The present paper proposes that quantum theory provides a source of models and metaphors that can serve as a more neutral and productive foundation for discussing the difficulties of accurate ethnographic representation than those provided by either the postmodernists or the political-economists. A wave-function model of ethnographic representation is more holistic, and therefore more realistic than the models proposed by either postmodernism or political-economy. Understanding social relations as a wave function demands that the ethnographic representation of those social relations include both the material actualities that shape those relations, and the cultural and symbolic ways that people interpret their present condition and how they idealize future social possibilities.

In the aftermath of the paradigm crisis of the 1960's, much contemporary anthropological debate has focused on the best model and metaphor for the construction and production of the ethnographic text. Robert Ulin states that in this debate, there are "two principal competitors: one informed by the meta-narrative of political-economy and its emphasis on the self-formation of the human species through systems of social labor and the other informed by the postmodernist emphasis on discourse and the representation of the 'other' through the writing of ethnography" (Ulin 1991:63). The disagreement between the political economists and the postmodernists focuses on, but is not limited to, the debated over the most representative and accurate models and metaphors for reflexive ethnography. Stemming from the theories of interpretive anthropology, postmodernists such as Marcus, Fisher and Clifford argue for a textual metaphor based on literary criticism that recognizes the ethnographer as author of a cultural reality and which calls for the inclusion of a "plurality of voices" (Ulin 1991:70) within the ethnographic text. Political economists see the postmodern textural metaphor as one that is blind to the wider historical political economic context in which the ethnography is produced. Instead, they call for the use of 'commodity' as the best reflexive, ethnographic metaphor. "Political-economists have come to recognize the commodity form as not only a model for exploitive social relations in capitalist society but also as a model of hegemonic cultural production and reproduction" (Ulin 1991:76).

According to the postmodernists Marcus and Fisher, interpretive anthropology is "the explicit discourse on the doing and writing of ethnography itself" (Marcus and Fisher 1986:16). Clifford Geertz, the most dominant figure within interpretive theory, might not fully agree with this definition or with the direction taken by the postmodernists in regard to the ethnographic text. However, Geertz did focus much of his attention on the construction of the ethnographic text. Ethnography, Geertz argues, is what anthropologists do, and writing ethnography is constructing "thick description" (1973:6). Geertz depended largely on the theories and methods of literary criticism both in his critique of ethnographic writing and in his views of culture and anthropological work. The anthropologist, according to Geertz, is not a scientist, but a cultural interpreter, who interprets culture as one would a text (Marcus and Fisher 1986:26). In Geertz's view, it is not only the anthropologist who interprets; the anthropologists construct their
interpretations based on the interpretations of their informants (1973:15). The result is that the anthropologists, their subjects, and the cultural 'text' they produce are fully immersed in subjectivity and relativism. Anthropologists are not merely recorders of cultural facts, they are the constructors of cultural realities. In this sense, Geertz argues, ethnographies are 'fictions' (1973:15).

In their book, "Writing Culture", Clifford and Marcus adopt Geertz's description of ethnographies as fiction. They claim that ethnographies are works of fiction in that they present "partial truths" (1986:7). "The simplest cultural accounts are intentional creations that interpreters constantly construct themselves through the others that they study" (1986:10). Thus, the ethnographer must be recognized as the author of a specific, constructed reality, rather than merely its observer.

Geertz argues that much of the ethnographer's ability to persuade her reader that she was 'there' in the field, and that she did indeed experience and penetrate another cultural reality is dependent on her successful use of literary devices (1988:6). Thus, the authority of the ethnographic text depends largely upon the anthropologist's ability to establish authority in a literary sense. For this reason, Geertz stresses the need for ethnographic readers and writers to employ the techniques of literary criticism in the ethnographic text (1988:6).

In their book, "Anthropology as Cultural Critique", Marcus and Fisher both continue and intensify Geertz's model and metaphor of textual analysis. They are "calling for a style of ethnography that de-centers the authority of the anthropologist by allowing a multiplicity of different perspectives to emerge in the ethnographic account itself" (Ulin 1991:70). They see the anthropological problem of representation as originating within the actual writing of the ethnographic text. As a result, they view the text as a metaphor for the ethnographic process, and literary criticism as a fundamental model or tool for dealing with the problem of representing the 'other'. Two primary solutions offered by postmodernists like Marcus and Fisher to the problem of writing reflexive ethnographies are: 1.) 'dialogic' writing, which calls for the inclusion of multiple voices within the text, and 2.) the construction of ethnographic 'collages' that mirror the seemingly fragmented nature of modern social reality.

Political economists Polier and Roseberry argue in their article, "Tristes Tropes: Postmodern Anthropologists Encounter the Other and Discover Themselves," argue that postmodern anthropologists, and in particular, Marcus, Fisher and Clifford, have misinterpreted the primary problem in the textual representation of the 'other.' They claim that the postmodern conception of the anthropologist as author and creator of cultural realities, and its use of literary criticism as a conceptual framework, makes it possible to analyze ethnography "just as one would a work of fiction" (1989:249). Instead, they argue that "a radical intellectual task... would involve an attempt to dissolve the surface appearance of disconnectedness and fragmentation and re-establish historical connections" (1989:259).

The criticism that many postmodern anthropologists (including Marcus, Fisher and Clifford) do not sufficiently recognize the roles of power and politics in both the field setting and in the production of the ethnographic text is a valid one. However, postmodernists do acknowledge that these elements shape the ethnographic process. Political-economists, like Polier and Roseberry, are not as willing to accept the validity of perspectives other than their own. Their article, "Tristes Tropes", makes this all too apparent. Their solution to the very real problem of textual representation is simply a regurgitation of their old idea - that focusing on the historical, political-economic context will provide ethnography will all the
relativity it needs. Their solution is to replace the postmodern textual metaphor with the metaphor of 'commodity'. "For the political-economist... wage labor and production exclusively for exchange have transformed labor itself into a commodity, and with the maturity of capitalism, this form has been generalized to all social relations" (Ulin 1991:76). But this alternative is no more of a solution to the problems facing anthropology than is the idea that culture is simply a 'text' and that ethnography is merely literature. Rather than a solution, the commodity metaphor is simply a shift to another issue within the problem of representation.

What becomes obvious is that the political-economists are not speaking the same language as the postmodernists. In fact, it seems that they are not able or even willing to take part in this dialogue. Marcus, Fisher and Clifford are attempting to point out that the ethnography is a text that is produced by the anthropologist; it is not, and indeed cannot be, a mirrored representation of cultural and social reality. Although they do not adequately or accurately represent the political-economic circumstances in which the text is produced, they recognize that these issues are part of the problem of representation. Conversely, Polier and Roseberry choose to be blind to the important literary aspect of the ethnographer's work.

Obviously, literary criticism is not the solution to all the problems that plague contemporary anthropology. However, the point made by Marcus, Fisher and Clifford (a point that was also made by Geertz, whom Polier and Roseberry cites as an ally) is valid. The ethnographer uses more politics and power to construct her text - she also uses literary devices. Just as the anthropologist must recognize the position of her ethnography within its larger political and economic context, so must she recognize the literary methods that she employs in order to make her text convincing.

The two reflexive solutions provided by postmodernists - the 'dialogic' writing and the construction of texts as 'collages' - focus on only one part of the problem of representation. The postmodern idea that reality is ultimately and absolutely relative and fragmented suggest that the possibilities of representation are limitless. This idea is reminiscent of what Clifford refers to as "ethnographic surrealism"; specifically, Marcel Mauss' idea that, "ethnography is like the ocean. All you need is a net, any kind of net; and then if you step into the sea and swing your net about, you're sure to catch some kind of fish" (Clifford 1988:134). Postmodernists, like Marcus, Fisher and Clifford, take pride in the similarities between the French ethnographic surrealst attitude of the 1920's and the beliefs of contemporary postmodern ethnographers. However, the problems of the French ethnographic surrealists are also problems within postmodernist theory. Comparing ethnography to the ocean and the members of a society to the fish in the sea results in an unrealistically relativistic view of both anthropology and of societies. If ethnography is like the ocean, then no viewpoint is superior to, or even differentiated from, other theoretical viewpoints. Even the postmodernists would disagree with this idea, since they see their viewpoint as being superior to that of the political-economists. Secondly, to compare the members of a society to the generic fish in the sea is to deny both the hierarchy of status and power between individuals within a society, and to deny their interrelationships with each other and with the larger historical, political and economic processes. In other words, postmodernists recognize the fact that a reflexive ethnography must acknowledge and represent the voices and opinions of individuals other than the ethnographer. The problem is that they do not seem concerned with which other voices they include in the text, or how they go about including them. When everything is relative and fragmentary, methodologies and models become arbitrary and useless.
Like the textual metaphor supported by the postmodernists, the commodity metaphor of the political-economists does not fully address the problems of ethnographic representation. Rather than focusing on dialogue between individuals, as the postmodernists do, the political-economists seem to leave individuals out of socio-cultural processes altogether. For political-economists, it is modes of production, rather than culture, that condition the human consciousness (Ulin 1991:74). Political-economists view the commodity as the best metaphor for ethnographic representation because they believe that both cultural products and social relations have taken on the form of the commodity (Ulin 1991:76). They believe that intersubjectivity and reflexivity within the ethnographic text are best represented through an understanding of how social labor is commodified. "Marx argued for a view of labor as praxis, or a synthesizing of subject and object, in that its formative activity upon the world was simultaneously a moment of human self-transformation. . . [he] believed that labor is thoroughly socialized and socializing, that is, intersubjective to the core" (Ulin 1991:75).

Like the textual metaphor of the postmodernists, the commodity metaphor leaves out vital elements of socio-cultural reality. While the postmodernists replace context with dialogue, the political-economists focus entirely on context, leaving out human voices altogether. In their effort to place human interaction in its wider historical, political and economic context, they fail to represent the human interaction they are trying to clarify.

Stemming from these debates, I will attempt to provide a language and methodology not only for critiquing ethnographic texts, but more importantly, for constructing them. The language and theories will, however, not be drawn from literary criticism, but rather from modern physics. Such a hybrid theoretical perspective is both possible and useful for three reasons. First, the paradigm crisis that began for the social sciences and the humanities in the 1960's and continues today is a relatively recent event when compared to that of physics. Physicists have been dealing with their paradigm crisis since the publication of Einstein's theory of relativity in 1905. However, physicists no longer view the rejection of the Newtonian paradigm as a crisis within their discipline; rather physicists have learned to accept relativity as an inherent part of the new physics - quantum mechanics. Despite the sixty years that separated the two paradigm crises, both share the same essential dilemma - relativism. Secondly, the post-paradigmatic or postmodern era has left much of academia without a common language or set of metaphors with which to discuss their common problems. Quantum mechanics may provide anthropology and the other social sciences with language and metaphors to facilitate {further debate, currently} complicated with much of the postmodern and anti-postmodern jargon. While this proposition may seem radical, it is by no means original. The language and metaphors of quantum physics are already being employed in psychology, economics and literary criticism. Thirdly, both quantum mechanics and anthropology share, as a fundamental goal, the discovery and understanding of the patterns and forms of reality. For anthropology, that reality is approached through the study of cultural, social, political and economic relationships. Quantum physics, on the other hand, turns primarily to the sub-atomic world. As different as these disciplines seem, anthropologists and quantum physicists share more than a topical interest, they also have similar methodologies. Like physicists, anthropologists are concerned with the contexts of time and space, and they are interested in the relationship between the microcosmic and macrocosmic levels of organization and interaction. Physicists share with anthropologists an understanding that the observer is never detached or objective - she always effects and is affected by the observed.
Perhaps the most fundamental assertion of quantum physics involves its description of the nature of matter (the term 'matter' will be used in this essay to refer to both matter and non-matter - the ambiguous 'stuff' that makes up the subatomic world). According to quantum theory, matter is inherently dualistic - that is, it can be described equally well either as solid particles or as waves. This concept is referred to as the Principle of Complementarity. Both theory and experiment show that not only does matter behave as light (wave), but that light behaves as matter (particles). Therefore, at the subatomic level, matter and non-matter are indistinguishable. The nature of matter is described as complementary not because waves and particles are different, but complementary ways of representing the same phenomena (Pagels 1982:75). The Principle of Complementarity, produced by Danish physicist Niels Bohr, was combined with the theory of another physicist, Werner Heisenberg, called the Uncertainty Principle. Heisenberg's Uncertainty Principle states that while all aspects of matter are necessary in order to grasp its true nature, only one quality - in this case, either wave or particle - can be known at any given time. Furthermore the known quality is dependent upon the method of measurement which is employed. Thus, the fundamental nature of matter is indeterminate. Two major assumptions about the nature of reality resulted from the Copenhagen Interpretation. First, it suggests that quantum reality is statistical, not certain (Pagels 1982:76); that is, its nature can only be understood in terms of probability. Secondly, it suggests that "it is meaningless to talk about the physical properties of quantum objects without precisely specifying the experimental arrangement by which you intend to measure them" (Pagels 1982:76). Thus, the Copenhagen Interpretation rejects two fundamental assumptions of Newtonian physics - determinism and objectivity. It rejected determinism by accepting instead the statistical nature of reality, and it rejected objectivity by accepting that material reality depends in part on how we choose to observe it (Pagels 1982:77).

The dualistic nature of matter was demonstrated by physicist John Wheeler in what is referred to as his "delayed choice experiment" (Zohar 1990:45 - See Appendix A). In this experiment, two slits are cut in an opaque screen. Two particle detectors are placed to the right of the screen, behind the slits. When a photon (a discrete 'packet' of light) is released from the left of the screen, it appears to travel through one of the slits and strikes one of the two particle detectors. Thus, the photon clearly behaves, in this experiment, as a particle. However, if the experiment is altered by placing a detector screen between the slits and the particle detectors, the results of the experiment are very different. In this experiment, when a series of individual photons are released, each photon appears to travel through both slits, resulting in a wave-like interference pattern on the detection screen. In this experiment, the photon clearly behaves as a wave. The nature of the photon, therefore, is largely dependent on the way in which it is measured or observed.

The confusing and paradoxical nature of reality as described by the Copenhagen Interpretation was perhaps best illustrated and explained by physicist Erwin Schrodinger's metaphor of the cat (see Appendix B). In Schrodinger's hypothetical experiment, a cat is sealed in an opaque box. This box contains a flask of lethal poison, a radioactive isotope and a Geiger counter. The radioactive isotope has a 50 percent chance of decaying. If the Geiger counter detects radioactive decay, it will set off a trigger that will release the poison, and the cat will die. Outside the box is a physicist, who wants to know whether the cat is dead or alive. However, because the Geiger counter (the measurement device) is inside the box, she cannot know the absolute status of her cat. Instead, she can know only of its two possible statuses - dead or alive. Thus, she can only refer to her cat in terms of probabilities. Because the status of the cat has not
yet been observed, the cat must be described as being both dead and alive, simultaneously. The cat's status is ambiguous because its fate is dependent on a reaction at the ambiguous, subatomic level. The radioactive isotope is subatomic, and its nature - decayed or not decayed - is (according to the Copenhagen Interpretation) dependent upon the measurement or observation.

The Principle of Complementarity, the Uncertainty Principle and Schrodinger's Cat - appear, at first glance, to have no relevance to the problems that anthropologists face when constructing an ethnographic text. With this in mind one can re-examine the three quantum theories in anthropological terms. The Principle of Complementarity tells us that matter is inherently dualistic - it has both particle and wave properties simultaneously. Such an understanding of the nature of reality can be useful in clarifying the claims made by both the postmodernists and the political-economists regarding the nature of human realities. Postmodernists like Marcus, Fisher and Clifford claim that modern reality is fragmented and disconnected. Ethnography, they believe, can best reflect that reality by using literary methods such as 'dialogue' and 'collage'. Conversely, political-economists like Polier and Roseberry claim that the disconnectedness and fragmentation that the postmodernists recognize is not true reality, but merely parts of larger, structured historical, political and economic processes. Both perspectives, are correct in a way; however, they are both incomplete explanations of reality. A more accurate description of reality, both at the microlevel of subatomic matter, and at the macro-level of human existence, can be constructed using the Principle of Complementarity. The descriptions of reality given by the postmodernists and the political-economists are actually descriptions of two different realities - the reality of individual human behavior and interaction, and that of the processes of which humans are a part. The two realities described by the postmodernists and the political-economists are very similar to the two properties of matter - particles and waves. However, according to the Principle of Complementarity, matter is not waves or particles, it is both, simultaneously. The same, is proposed to hold true for human reality. Postmodernists and political-economists cannot agree on the nature of human reality because their different methods of observation (like the physicist's use of different measuring devices) determines, in part, the nature of the reality they observe. As in the double-slit experiment, the method of observation determines whether the physicist (or anthropologist) will recognize photons (or humans) as random, individual particles, or as part of structured, wave-like processes. Reality then, becomes a matter of perspective.

Unlike the textual metaphor proposed by the postmodernists, the quantum metaphor does not suggest that reality has an unlimited or disconnected set of possibilities from which the ethnographic text may be constructed. However, it is also unlike the commodity metaphor in that it recognizes that human reality cannot be adequately described in terms of global processes. The Principle of Complementarity demands not only that the micro and macro levels be given equal ethnographic attention, but that the two levels must be recognized as interdependent and mutually constructive. In essence, neither level can be viewed as preliminary. For the postmodernists, this means that an interpretive text that focuses on the micro-level cannot be 'corrected' simply by placing a 'dialogue' between the ethnographer and her representational 'others' into a larger, processual context. The Principle of Complementarity reminds us that human behavior and interaction is, at every level, part of larger systems and processes; humans are not merely participants in those systems and processes, they are also their creators. A quantum ethnography must pay attention to the ways in which individual humans act both within and upon larger systems and processes. For political-economists, this means that ethnographies that do not include human behavior and interaction at the micro-level misrepresent
the systems and processes that are their focus. A purely processual analysis fails to acknowledge that the processes of which humans are a part are simultaneously being created and carried on by humans themselves. Humans continually reshape and reinterpret the processes that guide and shape their lives. These changes at the micro-level can in turn affect the larger processes themselves. A failure to understand the reciprocal relationship between micro and macro levels of human organization lessens the ethnographer's ability to provide an accurate representation of reality. Furthermore, the double-slit experiment reminds us that while particles often behave like waves, they also can behave like particles. Political-economists often fail to recognize diversity within, and deviancy from, structural and processual norms. Political-economic ethnographers might do well to ask: how do individuals at the micro-level work against the systems and processes of which they are a part; and how does that behavior effect (or not effect) the micro and macro level structures and processes themselves?

Heisenberg's Uncertainty Principle states that "we can measure the exact position of an electron when it manifests itself as a particle, or we can measure its momentum when it expresses itself as a wave, but we can never measure both, exactly, at the same time" (Zohar 1990:26). Like the Principle of Complementarity, the Uncertainty Principle sheds new light on the debate between postmodern and political-economic ethnographers. The postmodern understanding of human reality is characterized by fragmentation and disconnectedness. Political-economists deny that those qualities characterize the essence of human reality. Fragmentation and disconnectedness, they argue, are merely false perceptions of a fully structured and processual reality. A quantum ethnographic model shows that the perspectives of the postmodernists and the political-economists are both correct and yet incomplete. According to the Uncertainty Principle, "we can never know a particle's place and motion at the same time" (Talbot 1986:18). This degree of uncertainty, however, "is not merely the result of some clumsiness in our ability to measure it. It is a quality intrinsic to the subatomic world and . . . its effects can be perceived on our own level of existence" (Talbot 1986:18). The quantum ethnographic model rejects the postmodernists' claim that reality itself is fragmented and disconnected. According to quantum mechanics, there are very real and complex connections between everything. However, the existence of those connections does not make the claim by political-economists - that a processual model can accurately represent those connections - a true one. The statement by physicist Neils Bohr, that "it is wrong to think that the task of physics is to find out how nature is . . . physics concerns what we can say about nature" (Pagels 1982:67), has strong implications when applied to the practice of anthropology. The political-economists are correct in stating that human reality contains very real structures and processes. However, the fragmentation and disconnectedness is not, however, a quality of reality itself, but of our observation of reality. This distinction seems to suggest that the political-economists are correct, and that the postmodernists are simply incapable of seeing past their own methods of analysis. However, quantum theory tells us that this is not altogether true. According to quantum theory, ontology and epistemology are indistinguishable. In other words, the quantum model suggests that it is wrong to think that the task of anthropology is to find out how humans are; rather, anthropology concerns what we can say about humans. This understanding of anthropology seems to support the postmodern idea that ethnographers 'create' cultural realities, just as authors create the fictional worlds of their characters. This is not however, what a quantum model for anthropology proposes. Recognizing that ontology and epistemology are inherently interrelated does not mean that reality is no more real than the world of a fictional novel. What it does mean is that anthropologists are wrong to believe
that any one model (or any combination of models) can represent or explain all of human reality. This does not mean that anthropologists should no longer use models. Instead, it demands that anthropologists recognize that what they know (that is, what aspect of human reality they clarified) is defined and determined by how they know (that is, what method of analysis they have employed). For postmodernists, this means that an interpretive analysis at the micro-level results in a better understanding of that micro-level. A micro-level analysis cannot claim to replace a macro-level analysis. For political-economists, this means that a macro-level analysis of structures and processes must not be considered a way to supersede micro-level analysis. Neither method of analysis can be made holistic by secondarily including the other. In other words, a micro-level analysis cannot be made holistic simply by placing it into an historical, political-economic world context. Similarly, a macro-level analysis of world processes cannot claim to be holistic simply by including, within the ethnographic text, random examples of micro-level human interaction. Because neither micro-level nor macro-level events and processes are preliminary or distinct, a text that treats one level of analysis as superior to, or independent from the other is necessarily an inaccurate and misleading representation of reality. Furthermore, any attempt to merge the methodologies of interpretive and political-economic anthropologists (such as the experimental texts examined by Marcus and Fisher in their book Anthropology as Cultural Critique) will necessarily produce 'fuzzy' ethnographic results. Just as physicists cannot measure the exact position and momentum of a particle simultaneously, neither can an ethnographer fully and accurately represent the micro and macro level realities of humans within a single ethnographic text. This does not mean that ethnographic analyses should not attempt to deal with both micro and macro level events and processes. It simply means that anthropologists must admit, both to themselves and to their readers, that an ethnographic text can never present a mirror-image of reality.

A quantum ethnographic model demands that the ethnographer make both her epistemology and ontology clear within the ethnographic text. This means not only explaining her methods of analysis, but also explaining what useful methods were not employed. Ethnographers must recognize and define what kind of text they are producing. Every analysis begins with different goals and assumptions, and anthropologists should make both the advantages and drawbacks of those perspectives clear both to their readers and to themselves. Recognizing inadequacies within the ethnographic text may superficially undermine textual authority, but it also works to make the analytical foundation stronger by reinforcing what kind of accurate information the text does provide.

Schrodinger's cat metaphor shows that the acts of measurement and observation collapse a wave function, or probability wave. Physicist Nick Herbert suggests that a quantum wave function is better described as a wave of possibilities than one of probabilities (1985:96). The Copenhagen Interpretation asserts that quantum reality is statistical rather than certain; that is, what will occur can only be surmised by its probability of occurring. However, probabilities at the subatomic level cannot be calculated like the odds in a craps game. In other words, quantum realities cannot be predicted statistically. Quantum events can be represented statistically only after they have occurred. This point is very important for understanding the quantum model for ethnography. A quantum ethnographic model does not call for a statistical representation of human realities. Rather, a quantum ethnography, like quantum mechanics, should represent possibilities, not probabilities, within human realities.
Postmodernists argue that ethnographies can best reflect human realities if they include a plurality of voices. Political-economists criticize this multi-vocal textual model, arguing that simply including other voices within the text does not take into account the power relations and the systems of social labor form which those voices speak. Again, the debate between postmodernists and political-economists parallels the particle-wave dichotomy. Schrodinger's cat metaphor, however, offers another method of representing cultural 'others' within the ethnographic text. Rather than trying to establish textual intersubjectivity by including the 'voices' of individual 'others', or focusing solely on political-economic structures and processes, it is possible to represent intersubjectivity using the wave-function model. In quantum theory, a wave-function represents possible realities or actualities. Socio-cultural relations and realities can also be expressed in terms of possibilities. Any network of social relations involves multiple competing social realities - different possible interpretations and idealizations of social actualities. In other words, social relations (including political, economic and cultural factors) can be understood as wave-functions. Each group of individuals believes that their interpretation and idealization of reality is both correct and the best one. Neither postmodernism nor political-economics is adequately sensitive to the possibility wave, or wave-function qualities of social relations. By including certain voices within the text without clarifying the political, economic and cultural interests that guide those voices, postmodernists inadvertently collapse the social wave-function. That is, they present certain versions of reality as representative of an entire, diverse socio-cultural group. Conversely, by focusing solely on economic and political processes, political economists represent only material reality. Reducing "symbolically mediated social action to the instrumental process of labor" (Ulin 1991:64) denies the fact that people construct interpretations and idealizations of their actual and potential social realities. Michael Taussig argues that political-economists relegate "human subjects and the cultural meanings they produce to the margins of history in spite of their claim to cast light upon those normally left in history's shadow" (Ulin 1991:77). In a critique of the political-economic texts produced by Eric Wolf and Sidney Mintz - Europe and the People Without History and Sweetness and Power - Taussig "contends that concrete human subjects, the key producers of culture and history, are subordinated by Wolf and Mintz to the univocal narrative of capitalism. Taussig hence believes that we learn very little from either about micro populations and how their cultural products both resist commodification and yet are subject to its penetration" (Ulin 1991:77).

In essence, a wave-function model of social relations would represent entire alternate realities that are integrated within a network of social relations. Anthropology is an attempt to understand and represent human reality to others. The paradigm crisis, which Marcus and Fisher refer to as the "crisis of representation" (Marcus and Fisher 1986:7), has forced anthropologists, including both postmodernists and political-economists, to become aware of the power they hold as cultural representors. Nowhere is this power more obvious than in the writing and production of the ethnographic text. While both postmodernists and political-economists are aware that there are problems involved with ethnographic representation, neither seems capable of producing an ethnographic model that reflects human reality. Postmodernists begin with the assumption that reality is fragmented and disconnected. As a result, their models for reflexive ethnography reflect those assumptions; in other words, they produce fragmented and disconnected ethnographies. Political economists, on the other hand, cling to the reductionist models of the modern era. All of human reality, they argue, can be explained using models such as modes of production and the commodification of social labor.

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This essay has sought to demonstrate how the models used by postmodernists and political-economists do not reflect reality. They fail to do so because each perspective is simply that - a perspective. Independently, neither model is representative of the complexity of human reality. As Niels Bohr stated, "While formerly we conceived these models as photographs of the system itself, now they become alternate understandings, depending upon the experimental viewpoint" (Cline 1987:211). Furthermore, hybrid models (such as those cited by Marcus and Fisher in Anthropology as Cultural Critique) are inadequate and misleading if they begin with the assumption that one model - one perspective – is preliminary. Quantum theory provides an alternative model to those proposed by postmodernists and political-economists. While its foundation (physics) is a radical one for anthropology, its methods and applications allow presently used theoretical perspectives, such as postmodernism and political-economy, to be reshaped and reinterpreted using different, more accurate assumptions about reality.

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