

CHAPTER TEN

WORLD HYPOTHESES AND INTERDISCIPLINARY SCIENCES IN INTIMATE RELATION

The perspective of the sexual body seems to have been turning up in each of the disciplines I have discussed. Such ubiquity, however, may be a mixed blessing insofar as the perspective is intended to clearly exhibit interdisciplinary relationships and at the same time make for a more valuable, coherent study of sexuality in all its dimensions. To what extent is the perspective a potentially scientific point of view? As Pepper understood the problem of scientific hypotheses, none of the hypotheses of science can be considered to have unrestricted scope (Pepper, 1982). Yet the perspective of the sexual body threatens to balloon interminably. I have attempted to show that psychoanalysis is the key discipline for such a perspective, but the key may not act as a useful control precisely because it is grounded in an incompletely specified theory of sexuality. Indeed, Freud's grasp of the necessarily open definition of sexuality, given his new insights into its psychosocial pervasiveness, was probably a saving element in his own integrity as a scientific thinker, for as Willbern has argued, Freud tended in his most intimate fantasy life (as shown in his dreams) to move toward a sense of closure and certainty (Willbern, 1979). The fact that in his theory of sexuality Freud resisted this tendency, this deep need of his own personality, gave psychoanalysis its resilience as a potentially scientific discipline; within the psychoanalytic tradition, sexuality became an unending series of "objects of knowledge" (Dewey, 1929a), rather than a hopelessly dogmatic claim to have "discovered" what sexuality "is." Sexuality might also be illuminated by disciplines outside

of psychoanalysis. Freud's hope that biology would eventually contribute an understanding of the psychology of bisexuality is one instance (see Chapter Seven). It is one instance out of many in which the results of research in one discipline regarding sexuality will affect not merely one or more theories in other specializations, but will cause larger ripples in the shared social and scientific assumptions about the general nature of sexuality. What seems to occur in such cross-fertilization of the disciplines, wherever sexuality is the focus, is the development of a large, unlimited hypothesis which Pepper would not call a scientific hypothesis at all (even though it must have empirical foundations in order to be cognitively valuable). Instead, the scientific understanding of sexuality, when it includes the psychological dimensions of sex, tends to move toward becoming a world hypothesis (Pepper, 1942). The perspective of the sexual body, in other words, may turn out to be a way of focusing upon the sexual elements in any hypothesis of what the world is probably like, but it may also prove to be a generating force in theory for the construction of a relatively new and relatively adequate world hypothesis.

Rossi (1977, pp. 11-17), for example, has pointed out that developments in neuroendocrinology—a field hardly expected to have immediate impact on the overall perspective of the sexual body—alter the traditional biological metaphor of sexuality in which males are the “active” and females the “passive” elements. The notion that androgen is a male, and estrogen a female hormone, must be qualified in light of findings which show that at least some androgen is also produced by the female body. There is no neat division of hormones along a male-female divide. “Both hormones,” in fact, “are present in both sexes, although in different balances” (Rossi, 1977, p. 11). Although women's bodies contain lower levels of androgen than do men's, there is some evidence to suggest that it also “takes less androgen to produce an effect in the female than in the male” (p. 11). Rossi also shows how developments in the field of reproductive physiology have a potential impact on thinking about male and female biological roles. The motility of spermatazoa, which has attracted attention and admiration from biologists since the time of Leeuwenhoek (Rossi, 1977, p. 16), is now understood in a new light. The sperm's motility now appears to depend not solely on its own forward impulsion, as it makes its legendary way up the uterus toward the ovum, but on cooperative forward-carrying motion provided by the glandular activity of the human female. Rossi realized that this information changes not just the restricted scientific theory of procreation, but the way in which we think of sexuality itself. Rossi's observations have been paralleled by those of Myron Hofer, whose discipline is called “developmental psychobiology” (Hofer, 1981). The selection of a given sperm for fertilization by the female will be effected, Hofer argues, by the woman's hormonal dynamics and potentially by her emotional state (Hofer, 1981, p. 83). Procreation thus appears as an interactional biological process, rather than an active-passive interchange between male and female.

The interdisciplinary perspective of the sexual body would provide a continuous scanning process for scientific research inquiries toward the discovery of changes of this kind. It is difficult to think of any other perspective that would do the same, although there will continue to be pertinent observations such as Rossi's from different fields. Rossi's own field of sociology, and her specialty of demographics, would not readily recognize her observations regarding sexual thought as their products, while the special discipline of sexology might acknowledge the biological findings without attempting to think of their implications for the ways in which members of society regard the nature of procreation. Hofer's study of developmental psychobiology would bring his argument under a general developmental framework without emphasizing the sexual aspects. But the perspective of the sexual body might be considered an instrument for intelligent thinking about sex in the social context of continuous new empirical evidence and the human response to that evidence.

Is a New World Hypothesis Needed?

If we are to attempt a preliminary elaboration of such thinking toward an organized theory, rather than stay within the less formal dimensions of a perspective, we would soon encounter the question of whether a theory of sexuality could be fitted into some one (or more) of the relatively adequate world hypotheses (Pepper, 1942). The position I have taken in this study is that the perspective of the sexual body developed since the early work of Freud will not fit the traditional hypotheses, except with great strain. A new world hypothesis would have to be developed to accommodate this perspective. Possibly the final hypothesis tentatively developed by Pepper (Pepper, 1967), which he called Selectivism, could accommodate and make intelligible the various findings I have grouped under the perspective of the sexual body.

In attempting to come to terms with the problem of the sexual body as a new perspective which challenges existing concepts, I suggest a consideration of the term "the sexual self." Actually this is the title of a work by the sex therapist Avodah K. Offit (Offit, 1977), to whom I have referred favorably above (Chapter Two). If only Offit meant something serious by the term! But she reverts as early as her introductory chapter to a conventional perspective: sex must be understood "as a part of the total personality," and only when that is done, can "we move toward harmonious sexual relationship." The sexual revolution Offit reduces to its simplicities which amount to a claim for easy and instant liberation. With such a view of the problem, she easily dismisses the value of the revolution (Offit, 1977, p. 20). In her last chapter she expresses contempt to the point of hatred for the very idea that "the new sexuality" could seriously lead to a better world, and she reduces the problem to a false opposition between "only the simple hedonism of biological pair-

ing," versus the full tragic potential of the human species that is above all that; "we are . . . a higher order of animals forever on the verge of immortality" (p. 292). A few years later, Offit went on to add a harsher comment in a revised edition of her book (Offit, 1983). Making a dubious historical generalization, she approves of the sexual revolution, but claims that the sexuality of the 1960's was not a part of that broader movement (Offit, 1983, pp. 294-295). Throughout her summarizing comments, Offit is most hostile to any suggestion that the sexual body can be important in widespread improvement in the quality of life. Such a hope would be *utopian*, as Offit sees it, and that would conflict with her major commitment to the *tragic* quality of human life.

This ideological stance aligns Offit with such psychoanalytic messengers of the tragic as the later Freud (1930), Kohut (1977) and Schafer (1976). It also connects her to a long tradition of tragic humanism which denies that any social change toward significantly unrepressed sexual and social life is possible. But in this denial, she as well as the psychoanalysts outrun their base in evidence. Were "advanced" technological society to adopt on a very wide scale the practice of affectionate, somatosensory contact shown by Prescott (1979) to be valuable for the control of sadistic impulses in numerous preliterate cultures, there is reason to expect that the "tragic" cultural pre-script of the civilized world would be largely evaded. I maintain it is more mature and sensible to *reject* tragedy as the fixed, necessary fate of the human, as indeed D.H. Lawrence rejected it (Gordon, 1966, p. 87; Michel, 1970, pp. 47-48). There is an implication in the psychoanalytic fascination with the tragic, in fact, that it is advisable to put the child's sexual body through some tragedy, in the best authoritarian traditions of child-rearing. As Philip Lichtenberg put it, after Freud turned in his later years to endorsing the value of frustration, there arose the notion that "sometimes psychoanalytic theory urges us to provide tragedy for our children" (Lichtenberg, 1969, pp. 89-90). The cycle of generations would thus guarantee the definition of the human being as a tragic creature, ostensibly confirming that definition while actively producing the conditions for its repetition.

Far from meriting Offit's scorn, the claims and hopes for the social changes to be expected from the sexual revolution as a great cultural movement are no different than those of any other world view that accepts the human ability to make and re-make social reality. As the Marxist sociologist and theorist, the late Alvin Gouldner pointed out, to believe that the human condition can in fact be radically improved is to make a break with the entire tragic paradigm (Gouldner, 1976, chap. 3; 1980, p. 71). Had Offit risen to the challenge of the new sense of the sexual body since Freud, she would not have written of the conventional integration of sex within the total personality nor of the conventional subordination of personality within predefined "human" and "tragic" constraints. Instead, the basic meaning of her term, "the sexual life," would be that *the self is basically sexual*, in ways that we are still discovering, ways that are

far from trivial or simplistic, and which eventually will make us revise our ideas of what it is to be human. Most of the contents of her two books (Offit, 1977, 1982) provide evidence for precisely such a conclusion. Moreover, the great bulk of the details she provides refer to the body, thus warranting from another source my own title, "the sexual body," rather than "the sexual self." The temptation to idealize human thought to the point of supposing that we belong to some "higher order of animals, forever on the verge of immortality" seems a perpetual one for the humanist psychoanalyst, as I have shown in discussing Kohut and his concept of the self. Such claims of higher-ness always avoid a serious confrontation with the sexual body.

Obstructive Synthesis Versus the Emergence of Usable Theory

To make such confrontation unnecessary, certain shortcuts in theory have been proposed from time to time. These are well-meaning, but I question whether they are wise. Winnicott, for example went so far as to say "There is no such thing as an infant," by which he meant that infants are always found within a context of maternal care, and hence we must always speak of infant and mother (Winnicott, 1960, quoted by Chodorow, 1978, p. 57). This is a neat way of distracting attention from the possibility that the infant is not always behaving in the maternal context, unless one insists that the infant's behavior is always in such a context by virtue of the fact that the infant (usually) is being nurtured by a mother. But such an insistence has long obscured the possibility of a neonate having "peer relations" with other infants during the first year of life (see for evidence of such relations among neonates, Atkins, 1983). Winnicott might not have objected to such findings, but he did not want to confront the sexual body of the infant or child. He seriously believed that in child play, "Bodily excitement in erotogenic zones . . . threatens the child's existence as a person" (Winnicott, 1971, p. 52). It was Winnicott who was threatened; how else explain this astounding claim?

Winnicott's foreshortening of theory through his declaration that there is no such thing as a baby has parallels in other formulations from non-psychoanalytic disciplines. The philosopher Merleau-Ponty presented a series of formulations which tell us that existence is sexual and the sexual is existence, one of the terms always supposing the other. D.O. Hebb, a psychologist, proposed an analogous formulation: human life is 100% biological and it is also 100% cultural (Hebb, 1959). An advantage intended by formulae of this type is to put an end, once and for all, to wrangling over whether something is sexual ("natural," "instinctual") or culturally learned: it has to be both. But the advantage thus gained is dubious. As long as we still are at the threshold of discovering what the dimensions of sexuality are, any call to fundamentally ignore the distinction between sexual as natural and sexual as cultural only contributes to the further obscuring of the sexual body.

Such moves as Winnicott's, Merleau-Ponty's, or Hebb's toward a premature synthesis of culture and nature also make it impossible to pursue the investigation of human nature, and cut off the search for universal cross-cultural emotional patterns and symbolic meanings that may underlie the vast array of cultures. The old question, for example, of why humans perceive color differentiations such as between green and blue at a certain range of the spectrum, when objectively there seems to be no division there, is hardly approachable by assuming that cultural namings such as those for colors just happen to perch at certain light spectra. It is approachable, however, by studying infant responses. In an experiment designed to test whether infant visual attention follows the "arbitrary" division of blue and green or not, Bornstein, Kessen, and Weisskopf (1975) found that it did. There is a discontinuous structure in color perception, in other words, that is characteristically human, not linguistic, and not approachable through assumptions which automatically classify all perception as both natural and cultural. But is the sexual body involved in this perception? I would say yes: the long traditions in many cultures which link perception of color with emotional perception (Birren, 1978; Itten, 1973; see also Cutler and Pepper, 1923, p. 149) are good indications that connections will be found with the sexual body. Restak points out that "neurons found in the areas of the brain specialized for the more 'elementary' perceptions such as vision are now known to be affected by sound and touch stimuli as well" (Restak, 1983, p. 23). If touch is involved, then affectionate somatosensory contact (Prescott, 1979) will be connected in some way or ways with the qualitative aspects of visual functioning, especially in the perception of emotionally significant color. Moreover, emotions are closely linked with body chemistry (as I noted earlier in Chapter Six; see Izard, 1977, pp. 9-10; McGeer and McGeer, 1980); the body is sexual. The evidence I have reviewed above, in "Reinventing the Asexual Infant," of the sexual differences in neonatal mental processes (little as these are understood as yet) is sufficient warrant for expecting further information to emerge concerning color perception and the sexual body. A considerable psychological literature, in fact, suggests universal humanly-shared patterns of emotional response, not primarily dependent on cultural conditioning, but closely connected with body language such as facial expression (Clynes, 1977; Izard, 1977; Tomkins, 1962, 1963, 1981a, 1981b). Pepper (1969c) was aware of this approach, and argued that there are certain natural symbols, such as fire, which are not entirely determined by culture.

The advanced (so-called) civilized psyche is not necessarily too refined or individualized for the sharing of referents with emotional value to occur. Recently Dahl completed a careful experiment on the referents of emotionally-loaded words (Dahl, 1983). Dahl is a psychoanalytic investigator who has falsified in this experiment certain predictions offered in current, mainstream psychoanalytic theory (Brenner, 1974). Brenner holds that the individual

psyche is so removed from common, shared emotional meanings as to make any hope for a shared language regarding emotions unrealistic. On the contrary, Dahl concludes,

the intrinsic ability of people to communicate their emotions to others successfully must surely rest on this area of shared referents for the labels they attach to their emotional states. (Dahl, 1983, p. 60)

Dahl's subjects were English-speaking Americans with college educations. Their ages ranged from 18 to 75, and Dahl used a total of 58 such subjects as judges of what some 370 different "emotion words" (p. 59) meant to them.

There is a parallel development in another branch of psychoanalytic investigation. In an empirical study of psychoanalytic aesthetic theory, the analyst Legault (1981) similarly concluded that the hypothesis of individual idiosyncratic perception of aesthetic objects proposed by Holland (1978) is quite the opposite of what actually happens when a number of observers, including some with a great deal of psychoanalytic training and some with none, look at Picasso's statue, "Man With a Sheep." From the perspective of the present study, I would expect that the sexual body provides the cognitive ground for such findings of shared referents within emotional and aesthetic experience.

We would have to look to human biology for verification of such a claim. The nature *versus* nurture conundrum is not in itself unapproachable. Recently, Jacquelynne Parsons, a developmental psychologist, has maintained that under certain conditions it is reasonable to hold that some human behaviors "are shaped at least to some degree by biological processes" (Parsons, 1982, p. 137). If there are congruent findings from two or more of the following four sources, then a biological involvement should be regarded as warranted:

- (a) demonstrations of an association between hormonal and behavioral variations, (b) behavioral patterns among infants or very young children, (c) cross-cultural universal, and (d) cross-species consistency, especially among higher primates. (Parsons, 1982, p. 137)

These guidelines have been adopted and made somewhat more inclusive by Rossi in her presidential address to the American Sociological Association (Rossi, 1984). From the perspective of the sexual body, they would seem most valuable, with the exception of (d) primate and other animal studies. Human sexuality is just too different, as I have explained in the introduction to the present study, to be compared directly with animal sexuality.

With this warning in mind, however, it should be permissible and valuable to consider evidence from a very broad range of mammals (sometimes known to include humans) which shows that sexual dimorphism of specific body organs other than the genitals is very likely a fact. Bardin and Catterall (1981)

have reviewed the effects of testosterone in this light. Biological understanding is in the process of change in this area, showing that testosterone has more effects and functions than had previously been thought. Although not strictly a male hormone, the authors state that the amount of it secreted by female ovaries "in most species is too low to have biologic effect" (Bardin and Catterall, p. 1285). This statement appears to oversimplify the matter, but there is good evidence for regarding the human kidney and liver as significantly sexually dimorphic (pp. 1288-1292), and not only in the factor of size. In muscle development, the effects of "estrogenic metabolites of testosterone" are especially notable on one set of muscles in the pelvic area, "the levator ani but not on other muscles" (p. 1292). What these dimorphic differentiations mean for understanding the sexual body is a problem for interdisciplinary research, but the problem cannot be dismissed out of hand if we grant the perspective of the sexual body.

Parsons, whose four criteria for proposing that some human behavior is shaped by biological processes, "at least to some degree," goes beyond these gross dimorphic considerations to draw some psychological conclusions. Using her own set of standards, she finds that there is good evidence for concluding that biological processes are involved in several "sex-dimorphic behavior clusters," namely

aggression and/or activity level; a set of limited cognitive skills associated with spatial visualizations and perhaps mathematical reasoning and verbal skills as well; and parenting. (Parsons, 1982, pp. 137-138)

This statement is significant not only in itself but as an indication of a new attitude among women scientists. Parsons is one of a new generation of biosocial inquirers among women in the disciplines. They are quite careful in their choice of terms not to imply support for sexism; they in fact oppose such sexism firmly and often bring a feminist sensibility to bear on the problems of sexual dimorphism—but they also insist that there is something very important to the biological dimension. (See also Kaplan, 1980; Ledwitz-Rigby, 1980; Peterson, 1980; Waldron, 1982, and the pioneering work of Rossi, 1977, 1981, 1984.) These women scientists seem to be attaining prominence in their fields at the same time that a new movement in feminist theory has revived a positive interest in female sexual pleasure (Patton, 1984, p. 4; Vance, 1984; Vance and Snitow, 1984).

In the newer biosocial research writing, whether it is by the women researchers just mentioned or by men in the same field, a high standard of complexity is maintained. The biological factors are not exaggerated, and they are never discussed without consideration of a cultural context. The biases and conceptual traps of E.O. Wilson's sociobiology are noted and avoided (Gove and Carpenter, 1982). An indication of the change afoot can be seen in the statement by Money (1980, p. 31) that certain of his research findings with

regard to adrenogenital syndrome "serve to remind us all that we dare not attribute all shades of difference in gender-related behavior to postnatal social and cultural determinants." A few years earlier, Money did not include such a statement; instead he then emphasized the ways in which certain newborn infants could be "reassigned" successfully to live as the opposite sex and be raised accordingly, aided by hormone injection and surgical correction (Money, 1977). Although he has not changed his mind about that, he seems to have come to a realization that there are limits to the environmental reshaping of gender.

At least one study has offered sharply contradictory evidence concerning the theory that gender is shaped primarily by social determinants. This is a study of genetic males who had been born with deficient masculine organs, due to a prenatal (testosterone) hormonal deficiency. In two inbred villages where this syndrome occurred with some frequency, 18 genetically classified males were raised unambiguously as girls. But once adolescence set in, with its new supplies of testosterone, all of these males changed to male gender identity, and all but one to male gender role as well, either during puberty or after (Imperato-McGinley, Peterson, Goutier, and Sturla, 1979). It is interesting in the light of the perspective of the sexual body, that the "object of knowledge" this study brought into being soon led to a change in the sexual gender identity practices of the inhabitants of the two villages. The researchers shared their findings with the villagers, and now the villagers do *not* raise babies who are born with this particular genetic defect as females; they raise them as males and allow adolescence to do its work (Imperato-McGinley et al., 1979).

The whole ideological drive toward androgyny (Heilbrun, 1973) in fact has suffered setbacks in the practical sense. Bem, who had been one of the theorists and advocates of androgynous child-rearing, that is, the raising of children so that traditional gender roles were redistributed equally irrespective of sex, found that more serious difficulties than she had expected were encountered. It was as if each child was being instructed not merely to follow the gender behavior of one sex, but that each child was now being required to learn how to fulfill the gender behavior of two sexes. This proved to be too much (Bem, 1983).

Bem's revaluation of androgyny at the practical level of its operation in children's lives was preceded by an unusually perceptive critique from yet another discipline. The failure of the androgynous child-rearing program was predicted by the political scientist, Elshtain, in 1981. She maintained that when we ask children to not understand reality sexually, we ask them to ignore their own bodies: each child knows that its genitals are part of its identity, and no matter how suppressed the topic may be socially, the child also realizes there are two sexes. Elshtain argued that to carry out the androgynous child-rearing program the parent would have to vigorously distract the mind

of the child from these basic matters of the sexual body, and that this would be psychologically disastrous: it would in fact make the old masturbation taboo look benign (Elshtain, 1981). Fortunately, there seems to be a growing consensus among feminist theorists and others now that the sexual body is essential to the child's view of the world. The concept of androgyny may continue to afford an ideological base from which to criticize sexism in the family, but perhaps it will not be taken as a warrant for denying the sexual body.

At other levels of theory, Bem's proposal for androgynous child-rearing also came under severe criticism by other feminists. Her hypothesis that children raised without an awareness of sexual role differentiation would score on personality tests to indicate a "balanced" male-female ratio, was upset by findings which showed that the term "balanced" could be applied to children with very low self-esteem as well as to those with high self-esteem (A. Kaplan, 1979). Beyond the empirical complexities, however, were more basic issues. Berzins (1979) showed in a brief survey that androgyny meant different things to holders of the four world hypotheses originally deployed by Pepper (Pepper, 1942).

Although Berzins' plea for grounding the problem of androgyny in the theory of Pepper seems to have had no direct results, there are more signs of a willingness to revise rather than avoid the basic categories of "culture" and "nature." For example, Money has offered a comprehensive and coherent schema for reformulating the "nature" versus "nurture" problem so that it no longer indicates a dichotomy (Money, 1980, pp. 9-11). There now seem to be good theoretical tools developing in the medical and psychological fields for the study of nature and culture which do not fall into the old traps of severing the two, nor into the newer traps of conceptually molding them into one "whole" that is so tightly forged it cannot permit an investigation at all. Within the world hypothesis of Contextualism, there has always been a tendency to examine the potential conflicts between "instinctive impulse and social interest," even while realizing that these always occur in a context or situation or event in which neither instinct nor culture stand in isolation (Pepper, 1945, p. 67). The only problem is whether Contextualism—which is Pepper's name for the Pragmatist tradition—can adequately encounter the sexual body.

Formism and Survival

Pepper might not have regarded all the new evidence for, and interest in, the biological basis of sex and gender role differences as equally supportive of all four of his set of world hypotheses. During much of his career Pepper appeared to regard such evidence as Dahl's on the relative uniformity of response to emotion words by various subjects, or such evidence as Legault's on the relative similarity among different viewers' responses to a Picasso

statue, as new evidence primarily for only one of the four relatively adequate world hypotheses, namely Formism. That worldview is one of the oldest of the set, and takes for its root metaphor the notion of "similarity," the matching of particular occurrences with a "normal" model. Idiosyncratic instances of feeling or perception tend to get labelled in this view as abnormal, and would be suspected of having a deficiency in human survival capacities. In Formism, the ethical and the normal are close categorical companions. People's emotions correspond to certain basic forms, cross-culturally, and their cultures are either grounded in those same forms or they lose their capacity for survival as cultures: all else is distortion.

Distortions occur . . . in the norms of animals, men, and of human societies. These last [the norms], of course, are the basis for formistic ethics. Human and social norms are ethical standards of value. In concrete existence, especially among the more complex forms of existence, these norms seem to exhibit states of human and social equilibrium, and serious distortions are accompanied with discomfort and pain. Hence Plato's search for the perfect State, Aristotle's for the several types of social structure, exhibiting a golden mean, and the search of many modern men for the life cycle of a normal culture, or for the life cycles of the several normal types of culture, or for the normal surges of transition of culture, toward the perfect social structure. All such social studies presuppose formistic categories. (Pepper, 1942, pp. 179-180)

It would be possible to take evidence of the human eye's propensity to divide the color spectrum in a certain way, for the human emotional range to form itself along a certain limited set of basic emotions in any culture, or for different human beings to respond in a shared way to emotionally-toned words, or to a statue by Picasso, as new evidence that somewhere the forms of the normal do exist and that these forms are also the ones that lie behind the cohesion of societies.

What has been suggested since the early Freud, however, is that sexuality has norms that are unknown, or not well-known, within culture, but which also are strongly suspected *not* to fit the other social, political or ethical norms of most of civilized society. This would suggest not a reinforcement of Formism through psychoanalysis, as Pepper sometimes argued (1949, p. 144), but a gaping disparity. What is "normal" to culture is not the human sexual body. But can culture any longer be regarded as itself "normal"? Cultures world-wide now seem to be caught in a position of increasingly probable non-survivability due to both nuclear proliferation and the hastening massive destruction of the environment. The biologists Paul and Anne Ehrlich, in their book *Extinction*, make a considerable case for the possibility of destruction (Ehrlich and Ehrlich, 1981). Cultural norms simply cannot be considered to be automatically linked to biological survival, given the present world situation. The perspective of the sexual body tends to highlight the gap between the two, and contributes to an understanding of changes that must be made for survival to be possible. For example, the cultural norms in typically

impoverished societies, such as in Bangladesh or in Northeastern Brazil, call for maximum procreation leading to an extremely high birthrate, which places great strain on the ability of the societies to remain viable. Some of the changes contemplated in this study, such as the encouragement of infant-maternal bonding and of affectionate somatosensory contact, are also important for species survival, even if they have no crucial role in individual survival (see Pepper, 1969a). It may be feasible to raise a generation of humans who lack an ability to empathically relate to the possibility of bodily destruction in nuclear war, and whose imaginations are controlled by the game-playing ideology of "we" versus "they." Such people have developed to maturity. But is it really a survival strategy to do so? The affectional somatosensory variable pointed to by Prescott, which is an inherently sexual body interaction, may not be necessary for growing up and having a career or for filling any number of social role models, but it may be necessary to insure the survival of a *species which is moving toward a violent demise and which cannot feel what it is doing to itself.*

Pepper's Selectivism and Alternate Philosophical Proposals on the Human Body

Pepper continued to maintain that Formism was one of the few relatively adequate hypotheses, whatever weaknesses it might have. He did not attempt to remedy its defects in theory, partly for lack of interest in Formism, and partly because his own philosophical attitude drew him toward the development of an entirely new world hypothesis which would do justice to both the physiological data concerning the body and to the typical contexts in which the body must be understood. In "Selectivism," Pepper proposed the category of the "natural norm" for human purposive acts. He thus gave philosophical order to the psychological theory of E.C. Tolman, a friend and intellectual companion who had great influence upon Pepper in the 1920's, and probably until Tolman's death in 1959. Tolman's *Purposive Behavior in Animals and Men* (1932) is a classic in its field. Tolman showed that the human species and other animal species carry out acts in an intelligent purposive manner; for example, the cognitive mapping which animals perform without benefit of written communication is not different in principle from the mapping performed at a vastly increased level of sophistication by humans, and all animal species have developed their mapping abilities in order to protect and enhance survival. Pepper's *Concept and Quality* in fact contains a detailed exposition of the purposive behavior of a deer in the act of searching out, among a variety of edible available plants, some especially delectable lily pads (Pepper, 1967, pp. 424-438).

With the concept of the "natural norm," and a project for outlining a limited number of "selective systems" in which purposive behavior occurs,

the Purposive Act became a new root metaphor for a world hypothesis (Pepper, 1967). The human body was notably included both in the subcategories of this hypothesis, and in some of Pepper's exposition. Purpose would require a body to carry it out, a truism which meant for Pepper a commitment to delve into not just the ideas or motives but also the behavioral actions and conditions in any purposive act. He regarded much of European philosophy as obviously weak in this respect, although he suggested that the omission of the behavioral "ties" including the body could be remedied in some instances, as perhaps in the work of Sartre (Pepper, 1970). Pepper also continued to think about sexuality: a few years after publishing *Concept and Quality*, in which Selectivism was described at length, he gave as an example of a minimal social situation the act of sexual intercourse, with orgasms—and as a matching example of a private situation, the act of taking a shower (Pepper, 1969a). I point this out because in considering the merits and failings of Pepper's gigantic new project in relation to alternative proposals in philosophy, it is important to keep the body in view. Pepper, for example, was somewhat anticipated in his proposed world hypothesis by the process philosophy of Alfred North Whitehead (see Reck, 1968, pp. 77-78), but he does not have Whitehead's bias against the body, a feature of Whitehead I have discussed elsewhere (Efron, 1980, pp. 249-250). Similarly, the body seems to be more integral in Pepper's "selective systems" than it is in the Systems Philosophy of Laszlo (Laszlo, 1969), although Pepper generously credited Laszlo's book with carrying out an argument very close to his own (Pepper, 1972).

There has been a slow growth in the Western world of philosophical interest in the body, as Thomas Hanna (1970) has argued. The rise of the discipline of aesthetics in the 18th century, with its emphasis on the sensuous element in perception, contributed to this development, as David Richardson has pointed out (Richardson, in press). Nor is it feasible to maintain a clear distinction between the sensuous and the sensual in aesthetics, as Berleant (1964) has shown. In the twentieth century, Merleau-Ponty has given a profound sense of the sexual body in *The Phenomenology of Perception* (1962). It has been argued that in fact Merleau-Ponty's intentions were more directed toward the development of a specifically sexual philosophy than his commentators have realized; his central term "chair," or flesh, has an erotic connotation in French which Weiss has designated as essential to Merleau-Ponty's new theory of the libido (Weiss, 1981). Gabriel Marcel also developed a philosophical theory of the body (see Siewert, 1971; and Zaner, 1984). Julián Marías, who has reinterpreted the philosophy of Ortega in terms compatible with Catholicism, has also proposed that the body is inherently sexual, or rather, "sexuate," a distinction by which he means to refer to the inherent sexual dimorphism of human existence without emphasizing genital sexuality (Marías, 1971; see Donoso, 1982, pp. 64-68). Marías instead attaches great

importance to the self-defining function of the sexuate division of humankind: I know I am a man only because I know that there are women, and for the woman, self-definition is equally "sexuate."

Without attempting to evaluate all of this work, I will merely state why I think Pepper has begun a more valuable project from the perspective of the sexual body. For one thing, Marcel's philosophy of the body was not concerned with sexuality. In fact, in reply to the comment by Marías that he had ignored the importance of sexuality (Marías, 1984, p. 567), Marcel could only concur, although he suggested that in his non-philosophical works, his dramas, this defect had been avoided. Rather startling is Marcel's declaration that "sexuality strictly speaking has not played a decisive role in my life" (Marcel, 1984a, p. 572). Marías' own insistence on the "sexuate" as an inherent category of human existence, an "installation" of life, as he calls it, is more problematical. To be frank, I suspect that the committed Catholicism of Marías (as well as that of Marcel) would not permit the full consideration of a new world hypothesis, open to possibilities which might not accord with the faith. As I have urged, the perspective of the sexual body introduced by Freud implies a break with traditional values. I doubt that either of these philosophers could make that break, which is not to deny that many of their observations and arguments on the body are valuable. Marías also often verged on what would now be called sexism in his exposition of the "sexuate condition." That is, he felt it was the inherent role of the male to exercise *senorio*, or "overlordship," while the correlative role of the woman was her "surrender" to the protection of the male, and to support his *gravedad*, a word connoting the endurance of the "burden of life" (quoted in Donoso, 1982, pp. 66-67). Although Marías did not intend these terms to have a sociopolitical meaning, it is not surprising that a woman philosopher has taken exception to them (MacGuigan, 1973), nor is it entirely clear to me how Donoso means to defend Marías against her accusations (Donoso, 1982, pp. 128-131). Probably the main issue here for the perspective of the sexual body is the question of whether Marías' type of philosophical anthropology could accommodate the historical changes in sexuality of the past century. There is some indication in fact that Marías has wished to make such an accommodation, in his recent untranslated work, *La mujer en el siglo xx* (1980). Unfortunately, Marías rejects the work of Freud in that book, not on empirical grounds, but because he believes the emphasis on sex and on a material, measurable libido in psychoanalysis can only devalue sexuality itself (Marías, 1980, pp. 126-141).

Pepper's main advantages as a philosopher in the context of the sexual body were probably first in his scope: he is offering a world hypothesis, which includes a theory of perception (see also Pepper, 1971), but is not limited to such a theory as is Merleau-Ponty's. Secondly, his empirical commitment is a great deal more serious than that of either Marcel or Marías. Pepper's lifetime of working closely in touch with empirical evidence regarding physiology and

the motivation of purposes led him to a much finer discrimination of body qualities within his conceptual plan. The categories of Selectivism do not merely refer vaguely to the body as a ground for perception and experience; they incorporate such dynamic considerations as "*bodily action and tension pattern* arising from internal bodily changes, or environmental stimulation (the drive impulse)" (Pepper, 1967, pp. 28-30). All the categories are regarded as qualitatively felt. This amounts to saying that the world itself, on this hypothesis, is a world of qualitative feeling. Pepper's ability to relate biological, environmental and cultural categories and bring them to bear on a concept of individual purposive activity gives his original world hypothesis a potential for further development which would continue to incorporate the sexual body and all the feelings of sexuality.

Pepper shows in *Concept and Quality* how it is conceivable that the manifold of philosophical and psychological problems (indeed how all of the disciplines) may be organized under the rubric of the purposive act metaphor within an arrangement of selective systems. It would be interesting to determine if the perspective of *the sexual body could not only be incorporated* into his effort, *but* if it could have sufficient empirical warrant to be *considered as approximately coextensive with* Pepper's qualitatively grounded hypothesis. If the perspective of the sexual body is actually a version of a world hypothesis, then it would have relevance throughout the natural world, not only within human life. In this respect, the discovery by the biologist Joshua Lederberg in the 1950's that bacteria reproduce sexually is an interesting increment to the evidence warranting Pepper's hypothesis (Lederberg, Cavalli, and Lederberg, 1952). For his work, Lederberg shared a Nobel Prize in genetics in 1959. The "genetic recombination" of bacteria, by which they reproduce, is a kind of mating. As Lederberg phrased the matter, the genetic recombination of certain strains of the bacteria *Escherichia coli*, upon which he conducted his investigations, "corresponds exactly to the normal sexual fertilization in the higher organism" (quoted in *Current Biography*, 1959).

Another corroboration of a qualitative sexual world hypothesis comes from work in the study of "protolife" forms. Sidney W. Fox, of the Institute for Molecular and Cellular Evolution, has presented evidence of "protosexual" behavior in certain macromolecules (specifically thermal polyamino acids, usually referred to as protenoids) (Fox, 1978, 1980). In Dr. Fox's account of the behavior of these macromolecules,

endoparticles combine with each other, exhibiting a primitive kind of recombinant behavior. The phenomena . . . when watched through a microscope, suggest a primitive kind of dating dance. Couples join and stay joined. Others join, break apart and rejoin. Others that break apart join with new partners. Moreover, during a typical three-day lifetime of a population, those less than half-a-day old are too young to conjugate, whereas those more than two-and-a-half days old are typically too old to conjugate. (Fox, 1980)

It might be objected that Fox is reading sexuality into these observations, a possibility he seems aware of in his own language: the phenomena "suggest" a dating dance, and they seem to "conjugate," in the reproductive process; but these terms are not the only ones he might have chosen. On the other hand, there are "couples" here, and the analogies with sexual behavior that his description reveals may be adequate to warrant his hypothesis that in fact we do find protosexual behavior at the molecular level. In working in the area of "protolife" forms, Fox is engaged in the study of the origins of life. Findings in this area concerning sexuality are fraught with implications for any hypotheses of what the world is like; at a personal level, they also condition what we assume about life.

In human beings, the perspective of the sexual body implies that whatever is sexual is basic to the whole human organism, not something confined to certain parts. Recent research has highlighted the sexual dimorphism of the human brain, which takes place in the fetus (Goy and MacEwen, 1980; Hoyenga and Hoyenga, 1979). From a feminist ideological perspective, Bleier has denied that there is any evidence to warrant a claim of gender "organization" of the fetal brain; there are too many "confounding variables" (Bleier, 1984, pp. 86-93). Hoffer, however, deals with several of these variables and still concludes that "probably in humans," there is a good reason to attribute gender organization to fetal hormonal exposure in brain development (Hoffer, 1981, p. 168). Evidence for difference in degree of hemispheric lateralization between adult males and females is strong (Hoyenga and Hoyenga, 1979), and it also appears to be true that females have a more fully developed corpus callosum joining the two hemispheres of the brain (DeLacoste-Utamsing and Holloway, 1982). These findings are corroborations for a hypothesis of a sexual body root metaphor. A student who asked me why D.H. Lawrence (Lawrence, 1915/1981) referred to the "female brain" of one of his characters might have been advised to take this field of research into account.

A long tradition of mis-reasoning has labelled women as mentally "inferior" to man, on the basis of brain differences, as Sayers shows (1982, pp. 84-104). It is all the more to the credit and credibility of the neurobiologist, M. Christine DeLacoste, that she refused to jump to the conclusion that a 40% larger corpus callosum in women makes women "superior." She was urged to do so by radical women scientists at a meeting entitled *Critical Issues in Sexual Dimorphism Research*, but DeLacoste argued that we do not yet know how this larger corpus callosum area functions: it could enhance communication between the two brain hemispheres, as some feminists have said, or it could inhibit it. We do not know. But the finding opens a new avenue of thought: the difference in the corpus callosum is the first major male-female brain difference to be discovered that is not directly connected with sexual functioning

(Del Guercio, 1983). This is a good example, in fact, of a discovery where the term "sexual body" seems directly needed as a perspective which permits a comprehension of findings.

There is also the possibility of male-female functional differentiation in brain chemistry involving hormonal production and its effects. Although the meanings of such research into this problem are not clear to me, and are undoubtedly quite complex, the minimal claim by Broverman, Klaiber and Vogel (1980)—two clinical psychologists and an endocrinologist who have pursued this line of research against strong initial opposition from other professionals—is worth quoting. It is, simply: "The gonadal hormones are psychoactive" (1980, p. 74).

The bits of evidence I have been assembling in these comments upon bacterial reproduction, macromolecules, sexual dimorphic organization of the brain, and hormonal effects in the brain are intended to show that Pepper's root metaphor of the purposive act, grounded as it is in its categorial structure on the facts of a human body which has feeling, must have an essential stipulation that this body is sexual. Despite his considerable sexual body thinking, Pepper did not make this point explicit. Further, this kind of root metaphor may be extended to cover phenomena in the world, in addition to the human. Pepper's root metaphor of the purposive act thus gains credence, as he would have expected, from evidence not available when he formulated the world hypothesis of Selectivism.

As a world hypothesis, Selectivism would have to have smaller, more restricted theories within it, eventually covering all fields for which there is any evidence, such as a theory of ethics. A basically ethical consideration, for example, would be the whole area of cultural mandates concerning purposive activity. The inculcation of learned helplessness (Seligman, 1975), for example, is tantamount to destructive cultural interference with the human capacity to carry out purposive acts. But given the sexual nature of the body, interference with sexual functioning would be a way of crippling that capacity at its base. In this light, the advice of Odent, an obstetrician who follows and develops the theories of Leboyer, that the newborn infant's rooting instinct (in which the baby turns to the nipple) should be not merely an idle fact, but a kind of "infant right" that society should protect, acquires additional theoretical warrant (Odent, 1984a). Similarly, Wolff's evidence that jarring the cradle of a 4-day old infant boy can interfere with the pattern of erections (Wolff, 1966, p. 22) might cause us to ask seriously if such interference is harmful. To be sure, these erections, and the analogous bodily functions in the human female, are not purposive acts. Nonetheless, we are learning enough about the neonate to suspect strongly that any function is more than mere reflex. The "purposiveness" of the neonate erection is problematical but, I maintain, not nonsensical. The point of both these examples (rooting reflex and male neonate erection) is that Pepper's world hypothesis of Selectivism would give

special sanction to a policy of noninterference with the neonate, based on the expectation that the cumulative weight of interferences will damage the ability to function in the most basic human way, the carrying out of purposes.

Formism as a Shelter for Fears of the Sexual Body

My reasons for making such suggestions are two: first, their very strangeness serves to highlight the radical possibilities of the perspective of the sexual body; and second, they are an indication of how a world hypothesis can be related to body events. I would invite comparison here with the applications of Pepper's world-hypotheses theories being made at this time by the distinguished psychologist and psychoanalytic theorist, Robert R. Holt. In two articles, Holt argues that Freudian psychology can best be classified as Contextualist, in Pepper's scheme, a conclusion with which I sympathize. However, Holt's exposition becomes vague and excessively abstract, especially as he places Pepper (and ultimately Freud as well) within a version of "Systems Philosophy" in which all levels of reality fit into one another without a single hitch (Holt, 1984; in press). I will not attempt to summarize Holt's elegant argument here; all I want to note, in fact, is that he has little to say about sexuality or the body and that he combines this reticence with some ill-considered insults (Holt, 1984, p. 153) aimed at Reich and Herbert Marcuse (1955). These are the two psychoanalytic theorists who took the greatest interest in the radical possibilities of sexuality, Reich through his theory of the sexual revolution and Marcuse in his critique of the cultural value of the myth of Eros. There is something more than Holt's personal taste involved in his disparagement: my suggestion is that the vagueness and the self-confirming levels of abstraction in Holt's exposition are a result of his loss of contact with the perspective of the sexual body. That perspective, in other words, has something to imply concerning theory formation itself. Most of the psychoanalytic formulations which I have found to be defective, as well as most of the research "explosion" in the field of the study of the infant, have avoided any extended consideration of the sexual body. It is as if researchers and theorists have run away from it. The result has been a series of reinventions of Formism within psychoanalytic theory and within research on the infant. The focus on the cognitive capacities of the infant accords with traditional interest in the human mind as a "higher" organism, well above the sexual body and its suspiciously animal correlates. The psychoanalytic world hypothesis that has emerged after the break from the early Freudian emphasis on sexual repression and human need has also been shaped through its unnoticed connection with Formism.

What I refer to here is Formism in the sense of assuming the need to match human behavior to patterns or forms that have long been known within culture. Long before the sex-hating theories of certain psychoanalysts had

been developed, the baby had come to be tacitly regarded as basically suspect within the psychology of the Formistic world hypothesis, because the baby is *unformed* as yet in the patterns of culture that the adults have accepted. This helps to explain the extraordinary psychoanalytical attachment to the image of the infant as incapable of self-regulation and self-perception and at the same time full of hatred or other allegedly natural, destructive wishes. From within the world hypothesis of Formism, this notion of the infant had already been implicit. The infant's unreliable perceptual apparatus (so it was assumed to be) could only make it part of the valueless category of the "unstable." As Dewey argued, in Formism true "Being" or "Reality" was conceived to be perfect and immutable. For purposes of adequate scope, Formistic philosophy has got to acknowledge the fact of change and movement, and thus come in contact with that in existence which is unstable, but it cannot concede that this instability has its own existence: it is always teleological change *toward* the Real that is valued. The rest is considered to be chaos (Dewey, 1929b, p. 20).

The traditional concept in natural ends . . . was that every change is for the sake of something which does not change, occurring in its behalf. (Dewey, 1929a, pp. 98-99; cf. Halper, 1984)

Such a view forces the mind into regarding infancy and childhood as existing "for the sake of maturity" (Dewey, 1929a, p. 99).

A recent philosophical consideration of the prevalent cultural meanings attributed to childhood in contemporary civilized culture, argues that there has been little change from this traditional view (Matthews, 1982). Our unacknowledged philosophical assumptions lead us to only three models: a Preformation model in which children are nothing but miniature men and women; a Specification-and-Generalization model which encourages the notion that a child is a schematic human being; and a Recapitulation model which suggests that children are primitives who must outgrow themselves. The last of these models is the great fear of Formism, while the first two are its pre-Freudian assumptions which are no longer very credible. The second model, that of Specification and Generalization, loses sight of the possibility that the neonate body could have neural pathways which are not present in later development, as some research in the newborn rat has suggested (Wiener, 1980, p. 235), or that the child of six years old has far *more* sensory receptors in a fingertip than he or she will have later on, as an adult—which is a fact, according to Schachtel (1959, p. 138). The human neonate has been found to sustain steady rhythmical sucking with its mouth, but some young adults who tried to imitate this sucking pattern could not do so: "The most stable adult performance was five times as variable as any of the newborns and the adults became tired within 2 min." (Stratton, 1982a, p. 129; Wolff, 1968). The newborn bodies do not simply "develop" into more mature ones.

Once the psychoanalytic revolution in thought had begun to occur, traditional expectations regarding the child could no longer be maintained, unless the notion of maturity itself were to be redefined so that it came to mean living in full acceptance of the sexual body. Accordingly, as the threat grew, Formist thinking began to infiltrate into the discipline of psychoanalytic thought. *Babies must be regarded as basically unfit* in order to warrant the imposition of cultural norms. The worst possible motives—innate unlimited sadism—are imputed to the infantile mind. Even when the analyst ascribes a sense of self to the infant at birth (an ascription basically at odds with current theory), he or she must do so with the proviso that this would be a self that violently rejects its situation as a dependent being. (See Hamilton, 1982, pp. 33-77 for a review of the several psychoanalytic theories regarding the neonate's ability to function as a self.)

In contrast, there was the original Freudian perspective of the sexual body. The early Freud, whose arguments presented in the U.S. in 1909 for a lessening of repression, a letting up on the civilized demands for sexual stifling of the human, threatened to break with Formism (Freud, 1910a; see also Freud, 1908). Far from envisioning a theory that would fasten upon deepseated endopsychic qualities which could not be changed, Freud wrote in 1914, in the preface to the third edition of his *Three Essays on the Theory of Sexuality*, that psychoanalysis attaches more weight to how a person develops, a course of life full of "accidental" factors, than it does to any inherent "disposition."

For it is the accidental factors that play the principal part in analysis: they are almost entirely subject to its influence. (Freud, 1905b, p. xvi)

Five years later, Melanie Klein was one of the therapists who showed that she understood part of Freud's radical social implications. Speaking before the Hungarian Psycho-Analytical Society in 1919, and giving her first professional paper, she said:

We can spare the child unnecessary repression by freeing—and first and foremost in ourselves—the whole wide sphere of sexuality from the dense veils of secrecy, falsehood and danger spun by a hypocritical civilization upon an affective and uninformed foundation. (Klein, 1975, p. 1)

Although Klein seems to have expected a great deal from sexual candor and sex education, her emphasis on how the therapist must be "first and foremost" among those who free the "whole wide sphere of sexuality" from civilized lies, is clearly in accord with Freud's original impetus toward social change. But Klein was soon to quit speaking in these terms; she was soon to help turn psychoanalysis around (see Chapter Three above). The later generations reversed Freud's emphasis, as the later Freud himself very nearly did.

Creation of the artifact of the self-less, helpless, destructive infant whose body exists in a state of confusion has in large part been both the method for this reversal, and its continuing justification.

The function of psychoanalytic concentration on the infant has also been that of distracting attention from the adult sexual body. The missing adult body in psychoanalytic theory cannot be explained as an omission that just happened to occur. The absence is too blatant, too much at odds with the original emphasis on sexuality in Freud to be explained away. The great threats to Formism in culture that are implied by what Reich called "The Sexual Revolution" need never be faced if only we can continue to cling to a theory of human nature that defines us as basically irresponsible due to the unavoidable facts of infancy. In such a definition, those who feared the great change could stave it off indefinitely.

Theoretical Intimacy

The sexual body posed a new problem within the life cycles of scientific hypotheses. There is something emotionally immediate, and personally intimate, in theories of what we are, sexually. This fact produces an intensification in the processes of theory that is not necessarily an advantage. By contrast, the best examples in Kuhn's *Structure of Scientific Revolutions* (Kuhn, 1970) are from the seemingly impersonal sciences of astronomy and chemistry. As Kuhn has shown, these sciences regularly have been loaded with emotional and symbolic meanings, so much so that the old notion of the purely objective institution of science has to be set aside. With the psychoanalytic theory of sexuality, however, the question was not so much whether the investigation *could* be loaded with meanings for the investigator; on the contrary, here was a topic so intrinsically intimate that it would produce instantaneous projections of a personal nature for the investigator. This condition of investigation is highly unusual, perhaps unique, in the sciences. The feeling must be something like this: "My evidence (clinical, self-analytical, empirical) is showing me what I am really like, and what others very probably are like, sexually and emotionally, and what it is showing is completely foreign to the expectations of the normal civilized person that I thought I was! Help!"

Kuhn's theory has nothing to say about such a crisis. In fact, it may have nothing to say about the cultural crises that underlie paradigmatic changes in general, as a recent criticism of Kuhn points out (Postiglione and Scimecca, 1983, p. 186). Kohut too, in his last work, expressed sharp disagreement with the use of Kuhn's theory to explain the nonreceptiveness many psychoanalysts display toward data and concepts which go against the grain of the paradigm they learned during their training analysis (Kohut, 1984, p. 163). Something more personal is at stake, a greater threat which prompts a search for help.

The "help" to which the investigator or theorist is likely to turn is the integration and normalization of psychoanalytic findings, within the manifold of other sciences on the one side, and within the traditions of humanism on the other. But would such moves toward the normal have the desired effect? At some level, perhaps an unconscious one, the investigator would be aware of a gaping discrepancy between his or her newly normalized theory of the infant and what is really felt about adult sexuality, based on what has been learned from the early Freud and from all the later supporting evidence that shows the reality of the sexual body. As a result, the theorist may go into another stage of refining and normalizing the theory, only to again be confronted with a feeling of dissatisfaction over the ever widening gap between the initial intimate perplexity and later theoretical security.

Is there anything in psychoanalytic therapy which would encourage such a process? Recently the psychoanalyst John Klauber has indicated that indeed there is. The analyst may be tempted to concentrate his or her attention on the process of interpretation as a defense against sexual impulses which could get out of control (Klauber, 1981). Not only is there the ever-present problem of the analyst's sexual body under the influence of transference; there is the analyst's own anxiety over the ability to control sexual impulses of his or her own. But while interpretations may be therapeutically correct, they may fail to defuse the intimate sexual level of the discourse, because therapeutic success itself carries an implication that the patient will become capable of acting in the manner of a sexually mature adult. Moreover, as the patient hears or mis-hears the analyst's interpretations, the message may become, unconsciously, one of sexual liberation. This complicates the transference, of course, which is Klauber's point; but it also complicates the position of the analyst. Several generations of analysts who have lived within this kind of intimate professional pressure might well evolve toward the avoidance of the sexual body delineated in the present study.

Sources of Change in the Disciplines

Because psychoanalysis is unable to abandon its roots in sexuality, it is safe to predict that there will continue to be creative dissatisfaction with its excessively desexualized theoretical revisions. The challenge of the sexual body will be revived periodically within it, even though the bulk of psychoanalytic theorists may avoid this challenge. Jacoby has argued, in fact, that the social processes of professionalization and, in the case of American psychoanalysis, the triumph of "medicalization," that is, the restriction of licenses for practicing psychoanalysis to holders of an M.D. degree, have produced a highly conservative social institution. Any hope that once might have been entertained for psychoanalysis as a source of radical change must be given up, according to Jacoby's theory of "the repression of psychoanalysis" (Jacoby,

1983). Drawing upon the Weberian theories of Burton J. Bledstein (Bledstein, 1976), Jacoby argues that psychoanalysis is not merely a special field of knowledge for which special training is necessary, but a method for the monopolization of certain skills and controlling their social applications (Jacoby, 1983, p. 144). Although there is much merit to Jacoby's argument, it seems to miss two possibilities for change which have not been closed off. One of these cannot be closed even under the conventions of professionalism: the need to change in order to conform to market pressures, such as the increased refusal of women to pay for therapy which tells them that they are suffering from penis envy. Second, there are also appropriations of the heritage of psychoanalysis outside of its own official circles, or its professional societies. In this respect, psychoanalysis resembles all of the disciplines of the sexual body: pressures for change frequently come from researchers who are acting somewhat outside of the accepted rituals of their field of specializations. (For example, it will be recalled that Kinsey was a zoologist.) With these two additional sources of change available to psychoanalytic thinking, and with the presence of courageous innovators within the field itself, the crisis of Formism is likely to recur periodically, or even continually. It will recur until such time as it is actually faced, along with the threat that this crisis poses to the entire manifold of Formistic assumptions.

It might also be noted that the triumph of medicalization—which Freud opposed (Freud, 1926b)—has not been complete. For example, Milton Klein, whose criticisms of the psychoanalytic model of infancy and whose critique (with David Tribich) of Freud's "blindness" toward the harm done by parents to children (Klein, 1981a; Klein and Tribich, 1979) I have cited, is not an M.D. As a Ph.D. he not only is a therapist but has worked as a training analyst within an institute for the training of psychoanalytic therapists. The *Review of Psychoanalytic Books*, founded in 1982, quickly established a reputation in the field, and became indispensable reading for anyone seriously interested in the range of psychoanalytic topics; yet it is edited by another analyst who has a Ph.D., and not an M.D., Joseph Reppen. Reppen's comprehensive review journal by no means selects its authors from the ranks of orthodox practitioners, although some conservative analysts, such as W.W. Meissner, M.D., S.J., who serves on its editorial advisory board and writes some of its reviews, presumably would not welcome the perspective of the sexual body. The review nonetheless succeeded in sounding a new note of theoretical work by M.D. analysts which are sympathetic to the perspective of the sexual body; one such is *Pleasure and Frustration: A Resynthesis of Clinical and Theoretical Psychoanalysis* by Leon Wallace, M.D., published by International Universities Press, the major publishing house for psychoanalytic writings in the U.S. (Wallace, 1984). Wallace argues for the primary role of pleasure in emotional development, and maintains that Freud was mistaken to give a large positive role to frustration as a developmental motivator. Wallace redefines and

endorses the pleasure principle. Such an argument goes against the grain of recent psychoanalytic thinking; it is too close to the perspective of the sexual body. But it will be heard by at least a minority of analysts. It is also important that the Reichian tradition of psychoanalysis has survived, even though it is often ignored; it continues to provide challenges to psychoanalytic thinking, from within the perspective of the sexual body. There are at least some practitioners of such disciplines as psychology, neurophysiology, sociology, aesthetics, etc., who will take heed. Some of the impetus toward understanding the sexual body in other disciplines, in fact, may by now be based on a sense of sexuality within these disciplines which owes a great deal to the classical psychoanalytic period.

It would be an error, however, to credit psychoanalytic journals, books, ideas, therapists, or associations, with the power to have kept the sexual revolution in process and spreading, since the latter part of the 19th century. A deeper convergence of human needs has energized the peculiar interdisciplinary relations described in the present study. In matters of the sexual body, we are confronted not only with specific research possibilities and results, but with an area of cultural choice. The choices frequently are made before there can be any firm evidential base. For example, Wilhelm Reich in his later years regarded the hospital personnel and even the parents in the hospital birth scenes of their own children, as functionally blind and deaf: they simply did not hear or see the agonized screaming and obvious bodily discomfort of the newborn (Reich, 1983, pp. 3-4). For Reich, as for Leboyer and many others, the choice was clear: birthing must be made a situation of love, not violence. However, as far as there was any question of hard scientific evidence that distress at time of birth, or that separation from the mother in the first few hours or days of neonatal existence, actually does any baby any long term harm—Reich was lacking. Such evidence is largely still unavailable, one way or the other, and for experts such as Jerome Kagan, there is nothing to be said until and if the evidence confirms what Reich and Leboyer and some parents have felt. In fact, some of Kagan's major research on change and constancy in infancy came out just prior to the Leboyer wave, and it did deal with the relationship between "excessive crying and irritability" in infancy and later personality development. When the babies who had cried a great deal became children of 10 years, no significant behavioral differences were found between them and other, control-group children (Kagan, 1971). Kagan thus was not in a position to contribute to the change which soon began to take place in obstetric practices. As Lamb and Hwang acknowledge (1982, p. 2), the inhumanity of the obstetrics wards was obvious and inexcusable, and they are glad to see it begin to change, but they do not think science has anything to do with the change—nor should it have. This problem presents a choice: the reader may ask if he or she *wants* to encourage and support a birth process that is gentle, non-violent, and as self-regulatory on the part of infant and mother

as possible, with ample body contact soon to follow, a process also involving affectional bodily presence of the father. I suspect that if the question is put this way, many could open themselves to feelings of empathy with the newborn as well as with the parents, and make an intuitive option for less pain and more love. This could be done on the grounds that it feels basically sane, basically human, to make that choice, rather than tolerate or even encourage the painful screaming of the infant that seems in most cases to be *caused* by unnecessary birth practices. We would not have to wait for evidence that better birth is beneficial in later life; being born is a part of life in itself.

The move toward gentle, loving birth, which is now a fairly strong social movement, did *not* gain its momentum from those in the fields of child development who took a neutral, purely scientific stand. Were the voices of scientists who require empirical evidence of damage in later development to have prevailed, the choice would have been made to keep having violent birth (cf. Arney, 1980, pp. 560-562). As I have noted, Leboyer did not go the route of trying to influence the obstetrics profession through publications in medical journals; instead he gave workshops and lectures and delivered thousands of babies before publishing his text—which reads like poetry—*Birth Without Violence*. Similarly, the decline within psychoanalytic therapy of the “penis envy” explanation of women’s neuroses did not come about through scientific revision of the theory (penis envy would seem to be still part of the theory at this point); it came because women, living through their own growth in an age of sexual revolution, more and more refused to accept such explanations. Sexual research outside of psychoanalysis helped to change the attitudes of clinical psychology, but so did the vast psychosocial changes which have led millions of women into the work force even when they might have the opportunity of staying at home as housewives (Heckerman, 1980). The absurdity of attributing this entire social change in work to penis envy must have become evident by 1970, just as that absurdity was not obvious in the society of 1900.

The influence of a popular demand on scientific disciplines is part and parcel of the topic of the sexual body. The pop-poet Rod McKuen has had some impact, I suspect, upon reducing child-abuse or at least in calling attention to its existence, through the National Committee for Preventional Child Abuse, an organization which he has helped to organize. It has been argued seriously regarding the problem of the sexual molestation of children, that the higher the level of professional training by the social worker or family counselor who sees the child, the less willingness will there be to recognize what is going on sexually (Sgroi, 1975). If more attention has been directed toward the problem in recent years, after long delay, it may be the result of a reform within the “Helping” professions by a minority of workers who had an awareness of larger nonprofessional support. Simplified presentations such as Masson’s recent *The Assault on Truth: Freud’s Suppression of the*

Seduction Theory (Masson, 1984a), serve at least to sound an alarm outside of the professional journals. It would also be a mistake to dismiss as "sensationalism" certain recent articles in newspapers which describe not the theory of child abuse, but its graphic practice; a news story telling of an 18-month old boy whose rectum was found to be bleeding because his father had forcibly penetrated him, is likely to get more than a routine reading. The cumulative effects of such work will include a prurient appeal to puritan values—but also will lead to popular demand for changes in therapeutic assumptions and in the mores of the family.

Research Formulations in the Light of Popular Pressures

Unfortunately, the tremendous wave of popular interest in sexual abuse of children will also encourage the adult denial of sexuality in children altogether. The PBS program "Crime of Silence" (1984) contains the briefest acknowledgment that children are naturally sexual (but no acknowledgment that children masturbate) in a half hour of condemnations of the "Crime" along with ways to prevent it. Probably if anything is clear in the present study of the sexual body, it is that human sexuality is too complex for simple nostrums to work. Thus the idea that adult-child sexual contact must always be bad, or that incest must always be harmful, which was the implied position of the program, can only confuse matters. None of the experts continually referred to in this broadcast represented the viewpoint of the group of researchers in *Children and Sex: New Findings, New Perspectives*, edited by Larry L. Constantine and Floyd M. Martinson (1981). For the contributors to this book, it is still necessary to ask such questions as what quality of sexual contact occurred between adult and child, and it is still possible to say that not all such contact is bad. In fact one contributor, Joan Nelson, offers a brief statement of self-evaluation which will no doubt anger any moralistic guardians of sexual innocence who happen to read her article:

This study was motivated in part by a strong personal need to know the "truth" about incest. When I was a child I experienced an ongoing incestuous relationship that seemed to me to be caring and beneficial in nature. There were love and self-actualization in what I perceived to be a safe environment. I remember it as perhaps the happiest period in my life. (Nelson, 1981, p. 163)

For Nelson, who is identified as a doctoral candidate at the Institute for the Advanced Study of Sexuality, tremendous harm came about not through the incestuous relationship but from her mother's horrified reaction upon learning of its existence. Other contributors to this volume (several of whom are women) are sensible to the damages and traumata of incest and adult-child sexual contact, but never allow themselves to be stampeded into simple

condemnation. In their study of "forbidden sexual behavior among kin," Symonds, Mendoza, and Harrell (1981) conclude with the necessary discriminations:

We would not condone incest if it is coercive or used by one member of the family in a power struggle, just as we would not condone other behavior used in that way. It appears, however, that where incestuous relations do not harm and have some positive aspects for those involved, the taboo should be played down rather than built up. (p. 162)

Another chapter in this volume studies childhood molestation in terms of its "differential impacts on psychosexual functioning" (Tsai, Feldman-Summers, and Edgar, 1981). The very concept that impacts could be differentiated is hardly suggested in the popular presentations, which tend to repeat unexplained shock statistics such as "one out of every three children up to 16 years of age report that they have been sexually abused." Yet from this time on, research on the sexual body of the infant, child, and adolescent will take place in a new context of an enlarged public awareness grounded in part upon a number of misconceptions. Without the misconceived aspects, however, there probably would not have been such awareness at all. Psychoanalysis, as the key discipline in the study of the sexual body, can only benefit in the long run from being obliged to give up its entrenched assumption that reports of childhood sexual abuse by clients in therapy are largely fantastic, or that even if such reports are true, they should be dealt with in the theoretical dynamics of sexual fantasy, just as if they had not occurred between human sexual bodies.

Any sharp dichotomy between professional and popular pressures toward change in the disciplines is thus misleading from the perspective of the sexual body. Those of us who work within specialized disciplines also make up some of the "popular" demands upon these disciplines; no one is specialized in all areas of life. As we absorb the perplexing evidence and controversies regarding the sexual body, we are also constantly re-forming our world view. We may revise it only to keep it the same, or we may make slow changes in how we view the world, other people, relationships, and our own bodies, as we think about the sexual body. I propose that having the nourishing flow of new problems which may be thought about and whose impact may be felt is as much a purpose for engaging in a professional discipline as is the specialized practice of the discipline itself. The new problems provide the opportunity for growth, intellectual and emotional. This perhaps is a truism, but in the disciplines of the sexual body it appears to be especially important.

To return to prospects for change within professional contexts, I would like to note two developments reported by the pioneers of "maternal-infant bonding," Marshall H. Klaus and John H. Kennell (see Chapter Six above). In their 1982 revised edition of *Parental-Infant Bonding*, they tell of their attempt to tone down their statements on the importance of bonding in order to allay

the possible fears they had been creating among parents who had not had the opportunity for an early bonding experience with their newborn infant. They had also been severely criticised by professionals for this same fault. However, there was an unfortunate result in their effort

to speak more moderately about our convictions concerning the long-term significance of this early bonding experience. Unfortunately, we find that this had led some skeptics to discontinue the practice of early contact or to make a slapdash, rushed charade of the parent-infant contact, often without attention to details necessary to the experiences provided for mothers in the studies. (Klaus and Kennell, 1982, p. 56)

Klaus and Kennell thus see themselves as caught in a “dilemma” of either having to make overstatements and popularize their approach, or allowing their work to fail to have an impact on bonding practices. From the perspective of the sexual body, it might appear that their dilemma was due to pressures brought to bear upon them—such as causing them guilt for allegedly making some parents feel guilty—by professional critics who would have preferred not to have to deal with the idea of bonding at all.

Klaus and Kennell evolved another method for meeting the related implied criticism which held that their advocacy of bonding could only cause guilt for mothers who delivered by Caesarian section. Instead of evading this problem, Klaus and Kennell have devised a postnatal procedure for these deliveries which achieves some of the specifications of their model of early contact between mother and infant. A local anesthetic is used, and fathers are permitted in the delivery room.

The father sits behind the mother with the anesthesiologist, receives the infant, holds the infant, and shows the infant to the mother.

Twenty minutes following the birth, the mother, infant, and father go to the small labor room where they have privacy and the infant can be placed next to the mother with a heat panel. Here the mother can have the normal 45 to 60 minutes together with her husband and the newborn infant. (Klaus and Kennell, 1982, p. 92)

An ingenious feature of this procedure is that it takes advantage of the period when the local anesthesia is still effective, thus allowing for contact to take place before post-surgical distress and depression can set in (*ibid.*). Kliot, an obstetrician who follows Leboyer’s teachings, also reports that he has developed a modified Leboyer procedure for Caesarian births. “No detrimental effects to the neonates have been observed” (Kliot and Silverstein, 1984, p. 173, endnote added by authors to offprint). Such innovations by Klaus and Kennell, and by Kliot and Silverstein, demonstrate a creative response to the social movement of nonviolent birth. Brazelton, who has taken a more cautious approach to the bonding controversy, might now wish to reconsider his view that a Caesarean section delivery automatically implies a “forced separation” of mother and infant (1981, pp. 80-104).

In a related practical application of a kind which might have been presumed to be unfeasible, Prescott, whose work on the value of affectionate somatosensory contact I have discussed, is reported to have developed a special rocker for premature infants in incubators. The device provides a facsimile of the movement the fetus would have experienced had it not been born prematurely (Utts, 1984).

The Challenge of the Sexual Body in Current Social Theory

In most theories, the very talk of making "choices" in life would be a signal that the discussion was no longer a scientific one. Dewey, however, long ago recognized that we are living in a time of history that will require choice in the realm of values, and that such choices should be intelligent ones—which means that scientific evidence will be important in making them. In *The Quest for Certainty* (1929b), Dewey's chapter on "The Construction of Good" stands as an opening statement on what must be done. For those who believe they already know what "good" is, the chapter is laughable. There is no need to "construct" what we already have. For those who would agree with me that the ongoing discovery of the sexual body is one of the developments in modern life that brings us into an unprecedented social situation, where we must both choose and make our choices in the midst of unsolved questions, Dewey's topic is crucial. To the chagrin of his critics, Dewey maintains that we will have to experiment empirically in the "field of ideas of good and bad" (1929b, p. 258). The phrase may arouse suspicions of "human research," but what Dewey had in mind was not the laboratory but the social context of modern life. The alternative to intelligent experimentation is not reliance on a set of conservative social values which have broken down; it is the indefinite extension of social chaos into the future, unless intelligent use is made of the changes already under way in science, psychology, and in society at large.

Evolutionary Theory and the Sexual Body

Although the perspective of the sexual body is inherently interdisciplinary, it may be the case that certain disciplines are so constituted as to be unable to make a positive contribution toward understanding the huge social experiment of the sexual revolution. An open question at this point is whether any of the disciplines are inherently based on assumptions that would cause them to give support to traditional values, irrespective of the modern situation. If there were such a discipline, it might be the study of evolution. Here we may consider the views of Donald Symons, in his highly praised work *The Evolution of Human Sexuality* (Symons, 1979). Symons is aware of the changing and unusual context of modern sexual life in the sexual revolution, and rightly regards it as part of a vast social experiment:

To some extent the artificiality of modern Western environments can be considered to constitute an unplanned experiment By the standards of preliterate peoples, modern human communities provide an enormous pool of potential sexual and marital partners, relatively few taboos, unprecedented freedom from parental influences, and thus great scope for personal attraction based upon physical appearance. (Symons, 1979, pp. 204-205)

In Symons' reading of human sexual evolution, physical appearance is very likely tied to reproductive fitness. Symons expects that the lifting of taboos will slowly bring about a return to the "adaptive human dispositions" which have functioned throughout human existence. The problem with his formulation is that it really amounts to no "experiment" at all: we remove the taboos only in order to return to the evolutionary roots of sexual relationships in connection with reproductive success. These roots are authoritarian in their social embodiment, rather than self-regulative. Symons maintains that biological study of human and other mammalian species shows that male and female sexuality, considered separately, differ very greatly, to such a degree that the two sexes should be regarded as two different species. Symons (1979) explains his intention of showing this in his Preface:

A central theme of this book is that, with respect to sexuality, there is a female human nature and a male human nature, and these natures are extraordinarily different, though the differences are to some extent masked by the compromises heterosexual relations entail and by moral injunctions. (p. v)

What sort of compromises and injunctions Symons has in mind are explained more fully in his chapter, "Copulation as Female Service" (pp. 252-285). In this model, heterosexual life is presented as a trade-off of male support and protection for female sexual "service"; such abstractions as "love" merely disguise that arrangement. This service "can be given freely, traded, or taken by force" (p. 284). Symons does not recommend the latter alternative, by any means. However, in order to prevent the use of force (which in the prehistoric past has shown its adaptive value), there must be both *structural barriers* which forcibly prevent a person from carrying out some sexual impulses, and *socialized inhibitions*, which are products of the socialization process (pp. 284-285). It is not my aim at this point to debate the merits of Symons' conclusions. I merely point out that they are a prescription for considerable social suppression and internalized inhibition of sexual expression. Symons argues for this prescription through a discussion of the problem of rape, where it seems to make common sense. (I say *seems* to make sense, because Reich has argued that adequate male sexual gratification will prevent the occurrence of rape impulses—which are quite another matter than rape fantasies—and that this method of dealing with rape will prove far superior to the attempt to control it through prohibitions. See Reich, 1968, p. 155.) But Symons explicitly generalizes this argument from rape to all of human sexual-

ity. Given Symons' approach to the evolution of human sexuality, he would have to reach such a conclusion. What he argues in effect is that the only result other than self-annihilation that can emerge from the sexual revolution is a re-creation in suitable modern terms of the same repressive controls over the sexual body which have been brought into question in the first place. Nor does Symons make any concessions to the notion of alternative world hypotheses or to interdisciplinary contributions which might clarify the sexual revolution in quite different ways than his own. On the contrary, he regards his evolutionary knowledge as impeccably scientific, and presents it as if it were value free. He even denies that his book has anything to do with social policy recommendations (Symons, 1979, p. vi). Yet it obviously entails very serious recommendations, by virtue of his endorsement of the barriers of inhibition.

Symons presents important evidence that any overall interdisciplinary account of the sexual body must consider. It would seem however, that unless his own Formistic assumptions are made clear, there is nothing at issue. Once the Formism is acknowledged, it might be possible to go on to other models of the "selective systems" for survival that have been evolved thus far. In this light, Pepper's discussion (Pepper, 1967) would come into play. From the perspective of the sexual body, a critique of Symons would emphasize three points. First, if we grant that adult sexual intercourse (if heterosexual) involves the energy interactions of man and woman, then the artificial problem of trying to have two virtually distinct species, male and female, get along with each other, is greatly alleviated. Men and women can and do feel the merging of their two organisms in sex. The significance of this merging is an empathic recognition of their profound compatibility. It is not a way to feel that each sex has built-in biological interests of its own, which would ignore the needs of the other if it could only get away with it. Despite Symons' boast that the study of evolution provides the most important evidence we have for understanding the human species, it cannot operate as a solo discipline: disciplines that tell us about the relational qualities of the interactions of the sexes are vital to understanding the species.

One such research effort is the study of human love based on an oral autobiographical account by a teenage girl of her dating and courtship relations. In it, we can follow her development from dating to sexual love and commitment (Schwartz and Merten, 1980). This account by "Cheryl" might fit into Symons' capacious evolutionary categories, but it would also have the contemporary relevance of a life within a society where the pressure to reproduce has undergone a shift toward intelligent self-regulation. During most of Symons' account of the evolution of sexuality, the potentials for relationships within such a shift were not available to the human race.

Another research inquiry which focusses upon a problem which sexual evolution has not previously been called on to face is the recent book by

Frank F. Furstenberg and Graham H. Spanier, *Recycling the Family: Remarriage After Divorce* (1984). The point of their eight-year study is that marriage is not exactly duplicated in remarriage; marriage becomes a very different process for the large numbers of people who go through the transition from marriage to divorce to remarriage. Not only are there special problems such as keeping some combination of distance and maintaining communication with a former spouse; there are also new expectations which are not usually present in a first marriage. There is a greater awareness that marriage may be an unstable, impermanent arrangement. This awareness would become generalized to the experience of marriage per se, eventually. A related problem is that of the adolescent who grows up under the supervision of a divorced parent. Teenagers in that circumstance are reported to have difficulty in accepting the behavior of the parent who dates, not because of Oedipal jealousies (although these cannot be ruled out), but because the behavior of the adult seems to interfere with the adolescent's own need to think of sexuality as a matter of love. In other words, adolescent fantasy is threatened by the idea that not all sexuality on the part of a parent is necessarily connected with love, or with falling in love (Francke, 1983, pp. 171-173). But adolescent fantasy has been conditioned by a cultural prescription which equates sexuality and love. Inasmuch as divorce is not likely to become greatly less frequent than it is now, a question for research would be, how can adolescents overcome this difficulty? How, in fact, have some of them perhaps already overcome it? Why are some unable to do so? Now Symons does discuss divorce, and he does not dismiss marriage as a purely social institution about which the science of evolution can tell us nothing. But the focus of his book is simply too broad to include an examination of the pattern of remarriage. The real issue here, however, is whether the questions investigated by Furstenberg and Spanier could ever have been *asked*, from the theoretical perspective Symons offers.

Second, there would have to be a recognition within Symons' theory, as there presently is not, of the human possibilities for self-regulation in sexuality. This would not settle the question of whether other controls are needed, but it would at least allow the question to be asked intelligently.

Third, it is revealing that Symons has only very bad things to say about ethnographic description; he faults all cross-cultural evidence on sexuality as hopelessly inept and biased (Symons, 1979, pp. 66-71). Thus Prescott's theory of the value of affectionate touching cannot gain entry into Symons' discussion. Were it permitted entry, that discussion might be improved. It would definitely have to be changed. The net result of Symons' book is an excellent example of an approach grounded in an established discipline which avoids most of the problems we are faced with, even as it recognizes that we are engaged in a great social experiment during the continuation of the sexual revolution.

Experiment and Risk: Psychoanalytic Pedagogy and Self-Regulation

Of the many studies I have commented upon, only one seems to have been a deliberate attempt at an experiment in the lives of those engaged in the study, namely the autobiographical account of the free family by Jean and Paul Ritter (1959, 1976). The Ritters could hardly have carried out this experiment in the context of a professional institution; at least they could not have justified the project with all its possible risks for the children involved. Inasmuch as certain risks were taken, both for their children and for the Ritters themselves, it is important that the results of their project become known so that later "free families" will have the benefit of this experiment. Yet their experiment is not generally known. Leboyer's delivery of thousands of infants according to his method required that he take chances, not only with his career, which might have been a real risk for him, but for the infants so delivered. Would they turn out happier and healthier, in some of the meanings of those unavoidable value-terms, than would have been the case under ordinary hospital practice? By going ahead with his project, Leboyer has managed to launch it into the world. Recent research on the Leboyer birth procedure is now able to focus upon a different question than the primary one, would it work? Kliot and Silverstein (1984) are content to show that there is excellent empirical justification for saying that at least the Leboyer procedure does not hurt the health or well-being of the baby or of the mother. In other words, they have now put the issue at the level of a choice: those who find value in the Leboyer procedure are able to make that choice, without having to wait for longitudinal studies which *might* answer some of the many questions about the long term effects. Kliot reports that since writing his article (with Silverstein), he has "delivered more than 1,500 infants, incorporating the Leboyer bath into the birth management technique" (Kliot and Silverstein, 1984, p. 173; endnote added by authors in offprint).

Psychoanalytic theory at one time was complemented by a series of social experiments which were inspired by its early commitment to the sexual body. Sol Cohen has recounted that there were several experimental schools with the definite aim of freeing the child of inhibitions, even of dissolving the superego, an aim which the staid Franz Alexander could designate as "the task of all future psychoanalytic therapy" (Alexander, quoted in Cohen, 1979, p. 194). These schools of the 1920' and 1930's, in Berlin and Vienna, were an experiment in sexual enlightenment. Yet by the end of the 1930's, the experiment had been found a failure by the notable analysts who had worked in the schools as teacher-therapists, such as Siegfried Bernfeld, Willi Hoffer, and Erik Erikson. Anna Freud, whose seminar on child analysis was closely attended by several of the teachers, was to concur. By 1935, Anna Freud was able to conclude that the sexual drives of the child cannot be allowed to go uncontrolled by a superior force:

for if they [the sexual drives] are constantly breaking through, there is a danger that his [the child's] development will be retarded or interrupted, that he will rest content with gratification instead of sublimating, with masturbation instead of learning; that he will confine his desire for knowledge to sexual matters instead of extending it to the whole wide world. This we want to prevent. (Anna Freud, 1935, p. 20, quoted by Cohen, 1979, p. 207)

How Anna Freud reached these dreary conclusions is not made clear in Cohen's article; what the article does show is a pervasive sense of "struggle" with, or rather against, the instinctual gratifications of the children. On the basis of Hoffer's description of the experimental school with which he was involved, some further clues may be gathered. The school was operating on a theoretical expectation that if the children were not subjected to sexual repression, they would develop in accordance with the phases of Freud's model, but that proved to be a problem. Latency especially "did not occur: only a limited reduction of instinctual expression could be observed" (Cohen, 1979, p. 205). The children not only remained highly "instinctual" in their behavior, but their emotional life seemed to be very disturbed, full of irritability, obsessions, depression and anxiety (*ibid.*). No doubt the analysts had indeed discovered that the pathway toward self-regulation was a troubled one, but it remains unclear how much of the "deterioration of character" (Hoffer, 1945, pp. 302-303, quoted by Cohen, 1979, p. 205) was due to their own unpreparedness for the vital life of the child, which offered little resemblance to civilized models of deportment, and how much to the analyst's expectations (cf. Hoffer, 1981). Another of these experimental schools, which lasted for nine months in the year 1920, not only expected the children to develop into free spirits who did not undergo sexual repression; the children were also being prepared for later Zionist emigration to Palestine and for Socialism (Cohen, pp. 196-197). Even with all that burden, the school appears to have given tentatively encouraging results.

The school in which Hoffer and Erikson were teachers operated for several years. Hoffer himself carried certain psychoanalytic beliefs with him which helped to guarantee that the experiment would fail. He concluded in fact that experiments in children's freedom were useless no matter how well they might be run. Arguing that it would be wrong to leave the child "alone with his various drives," Hoffer maintained that the Oedipal wishes

are prone to frustration even without any external influence. To excite castration fear in the boy and penis envy in the girl no other stimulation from the outside is necessary than the unavoidable sight of the other's genitals. (Hoffer, 1945, p. 303)

Clearly, the "various drives" must be subjected to control. Erik Erikson, after three years of teaching in a school founded by Anna Freud and Dorothy Burlingame, declared that sexual enlightenment alone did not make for healthy children (Homberger, 1935). Erikson (at that time still writing under

the name of Erik Homberger) concluded, much as Anna Freud was to do, that the child will continue to form "anxieties, fantasies, and unconscious and conscious [sexual] theories, regardless of sexual enlightenment" (Homberger, 1935, pp. 58-59). One problem here is that Erikson appears to have thought it desirable for the child not to fantasize about sex, and not to make up "theories" about it. But why that would be good for the child is not explained. If we take seriously the psychological needs of a child with a sexual body which the child remains interested in, and the child's observations of other people's bodies, then much repression would have been necessary for the disappearance of sexual fantasies. Erikson does show that some of the children did not thrive in the atmosphere of sexual enlightenment; some in fact showed signs of becoming *more* repressed to the extent of becoming unable to ask Erikson the questions about sex that were (as he persuasively infers) troubling them. But Erikson says almost nothing about the context in which these children were living.

That context could easily have been a factor in the "failure" of the experiment to produce healthy, unrepressed children. One student in the school at which Erikson taught was Peter Heller, who is now a professor of Modern Languages at SUNY-Buffalo. Heller's invaluable account of his psychoanalytic therapy as a child (age 9 to 12), when he was a patient of Anna Freud (Heller and Bittner, 1983) is especially revealing since it draws upon both his own memories and upon the notes Anna Freud kept of his case, which she generously gave to Heller for his use in writing his book. Heller has little doubt about Anna Freud's conservative attitude regarding sexual matters (Heller, 1984, p. 8), but this did not hinder her from explaining the "basics of sex" to young Peter. According to her notes, this explanation was gratifying to him, although he now does not recall the feeling (1984, p. 6). It can be seen that Anna Freud was still following the advocacy of her father's essay (Freud, 1907) on the sexual enlightenment of children. The pertinence of Heller's case history to the experiment in psychoanalytic pedagogy—for at the time that he was in therapy with Anna Freud he was also in the school where Hoffer and Erikson were his teachers—lies in its information concerning family context. Heller's parents were going through a complicated separation and divorce, involving a lengthy separation of the young boy from his mother. He developed a partial awareness of non-monomamous behavior by his parents, which was carried out *without* the condition of their enlightening him. As his case history makes clear, his disturbing symptoms, such as his night terrors which woke him up screaming, were connected with the family dynamics. But the accounts by Erikson, Hoffer, and by Anna Freud herself of the psychoanalytic pedagogical experiments make no mention of the pressures and strains which the children were undergoing in their family lives. The omission of such essential matters unfortunately serves to reinforce the impression that the experiment with sexual enlightenment, and with the sexual self-regulation of children, "failed."

Even within the context of the school, it hardly will do to enlighten children about sexuality while implying in all sorts of ways that they had best not engage in sex play, should curtail masturbation, and not drift off into day-dreaming. Erikson, a few years later, began to be interested in implementing the social "organization" of the infant's "early bodily experiences and through them," of the early ego (Erikson, 1982, p. 23). His heart certainly was not drawn to the concept of self-regulation for children. In 1936, he visited a tribe of Sioux Indians and was deeply and favorably impressed with their infant rearing practices, particularly, the Sioux mother, who

while still nursing during the teething stage . . . would playfully aggravate the infant boy's ready rage in such a way that the greatest possible degree of latent ferocity was provoked. (1982, p. 35)

The energies thus "provoked and deflected" would be later "channelized" into culturally normal activities. Erikson considered this sort of behavior by the mother as part of her "almost unrestricted attentiveness and generosity" (*ibid.*). He also felt a powerful convergence between these Indian ways of childrearing and psychoanalytic theory (p. 23). Given his assumptions, it is not surprising that his work as teacher in the progressive school founded by Anna Freud led him to unenthusiastic conclusions.

All in all, these experiments "proved" something to the founders and teachers which they were too eager to accept: namely that without sexual repression and control over children's lives, there can be no expectation of producing anxiety-free "normal" children whose sexuality would never pose a threat to their progress in schools nor threaten their teachers' most cherished values. Half a century after the demise of the psychoanalytic experiments in self-regulation for elementary pupils, Erik Erikson was still referring to the unexpected "defensive behavior of an intimidated and inhibited sort" which some of the children had developed (Erikson, 1982, p. 84). Plainly, the experience impressed him deeply; it discouraged any further experimentation on his part or on the part of Anna Freud.

Heller (1984) has remarked that there has been some effort on the part of his former teachers and his older acquaintances from the Viennese psychoanalytic circle of the period 1929-1932 to persuade him that no experiment had ever taken place—there was nothing more than a school which happened to be closely associated with Anna Freud. This advice has conflicted with his earlier impression that there had indeed been an experiment (Heller, 1984). As we have seen, the experiment was centered not on a generalized conception of childhood freedom, but on a hypothesis concerning the sexual body, namely that sexual enlightenment would lead to healthier development. Anna Freud's therapeutic practice with her young patient was also grounded in the sexual body. Not only did she enlighten the boy at a factual level, but as his account makes clear, she stressed sexuality as the key psychological factor

throughout the course of treatment, often at the cost of other factors which Heller now feels might have been given more attention (Heller, 1984, pp. 5-6). She emphasized sexuality notwithstanding her own rather ascetic personal preferences. The sexual body was still central to psychoanalysis, but its relation to health was not adequately formulated.

The narrow hypothesis that sexual enlightenment in itself would prevent intrapsychic conflicts over sex may have been disconfirmed in these experiments in psychoanalytic pedagogy. A broader hypothesis, however, that sexual enlightenment combined with a consistent child rearing practice of self-regulation would lead to self-regulated children who would be capable of dealing in a relatively unarmored manner with the inevitable traumas of growing up, was not implicated. As Reich put it,

We must abandon the mystical expectation that we are going to bring up perfectly healthy human beings. It is totally unrealistic to believe that children will grow up without traumas . . . We are not aiming for perfectly healthy children. We are fighting against the impact of events that cause armoring. (quoted in Sharaf, 1973, p. 256)

The psychoanalytic pioneers who experimented in pedagogy thus misunderstood their project. They expected perfection through knowledge, and did not understand that knowledge is much more than honest enlightenment on matters of sexuality. Knowledge to be meaningful from the perspective of the sexual body would have to have been created in the context of the many obstacles against self-regulation which culture has erected through its "contempt for the body, fear of the senses, and the opposition of flesh and spirit" (Dewey, 1934, p. 20, once more).

In the historical context of European childrearing, it would have taken, and it still would take, a much greater effort to overcome a heritage in which children often were considered a hindrance to be disposed of as simply as possible. Elisabeth Badinter, in *Mother Love: Myth and Reality* (1981), has brought to light widespread evidence that from 1760 onward, French children of all classes were abandoned, or given to wetnurses who would be expected to insure their nonsurvival. In 1850, for example, some 80% of infants born in Paris and sent to the country for care by wetnurses died before the age of two (Badinter, 1981, p. 193). As late as 1907, 30% to 40% of all newborns in the large French cities were sent to the countryside for nursing (p. 192). The mortality rate was considerably higher for these children as compared with those nursed by their own mothers (p. 193, footnote). Badinter produces evidence to support her hypothesis that maternal indifference has been an especially strong cultural phenomenon in France; it is being slowly countered by social conditioning—of which Badinter quite disapproves—which teaches women that they "should" feel virtually unlimited quantities of "mother love." Badinter's research reinforces the work of DeMause (1974), who has maintained that parental indifference and hostility toward infants and child-

ren has been the widespread and indeed the dominant pattern in the Western world until recently. Smith (1984) concisely summarizes the research by Badinter, DeMause, and others during the past two decades, as showing "a particularly disturbing pattern in the treatment of children over the centuries" (Smith, 1984, p. A). He then draws a connection between that pattern and the "great national experiment in childcare" now taking place in the U.S. This experiment, Smith argues, is being vitiated by the neglect of children's needs, especially in the commercially operated franchise-chains of day-care centers. The day-care situation has been brought to public attention by Valerie Suransky in *The Erosion of Childhood* (1982). In contrast to the U.S., Sweden provides day-care centers in which the ratio of child to adult is no higher than 5:1, and it gives salary payment to parents (including fathers) who wish to take days off from their employment in order to take part in the child care center in which their children are enrolled (Thomas, 1984). Britain has a licensing system for childcare workers; it offers a two year study program followed by an examination which qualifies these workers, providing their health is good, their police records are not suspicious, and their references are favorable. According to Thomas, there have been no sex-abuse scandals in day-care centers in those countries (Thomas, 1984).

The broad historical context in which childcare and education outside of the family take place should be considered when evaluating the several short-lived psychoanalytic pedagogical experiments of the period 1905-1938 (Cohen, 1979). The ironic fact is that these schools were inaugurated by adherents of a theory which gave a central position to the sexual body, which focused attention on the sexuality of children, and which emerged in a culture where disregard or outright violence toward the child's sexual body had been the major historical heritage. Yet within a few years the experiment was given up. One result may have been to further delay a shared social awareness among specialists in education as well as among parents and the populace at large that self-regulation, far from having been discredited, has never been tried on a large enough scale over a long enough time span to have yet had its experimental test.

Child and Infant Research as Social Experiment

The early psychoanalytic schools were experiments such as Dewey envisioned; they dealt with the creation of values, although they were also attempting to recreate some traditional values through a new method. Their "failure" had a fateful effect on the social bearing of psychoanalytic theory, giving it further justification for its attempt to turn away from the sexual body. In a sense, it can be said that the "army of infant observers and researchers" to which Galenson and Roiphe have referred (1981, p. x) are also engaged in an experiment with the values of good and bad even though any given experi-

ment considered individually may not seem to be part of any larger pattern of social change. Much of the literature gives an impression, in fact, of a "fallacy" pointed to by Dewey long ago. The fallacy is to assume that because a given experimental procedure is free of any application in life, therefore the entire empirical endeavor of the sciences is ultimately just as free. Science thus becomes an exercise in pure abstraction. The fallacy is a kind of occupational hazard, "easy to fall into on the part of intellectual specialists" (Dewey, 1929b, p. 154). Dewey maintained that science and its researchers ultimately exist for the purpose that all inquiry exists: to permit "added depth, range and fullness of meaning [to be] conferred upon objects of ordinary experience" (1929b, pp. 190-191). The sexual body in infant, adolescent, and adult is such an object of ordinary experience. The special problem for inter-disciplinary study is considered by Dewey, in this statement:

The sheer increase of specialized knowledge will never work the miracle of producing an intellectual whole. Nevertheless, the need for integration of specialized results of science remains, and philosophy should contribute to the satisfaction of this need. (Dewey, 1929b, p. 312)

As Dewey goes on to say, however, this task calls for something extra, something that scientific research and theory alone cannot give:

The need, however, is practical and human rather than intrinsic to science itself; the latter is content so long as it can move to new problems and discoveries. The need for direction of action in large social fields is the source of a genuine demand for unification of scientific conclusions. They are organized when their bearing on the conduct of life is disclosed. (1929b, p. 312)¹

In this light, we may say that the cumulative effects of knowing a great deal more than we did about the infant will undoubtedly bring changes in child-rearing and parental marital status. For example, the single-parent family is now part of the "mainstream of American society," but there is still little research comparing the effects on children of this living arrangement with children in two-parent families (Thompson and Gongla, 1983, p. 110). Unfortunately, some distinguished behavioral scientists such as the medical sex researcher Money (1980, p. xiv) and the cultural anthropologist Naroll (1983) have condemned the single parent family out of hand, as something inherently bad for children. They have not waited to find out what the new

¹As these statements by Dewey show, he did not abandon the philosopher's role of attempting to show how empirical inquiry has bearing on life, and particularly on the social practices and policies of societies. It is somewhat misleading to reduce Dewey's later position to one of advocating a culture of "aesthetic enhancement" as opposed to one in which "objective cognition" is the dominant motif (Rorty, 1979, p. 5). Although the term "objective cognition" obviously conflicts with Dewey's whole method, he continued to hold that the "objects of knowledge" which science creates are crucial for human wellbeing, even when defined aesthetically.

"object of knowledge" will turn out to be. When such research is carried out, it will be affected by recent discoveries of infant competence and the redefinition of dependency that is implied by it. But a crippling interdisciplinary defect must be faced: most of the research implies a metaphor of the infant as a de-sexualized creature. Hence it may be research that is in the long run harmful to the enrichment of ordinary human experience. There is a practical "need for direction" in the large social field of child-rearing in relation to sexuality, in which the new knowledge created by the explosion of research is brought to bear. This research itself will not merely have to be handled with caution and subjected to doubts (such is common sense); it will need to be sorted through and organized so that it becomes applicable to human sexual beings.

Research Conventions, Research Purposes

Rather than continually having to catch up, and make research applicable to the sexual body, it would be preferable to begin designing research which has an awareness of the sexual body incorporated into its program. I envision, for example, a deliberate change in much of empirical reporting, in which the "conclusion" section of an article specifies the possible bearing of the research on issues concerning the sexual body. Were this change in convention to begin to occur, it eventually would lead to a shift in the objects of inquiry among the disciplines, toward an inclusion of the sexual body. A larger recommendation is for the deliberate undertaking of research in various disciplines with the aim of learning whether and in what ways the "proposition" regarding the perspective of the sexual body applies. The proposition, which I introduced in the opening chapter, is: *any finding in science concerning human beings will turn out, upon investigation, to have meaningful connections with human sexuality.* Research into vision, for example, might explore the question of how brain dimorphism is related to visual functioning. Another approach to visual experience might attempt an understanding of the connections widely reported in therapy between variations in gaze and memory. In a recent clinical symposium, Byron Braid remarks:

There is a body of research having to do with neurolinguistic programming that has apparently documented that memories and experiences are revived by altering the direction of gaze [in therapy], and that by looking in another direction, aural memories are stimulated, and by looking in another direction, visual memories are stimulated. (quoted in *Clinical Symposia: The Ocular Segment*, 1984, p. 47)

Inasmuch as these remarks were delivered in a symposium of Ergonomic therapists, my point is almost made for me: any substantiation of the connections between direction of gaze and type of memory revived will prove, according to the proposition offered by the perspective of the sexual body, to

have meaningful connections with human sexuality. Reichian therapists could not assume otherwise. In this case, the psychoanalytic theory of repression and the cultural conditioning of visual perception for use in "distance" rather than emotional perception (Schachtel, 1959, pp. 279-322) might be involved.

The larger problem is not so much how to devise experiments which would permit a greater range of investigations into the sexual body in all its connections with human psychological functioning, but the fostering of an orientation toward research which could answer to the old question, Knowledge for What? In complicated civilizations, with our complicated bodies and minds, it is both "more difficult and more imperative," as Dewey put it, to find out what we are doing: will a given policy—whether it is promulgation of a cognitive emphasis in psychological research, the social protection of adolescent sexuality, or noninterference with the sexuality of the newborn—work toward creating conditions "favorable to subsequent acts that sustain the continuity of the life process"? (Dewey, 1929b, p. 224).

Freud's original "classical" theory strongly suggested that this continuity of life process had been badly disturbed, not in the sense of stopping human survival—not as yet anyway—but in blocking, upsetting, and over-riding the sexual body. The theoretical perspective of the sexual body is a way of reformulating Freud's insight. As the reader will note, the present study does not move toward the safe but perhaps sterile assumption that life is equally of the mind and of the body, or that the two are so intermixed as to make any discussion in terms of the sexual body meaningless. Instead, I have throughout suggested an "asymmetrical" balance (Efron, 1980), in which the sexual body is assumed to be indispensable for a reconnection with "the continuity of the life process," as Freud had thought. (There was one point, however, at which I speculated that in very early infancy, the mind-body relation is not only in balance, but that it may be virtually free of intrapsychic conflicts.)

As far as civilized mental functioning is concerned, I suspect that the mind is far from at ease with the sexual body. I offer as speculation the idea that the cerebellum, which Eccles has found to be the chief organ of the body with the function of *inhibiting* impulses (Eccles, 1977; Eccles, Ito, and Szentágothai, 1967), has been "selected" by modern industrial civilization as an organ to be maximally developed, and metaphorically celebrated. It is significant that Masao Ito, Eccles' associate, does not even deal with the functioning of the cerebellum during normal sleep, in his book (Ito, 1984), *The Cerebellum and Neural Control*. There is little discussion in this 580 page work of the problem of what happens during those hours of REM dreaming, when "neural control!" is of quite a different order than during wakeful states, when in fact the degree of "control" is greatly decreased from the level of ordinary rationality. Eccles has described REM dream activity as another mode in which the "self-conscious mind" is constantly at work: "It is always there scanning the brain, but the brain is not always in a communicative state for it!" (Eccles, in Popper

and Eccles, 1977, pp. 371-372). The cerebellum obviously is not the whole brain, but if it comes to serve as the metaphor for mind, it then will insinuate an equation, "mind equals control over body," and particularly over the sexual body. This equation also serves to fuel the hatred of the sexual body as precisely that which cannot be fully controlled by the artifact of a "self" metaphorically situated in the mind. As Zaner (1984) has long argued, the "body as mine" is not really mine in the sense that other property I own is mine. The sexual body rather than the body in a general, non-sexual sense, poses a special problem. As Freud stated in 1905, "I am inclined to believe that the impulses of sexual life are among those which, even normally, are the least controlled by the higher activities of mind" (Freud, 1905b, p. 149). Eighty years after Freud's statement, it is still far from evident that the various disciplines in psychology have come to terms with it. Few theorists seem concerned to understand human intelligence and mental development, for example, in close connection with emotional development, let alone sexuality. Yet intelligence in Dewey's sense, the capacity to convert "desires into plans" (Dewey, 1930, p. 255), cannot function unless desires are understood and clarified (cf. Dewey, 1935, p. 51). Plans drawn up without benefit of such clarification are bound to lead to destructive consequences, precisely because such plans are carried out without regard to what Dewey referred to as the "continuity of the life process" (Dewey, 1929b, p. 224).

At the present time in human history, unintelligent choice can prove unthinkably disastrous. Pepper's very late attention to the problem of "Survival Value" (Pepper, 1969a), and his position taken in *Concept and Quality* that the "selective system" for survival may be judged under certain conditions to take precedence over all the other value systems (Pepper, 1967, pp. 544-551), are pertinent today. The perspective of the sexual body may have more bearing upon research concerning survival and decisions taken about survival of the species than it has for any of the topics discussed in the previous chapters. It is not too much to say that "the continuity of the life process" is being risked, over this globe, in current history. Science will soon increase that risk further, in the rapid development of biotechnology (see, for example, Chargaff, 1976). The entire discussion on the sexual body given in this study will have to be reconsidered once sexual bodies come to be produced on a large scale outside of procreation and the birth process. A distinction is already being drawn in recent discussion of "noncoital collaborative reproduction" between the "gestational mother" and the "genetic mother" (Goodman, 1984; see also Keane and Breo, 1981). Human genes are entering a time of greatly enhanced mechanical manipulation at the same time that the decision has been made (with virtually no public awareness of the fact) that gene transplantation from one mammalian species to another may be carried out for medical and other scientific purposes (Schmeck, 1984). The sexual body, as well as all other objects of knowledge which we now regard as

mammalian bodies, are likely to undergo changes of an unpredictable nature now that these processes are underway. Yet there are still many decisions to be made concerning these processes in their details; members of the appropriate specialized disciplines may have influence in making such decisions. My point is not to call a halt to biotechnics, but to insist that without coming to terms with our knowledge of the sexual body, intelligent decisions cannot be made in this area (nor for that matter in the many other problem areas I have discussed in this study), and survival will be risked. Moreover, even those decisions which do take into account the perspective of the sexual body will be unable to do so intelligently unless the decisions are made with an awareness of affectionate somatosensory contact such as Prescott describes in his cross-cultural study. The sexual body-haters could hardly be expected to make a fair or wise decision for the survival of humankind, nor could the practitioners of virtually affectless theoretical systems (e.g., Schafer, 1976) be expected to feel the depth of the problems.

Research and Knowledge

It remains to emphasize that research helps to create objects of knowledge, but at least in Dewey's contextualist theory, no "antecedent existence" is discovered. We never "discover" what the sexual body "is." Yet there is a point in Pepper's excellent chapter on Contextualism where he suggests a doubt about this position. Is it not a strange paradox that all our inquiry fails to give us "insight into the qualities of nature"? To maintain that any research, or any hypothesis even if confirmed, is "no more than a tool for the control of nature . . ." strikes Pepper as a harsh doctrine. He argues that this position is actually an "unnecessarily stern if not perverse interpretation" of the Contextualist notion of truth (Pepper, 1942, pp. 274-275). It would be difficult to refute Pepper, and the attempt would be little more than making an arbitrary choice to mediate between his Contextualism and that of Dewey. Perhaps the perspective of the sexual body would require that both Pepper's and Dewey's views on knowledge within Contextualism be kept active. Despite Dewey's advice, we would not want to discourage the researcher who hopes to find out what some aspect of sexual body life "is," underneath all the shifting demands of culture.

If anyone has a research inquiry which promises to tell us something about sexual body functioning that is true for the human race and that would appear to be true for as long as there have been human bodies, then why should the Contextualist or the advocate of any other world hypothesis rule that researcher out of order? I.D. Rotkin, for example, has presented results of his research on cancer of the prostate which strongly suggests a link between sexual abstinence in the adult human male and the incidence of that cancer, by way of a slow-working virus which develops in the testes of the inactive adult

male (Rotkin, 1980). If there is such a link (and Rotkin's empirical evidence for it is at least indicative), then we would want to know about it, and we would take this knowledge into account in leading our lives as well as in making judgments about other lives. There would have been little point in discouraging Rotkin, before he began this research, with warnings that he should not assume there "is" a link of abstinence and disease in the sexual life of the human male which he might uncover. Rotkin, if he is right, has given us some insight into the qualities of nature, as Pepper had expected a good confirmed hypothesis to do.

Yet ultimately, Dewey may have had the greater social wisdom. He realized that you cannot suggest to the modern mind (and especially not to the mass mind) that science gives "knowledge" of that which is, and still have an inquiring society. It is exactly where research promises to give results which are threatening—which is surely the case with inquiry into the sexual body—that the need for keeping inquiry open is felt most strongly. This is all the more so when the new objects of knowledge clash with old forms of social organization, fail to comply with established mores, and upset the prevalent world hypotheses. In such unresolved cultural conflict lies the continuing challenge of the sexual body, both to the specialist in the disciplines and to the same specialist engaged in living a life.