintaining that the two are distinct types of inquiry; if anything they hold that, despite the parallels, Kabbalah is the superior form of knowledge, or at least recognize that Kabbalah and science are ultimately concerned with answering different types of questions: differentiating fact from value, they recognize that science, as a moral cul-de-sac, will never dictate the right way to live, although Kabbalah does. This is the usual position not only of scholars of Kabbalah who are nonscientists, but also of those kabbalists who have advanced degrees in these fields, people such as Aryeh Kaplan (in physics), Michael Laitman (in bio-cybernetics), and Yitzhak Ginsburgh (in mathematics).

Not so for structuralism. Lévi-Strauss maintains that structuralism is not *like* science, but *is* science, albeit a member of the human and social sciences as opposed to one of the natural or hard sciences. “He persuasively argues that the attainment of a general science of man is contingent on structural considerations, which must include unconscious as well as conscious social processes, and he time and again develops his thesis in dealing with some of the major aspects of culture—language, kinship, social organization, magic, religion, and art” (Jacobson and Grundfest Schoepf in Lévi-Strauss 1963:x). Still, one needs to ask in what sense is structuralism science?

The Confrontation with Empiricism: Maybury-Lewis and Lévi-Strauss

Rather than scanning Lévi-Strauss’ *oeuvre* for his many and varied pronouncements on the subject of what sort of science structuralism is, it would be infinitely more useful to address the question in reference to a specific set of grounded, empirical issues. I shall therefore concentrate on answering it in the context of the debate he had with David Maybury-Lewis. I do this for two reasons. First, at the heart of this exchange is the very question of what counts as “science”—i.e. what constitutes method, hypothesis, evidence, proof, and so on—in anthropological research. Second, Maybury-Lewis occupies the nearly unique position of being able to seriously challenge Lévi-Strauss on empirical grounds, since he is an expert on the ethnography of the Gê speaking peoples of central Brazil upon whom Lévi-Strauss routinely bases his writings.

The debate centers on the analysis of kinship, specifically the nature of dual organizations, and mythology. The first volley was fired by Lévi-Strauss when he wrote his 1956 article, “Les organisations dualistes existent-elle?” Distinguishing between “diametric dualism” and “concentric dualism,” he argues that dual organization is present among diverse societies of Indonesia, Melanesia, North, and South America. In some cases, for example among the Winnebago, both diametric and concentric forms have been reported by native consultants for the same society, depending on which moiety they belonged to, leading to an apparent discrepancy of the facts. However, Lévi-Strauss argues that the two explanations are not in fact contradictory. Instead, he maintains: “These forms, as described, do not necessarily relate to two different organizations. They may also correspond to two different ways of describing one organization too complex to be formalized by means of a single model, so that the members of each moiety would tend to conceptualize it one way rather than the other, depending upon their position in the social structure” (1963:134-135). Thus Lévi-Strauss holds that among the Bororo, as among the Winnebago, it is only by means of a third structure, a triadic form not consciously perceived by the natives themselves, that the apparent contradiction between diametric and concentric organizations can be harmonized within a single over-arching model. The larger issue at stake here is how we are to regard social theories that fly in the face of the empirical statements of the natives themselves; that is, what does it mean if the natives say they have a dual organization, while Lévi-Strauss says they in fact have a triadic structure? As his translators put it, Lévi-Strauss’s study of dual organization offers, “a convincing demonstration of the author’s oft-repeated point that, although informants’ accounts of institutions must be taken into consideration, they are rationalizations and reinterpretations, not to be confused with the actual social organization” (Jacobson and Grundfest Schoepf in Lévi-Strauss 1963:xiii).

Against this view is the position put forth by Maybury-Lewis in “The Analysis of Dual Organizations: A Methodological Critique” (1960). Here, Maybury-Lewis takes aim at Lévi-Strauss’s essay on dual organization in terms of data, method, and theory. Not only did he reanalyze Lévi-Strauss’ reading of the Winnebago material in a more straightforward manner, he furthermore argues that Lévi-Strauss’s treatment of the Gê speaking Bororo is deceptive ethnographically. Without getting into the minutiae of the critique, Maybury-Lewis maintains that Lévi-Strauss’s “argument affords an illustration of the dangers of basing any analysis directly on a model rather

than using the model as a conceptual aid to facilitate analysis of the data” (1960:34). The problem is not only that Lévi-Strauss privileges abstract theory over empirical data, but also that he supposedly regards his own models as more real than the phenomena they are meant to explain. For this reason, he also takes Lévi-Strauss to task for reducing human relations to algebraic expressions. “Social relations,” writes Maybury-Lewis, “cannot be formally represented by symbols in the same way as mathematical relations can. Accordingly, sociological models are not manipulable in the sense that mathematical equations are. Conclusions drawn from such models or from a comparison of such models without a simultaneous consideration of the data from which these models were constructed run a serious risk of error” (1960:35). In sum, writes Maybury-Lewis: “We are therefore obliged to reject Lévi-Strauss’s specific hypotheses along with the evidence on which they are based” (1960:41).

Such a scathing, frontal attack—particularly from a specialist on the kinship systems of central Brazil—could not go unremarked. In his elegant rebuttal “On Manipulated Sociological Models” (1960, 1976:71-81), Lévi-Strauss persuasively defends his position on everything from the interpretation of ethnographic particulars to the methods he employed in constructing his models. A recitation of the details of his counter-argument is beyond the scope of this essay, but it can be boiled down to two main points. First, Lévi-Strauss maintains that Maybury-Lewis, “mistakes a theoretical reconstruction for a description of actual facts” (1960:45). That is, Lévi-Strauss seems to be all but saying that Maybury-Lewis runs aground on the shores of vulgar—one is inclined to say, British—empiricism insofar as he supposedly fails to differentiate between different levels of explanation, and therefore conflates description with analysis. As to the second point, that one cannot translate social relations into mathematical formulae, Lévi-Strauss responds, “if a distinction is made between the level of observation and the symbols to be substituted for it, I fail to see why an algebraic treatment of, let us say symbols for marriage rules, could not teach us, when aptly manipulated, something about the way a given marriage system actually works, and bring out properties not immediately apparent to the empirical observer” (1960:53).

Finally, to clinch the argument that his approach is wholly in keeping with the scientific method, Lévi-Strauss adds: “Of course, the final word should rest with experiment” and furthermore, again genuflecting at the altar of the natural sciences while reminding the reader of the premi-

nence of explanatory models in that domain, he continues with an analogy to chemistry: “The ultimate proof of the molecular structure of matter is provided by the electronic microscope, which enables us to see actual molecules. This achievement does not alter the fact that henceforth the molecule will not become any more visible to the naked eye. Similarly, it is hopeless to expect a structural analysis to change our way of perceiving concrete social relations. It will only explain them better” (1960:53).

Moving from the controversy on dual organization to his critique of the structural analysis of symbolism, Maybury-Lewis faults Lévi-Strauss in similar ways. In two essays, “Science by Association” (1970a) and “Science or Bricolage” (1970b) that offer critical reviews of Lévi-Strauss’ approach to totemism and lowland South American mythology respectively, Maybury-Lewis indicates by the titles themselves that the scientific status of the structuralist method is again being impugned. While Maybury-Lewis, here as elsewhere, reveals enormous respect for Lévi-Strauss’s brilliant analyses insofar as they have opened up vast new horizons of interpretive possibilities in several branches of ethnology, these novel perspectives, however scintillating intellectually, do not by themselves confer scientific status on structuralism. Of Lévi-Strauss’s approach to mythology, he writes: “There are references to...‘verifications.’ There is even talk of ‘proof.’ Lévi-Strauss speaks of his rules of method, of his predictions, of their confirmation. He shows his working in a series of diagrams, equations, and graphs, using a notation that imparts an air of science, or, at the very least of rigorous logic to the enterprise, so that it has duly been accepted in some circles as a ‘science of myth.’ The kindest thing to be said about such pretensions is that they should be taken as more Lévi-Straussian metaphor. They need not, indeed they cannot, be taken seriously” (Maybury-Lewis 1970b:160).

Again, the problem lies with the empirical status of Lévi-Strauss’ analyses and his method’s apparently cavalier resistance to objective refutation when area specialists bring to bear ethnographic data that contradict his interpretations. But Lévi-Strauss not only anticipated that skeptics would accuse his analyses of taking flight from the facts of ethnography, he even seemingly remains unfazed by the charges, as he famously announces in *The Raw and the Cooked*: “I therefore say in advance to possible critics: what does this matter? For if the final aim of anthropology is to contribute to a better knowledge of objectified thought and its mechanisms, it is in the last resort immaterial whether in this book the thought processes of the South American Indians take shape through the medium of my

thought, or whether mine take place through the medium of theirs” (Lévi-Strauss 1969:13). For Maybury-Lewis, this pronouncement seems to be the last straw. He rightly notes that in maintaining this position, Lévi-Strauss “sidesteps the real difficulty, which is how to get at the thought of South American Indians at all” (Maybury-Lewis 1970b:155). By conflating subjective and objective dimensions, thereby overriding the fundamental distinction between the observer and the observed upon which all induction is based, Lévi-Strauss seems to suggest the possibility of establishing anthropology independent of ethnography. True, Maybury-Lewis does not come right out and say that structuralism is mysticism. But he does not have to. In likening Lévi-Strauss’ dizzying prose to “a conjurer’s patter [that] distracts attention from what is really happening” and his alleged “science of myth” as actually being more akin to fortunetelling, or, as he himself puts it in his inimitable style, “intellectual haruspication,” it amounts to the same thing in the end (1970b:154-155). “After all of Lévi-Strauss’s dialectical ingenuity,” concludes Maybury-Lewis, “we still do not know who is supposed to be saying what and in what language to whom” (1970b:163).

One may be tempted to see in the debate between Maybury-Lewis and Lévi-Strauss the confusion that comes about in the confrontation between a stickler for ethnographic facts on the one side, and an encyclopedic theoretician on the other. Yet such a characterization does a disservice to both men. At bottom, the controversy between the two anthropologists actually replicates in miniature the differences in scientific method as conceived by the tradition of British empiricism, on the one hand, and that of Continental rationalism, on the other. That is, as Locke maintained, is knowledge to be arrived at only through the senses and a posteriori of experience or in some instances can it also be apprehended, in Cartesian or Kantian fashion, via reason and intuition alone? Despite differences, the important point is that both traditions are regarded as avenues to scientific understanding. No less an expert than the eminent biologist Sir Peter Medawar, Nobel Laureate in Physiology and Medicine, has shown, in his writings on the practice and philosophy of science, that intuition is as crucial as induction to scientific thought (1969).

Popper, of course, attempts to demarcate science from pseudo-science in his rejection of classical empiricism and inductive methods as the criteria of science by substituting instead his principle of falsifiability—the idea that true sciences are characterized by the logical possibility that a proposition can be shown false by experiment or observation. Falsifiability is superior to

verifiability because, “it is far from obvious, from a logical point of view, that we are justified in inferring universal statements from singular ones, no matter how numerous; for any conclusion drawn in this way may always turn out to be false: no matter how many instances of white swans we may have observed, this does not justify the conclusion that *all* swans are white” (Popper 1968:27). According to Popper, this is why neither Freudian psychoanalysis nor Marx’s theory of history are sciences, whatever the claims of the founders and followers, since neither are capable of generating refutable hypotheses. In other words, nothing is outside their respective universes of explanation, or rather, because they can explain everything, in the end they are really capable of explaining nothing in particular.

Structuralism may be in a similar bind, as Lévi-Strauss acknowledges, “[t]he most fashionable objection to structural anthropology is that its hypotheses cannot be ‘falsified,’” but this is not because, as Lévi-Strauss believes “this criterion can only be applied to fully established sciences” (1976:viii), for doubts have been raised even in its applicability to these disciplines. Thomas Kuhn’s concept of the revolutionary structure of science (1970), Paul Feyerabend’s notion of epistemological anarchy (1978), and Imre Lakatos’ modifications of critical rationalism (1976) are only a few of the most weighty objections to Popper’s narrow definition of science as falsification that come to mind. So the fact that structuralism cannot produce falsifiable propositions ultimately may not matter after all. What does matter is that structuralism pushes out the limits of the possible and in constructing a theory amenable to modification dares us to willy-nilly enlarge the realm of the real. In the end, even Maybury-Lewis is forced to admit: “It is undeniable that some of Lévi-Strauss’s insights have done precisely what we expect of structuralism, helped us to see things in a new way. In this respect, they have been revolutionary” (1970a:139).

Conclusion

I can think of no better way to conclude this essay than to relate an anecdote of the late Sheldon Klein, Professor Emeritus of Computer Science and Linguistics at the University of Wisconsin, Madison, who in 1976-1977 was invited to become a Visiting Director of Studies at l’Ecole des Hautes Etudes en Sciences Sociales in Paris, where he worked closely with Claude Lévi-Strauss. He says, “Ultimately, I think Lévi-Strauss’ approach has antecedents in an older mystical tradition—I once had occasion to

describe the work of Lévi-Strauss to a Hasidic Rabbi in Paris (who had known nothing of Lévi-Strauss before). His response was, ‘*Er macht a Kabbalah fur die Indiens,*’—‘He makes a Kabbalah for the Indians’” (Klein 1995). Essentially, I have made the same point in this paper.

I have suggested here that structural anthropology and Kabbalah, although on cursory appraisal having nothing in common—insofar as they stem from entirely different intellectual domains, the one being a modern social science and the other an ancient form of Jewish mysticism—on deeper examination actually share a number of epistemological and ontological postulates. These include, but are not limited to, the idea that surface diversity conceals an underlying unity, specifically truth is discoverable within a layered model of reality, and that space, time, and matter are characterized by entropy and fragmentation as revealed by similarities among modern physicists’ cosmology of the big bang, Rabbi Isaac Luria’s theory of creation, and Lévi-Strauss’s structural analysis of myth.

The universal dispersion that characterizes the present can be overcome, however, through human action, and as such both Kabbalah and structuralism represent redemptive philosophies. In Kabbalah, this is manifested through the concept and practice of *tikkun olam*—the theory that although the cosmos fractured an instant after it was created, it nonetheless can be repaired through ethical action and adherence to divine commandments, a praxis that allows humans to be co-creators of a new world. The analogue to *tikkun olam* in structuralism is *bricolage*, for in imaginatively cobbling together the debris and fragments of previous orders to make new ones, the *bricoleur* likewise uses the fractured ends of one creation as the means to bring about another, just as *tikkun olam* enjoins the kabbalist to work with the “broken vessels” of this creation to restore a more perfect order. The arts of *tikkun* and *bricolage* alike can bring about harmonic reconfigurations because, although reality is fragmentary, there is a logical, albeit hidden, correspondence among its broken parts, and structuralism and Kabbalah each in its own way reveal the calibrations necessary to resuscitate its latent symmetry. These correspondences are themselves predicated on a model of reality that not only is at once linguistic and mathematical in nature—for, as hermeneutic systems, Kabbalah and structuralism are both based on algebra and phonology—but one where meaning comes about through the combination of binary elements.

The seemingly scientific and mathematical scaffolding upon which both structuralism and Kabbalah rest have led Lévi-Strauss and certain modern

kabbalists to use self-consciously models and theories drawn from the natural sciences to expound their ideas: concepts such as the molecular structure of DNA, the second law of thermodynamics, fractals, holography, the Heisenberg Uncertainty Principle, and the behavior of light according to quantum mechanics, to name a few. Nevertheless, when types of mysticism are unproblematically equated with branches of science, it is bound to raise questions, if not downright disbelief. No matter what the parallels, Kabbalah is not quantum physics any more than structuralism is a religion. Or is it? The incisive empirical critiques of Maybury-Lewis, and to a certain extent even the statements of Lévi-Strauss himself, certainly give the impression that, since structuralism seems virtually irrefutable in the face of disconfirming evidence, the truth of its analyses appear more a matter of faith than a matter of fact. Does this mean that structuralism represents a mystification of science? Not if we maintain, with the eminent philosopher and physical chemist Michael Polanyi, that “science consists in the apprehension of a rationality which commands our respect and arouses our contemplative admiration; that such discovery, while using the experience of our senses as clues, transcends this experience by embracing the vision of a reality beyond the impression of our senses, a vision which speaks for itself in guiding us to an even deeper understanding of reality...” (Polanyi 1962:5-6). Which leads us, of course, back to Lévi-Strauss “Structuralism,” according to the master, “uncovers a unity and a coherence within things which could not be revealed by a simple description of the facts somehow scattered and disorganized before the eyes of knowledge” (Lévi-Strauss 1976:ix). Is this Kabbalah? God only knows.

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ENDNOTES

¹The ethnographic foundation upon which this paper is based derives from my familiarity with Kabbalah as interpreted by Hasidism in general and among Habad Hasidim in particular. Since 1972, I have had the good fortune to study, converse, learn, eat, pray, and argue with many representatives of this tradition, both rabbis and laity, in California, Massachusetts, New York, New Jersey, Israel, and Minnesota.

²This holds true even were it not for his celebrated debate with Sartre comprising the last chapter of *La Pensée sauvage*—which, rather than being titled in English as *The Savage Mind* could equally have been rendered as *The Wild Pansy*, this in keeping with the dust jacket to the French edition which pictured an undomesticated purple pansy on the cover.

³In some kabbalistic systems, including Schneur Zalman's, a distinction is made between two kinds of *Kelipot*: *Kelipot Nogah*, which can be uplifted to a state of holiness, and *Shalosh Kelipot Hatmayot*, or the “three totally impure *Kelipot*,” none of which can be elevated until the final redemption.

⁴In Hebrew there are several letters that do appear to carry meaning on their own but the salient point is that they can never stand by themselves and must always be attached to other letters. Linguists therefore denote these as “bound morphemes.” For example, the letter *bet* (with the sound of *b*) means “in,” but it must be connected to a word in order to have this function, i.e. *b'mitzrayim*, “in Egypt,” or again, the letter *lamed*, with the sound of *l*, can be used either as a preposition meaning “to” when used with a noun (*l'goyim*, “to the nations”) or to denote the infinitive form of a verb (*l'daber*, “to say”).

REFERENCES

- Almeida, Mauro W. Barbosa de. 1990. “Symmetry and Entropy: Mathematical Metaphors in the Work of Lévi-Strauss.” *Current Anthropology* 31(4):367-385.
- Ashlag, Yehudah Lev. 2002. *In the Shadow of the Ladder: Introductions to Kabbalah*. Translated by Mark and Yedidah Cohen. Safed, Israel: Nehora Press.
- Austin, J. L. 1962. *How to Do Things with Words*. Oxford: Oxford University Press.
- Bakan, David, 1971. *Sigmund Freud and the Jewish Mystical Tradition*. Boston: Beacon Press.
- Barnard, Alan. 2000. *History and Theory in Anthropology*. Cambridge: Cambridge University Press.
- Berg, Michael. 2001. *The Way: Using the Wisdom of Kabbalah for Spiritual Transformation and Fulfillment*. Hoboken, New Jersey: John Wiley and Sons.
- Bronowski, Jacob. 1956. *Science and Human Values*. New York: Harper and Row.
- Cassirer, Ernst. 1946. *Language and Myth*. New York: Harper and Brothers.
- Capra, Fritjof. 1975. *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism*. Berkeley: Shambhala.
- Champagne, Ronald. 1987. *Claude Lévi-Strauss*. Boston: Twayne Publishers.
- Charbonnier, G. 1969. *Conversations with Claude Lévi-Strauss*. Translated by John and Doreen Weightman. London: Jonathan Cape
- Cooper, David. 1997. *God is a Verb: Kabbalah and the Practice of Mystical Judaism*. New York: Riverhead Books.

- Cuddihy, John Murray. 1974. *The Ordeal of Civility: Freud, Marx, Lévi-Strauss, and the Jewish Struggle with Modernity*. Boston: Beacon Press.
- Damrosch, David. 1995. "The Ethnic Ethnographer: Judaism in Tristes Tropiques." *Representations* 50:1-13.
- Dan, Joseph. 2005. *Kabbalah: A Very Short Introduction*. Oxford: Oxford University Press.
- Dan, Joseph and Ronald Kiener. 1986. *The Early Kabbalah*. New York: Paulist Press.
- Diamond, Stanley. 1987. *In Search of the Primitive: A Critique of Civilization*. New Brunswick: Transaction Publishers.
- Drob, Sanford. 2000. *Symbols of the Kabbalah: Philosophical and Psychological Perspectives*. Northvale, New Jersey: Jason Aronson.
- Elior, Rachel. 1993. *The Paradoxical Ascent to God: The Kabbalistic Theosophy of Habad Hasidism*. Translated by Jeffrey Green. Albany: State University of New York Press.
- Feldman, Jeffrey. 2004. "The Jewish Roots and Routes of Anthropology." *Anthropological Quarterly* 77(1):107-126.
- Feyerabend, Paul. 1978. *Against Method: Outline of an Anarchistic Theory of Knowledge*. London: Verso.
- Fine, Lawrence. 2003. *Physician of the Soul, Healer of the Cosmos: Isaac Luria and His Kabbalistic Fellowship*. Stanford: Stanford University Press.
- Geertz, Clifford. 1973. "Religion as a Cultural System." In *The Interpretation of Cultures*, pp. 87-125. New York: Basic Books.
- Ginsburgh, Yitzchak. 2003. *Living in Divine Space: Kabbalah and Meditation*. Jerusalem: Gal Einai.
- _____. [2005]. "The Hebrew Language: An Ideal Model for Information Processing and Management." Lecture delivered at University of California, Berkeley. November 20, 2005. Available at http://www.torahscience.org/communicat/hebrew_language.html.
- _____. 2006. *What You Need to Know About Kabbalah*. Jerusalem: Gal Einai.
- Glick, Leonard. 1982. "Types Distinct From Our Own: Franz Boas on Jewish Identity and Assimilation." *American Anthropologist* 84:545-565.
- Gramont, Sanche de. 1970. "There Are No Superior Societies." In E. Nelson Hayes and Tanya Hayes, eds. *Claude Lévi-Strauss: The Anthropologist as Hero*, pp. 3-21. Cambridge: MIT Press.
- Huss, Boaz. 2005. "All You Need is LAV: Madonna and Postmodern Kabbalah." *Jewish Quarterly Review* 95(4):611-624.
- Idel, Moshe. 1988. *Kabbalah: New Perspectives*. New Haven: Yale University Press.
- _____. 1989. *Language, Torah, and Hermeneutics in Abraham Abulafia*. Translated by Menahem Kallus. Albany: State University of New York Press.
- Jacobson, Roman and M. Halle. 1956. *Fundamentals of Language*. Janua Linguarum: Series Minor 1. The Hague: Mouton.
- Kaplan, Aryeh. 1990. *Inner Space: Introduction to Kabbalah, Meditation, and Prophecy*. Abraham Sutton, ed. Jerusalem: Moznaim Publishing.
- _____. 1997. *Sefer Yetzirah, The Book of Creation: In Theory and Practice*. Boston: Weiser Books.
- Klein, Sheldon. [1995] "Re: Klein and Levi-Strauss sources/ H. Urbano." Online Posting 8 December 1995. General Anthropology Bulletin Board. Oct. 26, 2005. ANTHRTO-L@UBVM.CC.BUFFALO.EDU. <http://unauthorised.org/anthropology/anthro-l/december-1995/0101.html>

- Kuhn, Thomas. 1970. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kurzweil, Edith. 1980. *The Age of Structuralism: Lévi-Strauss to Foucault*. New York: Columbia University Press.
- Kushner, Lawrence. 1977. *Honey From the Rock: Visions of Jewish Mystical Renewal*. New York: Harper and Row.
- Laitman, Michael. 2006. *Kabbalah, Science, and the Meaning of Life*. Toronto, Canada: Laitman Kabbalah Publishers.
- Lakatos, Imre. 1976. *Proofs and Refutations*. Cambridge: Cambridge University Press.
- Leach, Edmund. 1970. *Claude Lévi-Strauss*. New York: Viking Press.
- Levi, Jerome. 2007. "Symbols." In William Darity, ed. *International Encyclopedia of the Social Sciences*, vol. 8, pp. 249-253. New York: Macmillan Co.
- Lévi-Strauss, Claude. 1954. "The Mathematics of Man." *International Social Science Bulletin* 6:581-590.
- _____. 1956. "Les organisations dualistes existent-elle?" *Bijdragen tot de Taal-, Land- en Volkenkunde* 112(2):99-128.
- _____. 1960. "On Manipulated Sociological Models." *Bijdragen tot de Taal-, Land- en Volkenkunde* 116 (1):45-54.
- _____. 1963. *Structural Anthropology*. Translated by Claire Jacobson and Brooke Grundfest Schoepf. New York: Basic Books.
- _____. 1966. *The Savage Mind*. Chicago: University of Chicago Press.
- _____. 1969. *The Raw and the Cooked. Introduction to a Science of Mythology. Volume 1*. Translated by John and Doreen Weightman. New York: Harper and Row.
- _____. 1976. *Structural Anthropology, Volume II*. Translated by Monique Layton. New York: Basic Books.
- _____. 1977. *Tristes Tropiques*. Translated by John and Doreen Weightman, trans. New York: Pocket Book.
- _____. 1985. *The View From Afar*. New York: Basic Books.
- Lévi-Strauss, Claude and Didier Eribon. 1991. *Conversations with Claude Lévi-Strauss*. Translated by Paula Wissing. Chicago: University of Chicago Press.
- Lerner, Michael. 1986. "Tikkun: To Mend, Repair, and Transform the World." *Tikkun* 1(1):7-13.
- _____. 1994. *Jewish Renewal: A Path to Healing and Transformation*. New York: Grosset/Putnam.
- Matt, Daniel. 1995. "Ayin: The Concept of Nothingness in Jewish Mysticism." In Lawrence Fine, ed. *Essential Papers on Kabbalah*, pp. 67-108. New York: New York University Press.
- _____. 1996. *God and the Big Bang: Discovering Harmony Between Science and Spirituality*. Woodstock, Vermont: Jewish Lights Publishing.
- _____. 2004. *The Zohar, Volume One*. Pritzker Edition. Translation and Commentary by Daniel Matt. Stanford: Stanford University Press.
- Maybury-Lewis, David. 1960. "The Analysis of Dual Organizations: A Methodological Critique." *Bijdragen tot de Taal-, Land- en Volkenkunde* 116(1):17-44.
- _____. 1970a. "Science by Association." In E. Nelson Hayes and Tanya Hayes, eds. *Claude Lévi-Strauss: The Anthropologist as Hero*, pp. 133-140. Cambridge: MIT Press.
- _____. 1970b. "Science or Bricolage." In E. Nelson Hayes and Tanya Hayes, eds. *Claude Lévi-Strauss: The Anthropologist as Hero*, pp. 150-163. Cambridge: MIT Press.

- Medawar, Peter. 1969. *Induction and Intuition in Scientific Thought*. Philadelphia: American Philosophical Society.
- Mindel, Nissan. 1973a. *Rabbi Schneur Zalman: Philosophy of Chabad*. Vol. 2. Brooklyn: Kehot Publication Society.
- _____. 1973b. "Introduction. Part I." In Schneur Zalman's *Likutei Amarim-Tanya*, pp. 762-772. London: Kehot Publication Society.
- Polanyi, Michael. 1962. *Personal Knowledge: Towards a Post-critical Philosophy*. Chicago: University of Chicago Press.
- Popper, Karl. 1968. *The Logic of Scientific Discovery*. New York: Harper Torchbooks
- Sacks, Jonathan. 2005. *To Heal a Fractured World: The Ethics of Responsibility*. New York: Schocken Books.
- Saussure, Ferdinand de. 1966. *Course in General Linguistics*. Charles Bally, Albert Sheehy, and Albert Reidlinger, eds. Translated by Wade Baskin. New York: McGraw-Hill.
- Shalvey, Thomas. 1979. *Claude Lévi-Strauss: Social Psychotherapy and the Collective Unconscious*. Amherst: University of Massachusetts Press.
- Shapiro, Rami. 1997. *Minyan: Ten Principles for Living a Life of Integrity*. New York: Bell Tower.
- Schachter-Shalomi, Zalman with Joel Segel. 2005. *Jewish with Feeling: A Guide to Meaningful Jewish Practice*. New York: Riverhead Books.
- Schochet, Jacob Immanuel. 1973. "Mystical Concepts in Chasidism." In Schneur Zalman's *Likutei Amarim-Tanya*, pp. 802-886. London: Kehot Publication Society.
- Scholem, Gershom. 1946. *Major Trends in Jewish Mysticism*. New York: Schocken Books.
- _____. 1965. *On the Kabbalah and Its Symbolism*. Translated by Ralph Manheim. New York: Schocken Books.
- _____. 1972. "The Name of God and the Linguistic Theory of Kabbalah." *Diogenes* 79:59-80.
- _____. 1973. "The Name of God and the Linguistic Theory of Kabbalah (Part II)." *Diogenes* 80:164-194.
- _____. 1978. *Kabbalah*. New York: Meridian.
- Steinsaltz, Adin. 1980. *The Thirteen Petalled Rose: A Discourse on the Essence of Jewish Existence and Belief*. Translated by Yehuda Hanegbi. New York: Basic Books.
- Wolf, Laibl. 1999. *Practical Kabbalah: A Guide to Jewish Wisdom for Everyday Life*. New York: Three Rivers Press.
- Wolfson, Elliot. 2005. *Language, Eros, Being: Kabbalistic Hermeneutics and Poetic Imagination*. New York: Fordham University Press.
- Zalman, Schneur. 1973 [1796]. *Shaar Hayichud Vehaemunah*. In Schneur Zalman's *Likutei Amarim-Tanya*, pp. 287-341. London: Kehot Publication Society.
- _____. 2003. *Siddur Tehillat Hashem, Nusach Ha-Ari Zal*. Translated by Nissen Mangel. Brooklyn: Merkos L'Inyonei Chinuch.