El Corazón Sangrante
The Bleeding Heart

Preface

Elisabeth Sussman

El Corazón Sangrante / The Bleeding Heart began in 1988 when The ICA decided to turn its attention to Mexico. Like most exhibitions, the project started experimentally and grew empirically. Olivier Debroise, a critic living in Mexico, was asked to propose a framework for an exhibition. He, in turn, after observing the appearance of the heart in the work of many contemporary artists living in Mexico City, suggested that the icon of the bleeding heart might afford a basis around which to gather a group of works. The decision to choose an image as one of the organizing principles was an acknowledgement of the particular power of images in Mexican culture. It was also an acknowledgment that this syndrome in Mexico has been and continues to be both a prefiguration and paradigm of the society of images, as theorized by postmodernism.

More particularly, the appeal of the bleeding heart was not only that it was ubiquitous in contemporary art, but that it was uniquely historically syncretic. It appeared both in the precolumbian culture of Mexico as a part of the sacrifice connected with fertility, and in colonial Mexico where it figured in the imported Christian art as a symbol of understanding, love, courage, devotion, sorrow, and joy. The syncretism of this image was of essential conceptual importance to this project, since syncretism per se, was taken as an inherently characteristic feature of Mexico, the subject of the exhibition.

Debroise's proposal became the premise for the exhibition's organization. He has been part of and party to the expansions and debates of his original idea, and he has supported the idea of its transformation. In fact, a state of evanescent stability and constant transformation has always been central to the historic construction of the syncretic heart, and that remains true of its use at present. Like most seemingly fixed symbols, *El Corazón Sangrante / The Bleeding Heart* appears to exist in order to become unfixed.

The same condition attaches to another of the founding principles of this project, the site of Mexico; for the definition

of a "Mexican artist," and, hence, of Mexican art and the ownership of this symbol in some geographically specific Mexico, became hotly contested in the course of research. Travel and migration became more accurate concepts when describing the actions of both the icon and the artists whose work appears in the show. Without denying that, Mexico was a starting point and has remained a point of passage and emanation for this exhibition, ultimately it has come to be seen conceptually as more of a hub – attracting, sending, and receiving. Thus, artists from the Caribbean, South America, and the United States pass through its iconic system, and that iconic system receives and transmits on a north-south axis of fluctuating cultural dominance. If other exhibitions, both historical and modern, have posited a stable definition of Mexico and its culture, this exhibition proposes an unstable one.

Nonetheless, *El Corazón Sangrante / The Bleeding Heart* does have a stable core. It is decisively an exhibition that emanates from the south. It argues for the presence of North American artists in the exhibition only as they relate to the south. It argues for the importance of the southern voice – the Chicano – in the north. Most important, this exhibition not only chooses to give voice to the politics of political domination, but it also chooses, or is forced, again empirically by the evidence, to give voice to the politics of the body. Of course, often the politics of the body and of political domination are interchangeable, and, on an actual and poetic level, the same. In this exhibition, however, the physicality of the symbolism of the heart bears the evidence. The heart is not only archetype and stereotype of romance and love, of psychic co-dependency, but it may also suggest the conflicted nature of gender and sex. And finally, the heart is a cruel reminder of the mortal pulse, of life and death.

All exhibitions are constructions, frames placed around a collection of works of art. This exhibition stands as the work of three curators: Olivier Debroise, Matthew Teitelbaum, curator at The ICA, and myself, Elisabeth Sussman. We have been assisted by many people whom we wish to thank. Before all others must come Rina Epelstein, independent curator from Mexico City, who not only assisted with all the administrative details, but unstintingly participated in many debates and clarification sessions. Roger Bartra, Serge Gruzinski, Carlos Monsiváis, and Nelly Richard, along with Olivier Debroise and Matthew Teitelbaum, wrote essays for this catalogue that will contribute to the debate around the ideas that underlie this project. Lisa Freiman has directed the production of this catalogue with both grace and intelligence.

David Ross, former Director at The ICA, encouraged and helped to shape the project from the outset. Matthew Siegal was the administrator of the exhibition at The ICA and supervised with unique sympathy the presentation of the work at The ICA and other tour sites. Branka Bogdanov, assisted by Sarah Minter and Gregorio Rocha, has produced and

Heart Attacks: on a Culture of Missed Encounters and Misunderstandings

Olivier Debroise

This study is centered around an image, around a series of clichés and commonplace ideas. It becomes therefore an essay on repetition, reproduction, and imitation. It includes some ideas on multiples and some proposals for distinguishing the good from the bad, the false from the true.

The vitality, diversity and complexity of Mexican culture have been interpreted as the residual effects of the struggle of a strong precolumbian civilization to survive the Conquest. Modern Mexican culture can therefore be seen in terms of "resistance." To understand this phenomenon, it is indispensable to first go back – as the majority of scholars have done using the relatively new science of archaeology – to our remote origins, to the time of formation.

1. Battles in the Night

Between the end of the eleventh and the mid-fourteenth centuries, the Sacred Heart of Jesus miraculously appeared before cloistered nuns in the Cistercian abbeys of Belgium, the Netherlands, and the north of France. The story behind each of these apparitions is almost identical: each woman had experienced a series of frustrated romances in her youth which was suddenly interrupted by a vision. An intense dialogue of love soon developed between the secluded nun and her newfound "divine husband," the Crucified Christ. Toward the end of her life, the nun wrote or dictated her memoirs in an attempt to leave for posterity a permanent record of her revelation. Thomas of Cantimpré, confessor of Lutgarde d'Aywières, relates the first ecstatic vision of his ward, which occurred around the year 1206:

She was still young in both body and age, and one night before the matins, she experienced a violent sweat, a simple natural phenomenon. She decided then to rest and abstain from the matins, in order to be better disposed to serve God. In fact, she thought that this sweat would be beneficial to her health. Suddenly she heard a voice that shouted to her, "Arise this very moment. Why do you remain in bed? You must do penance for

the sinners who lie in their filth. . . ." Terrified by this voice, she immediately arose and went . . . to the church. Christ appeared to her, crucified and bleeding. From the Cross, an arm broke away, embraced her, pressed her against His right side, and [she] placed her mouth on His wound. She drank in a sweetness so powerful that she was from that time stronger and more alert in the service of God.[1]

Lutgarde's direct access to the invisible organ, to Christ's heart, was provided by the opening on His side, by that deep wound inflicted by the Roman soldier during the Crucifixion. It was into this "cave," the only wound on the torso of the Saviour, that Doubting Thomas placed his fingers and from which ran the blood of Redemption. Through this same wound, Lutgarde was able to see His heart, to touch it and caress it.

In similar narratives, the visionary literally penetrates into the interior of Christ's body, where there occurs a complex mystical operation known as the "Interchange of Hearts," in which the young woman takes the vital organ of the Saviour, and gives to Him her heart in exchange. In other cases, Christ offers the organ directly, without requiring the act of penetration itself. "He had in His divine hands a human heart, red and luminous," writes the hagiographer of Saint Catherine of Siena, "and upon seeing her Creator and that light, she fell trembling to the floor, and the Lord approached her, and He made an opening in her right side and inserted the heart which he held in His hands."[2]

Despite the spiritualist interpretations of those who recorded these events, these mystical literary works have an earthly stamp; no recorder could avoid comparatively precise anatomical descriptions of the heart as a fleshy object, or descriptions of the physical effects the visions had on the bodies of the women themselves. This is particularly evident in the case of Saint Marguerite-Marie Alacoque of France, founder of the cult of the Sacred Heart in the seventeenth century. Like her predecessors, following her "Interchange of Hearts" with Christ, Marguerite-Marie acquired miraculous healing powers which were the basis for her eventual beatification and sanctification, as such powers were for mystics like her.[3]

Marguerite-Marie suffered familial rejection and a physical paralysis in her infancy, and from an early age found "refuge in the side of Christ," a cavity in which she gained renewed strength. In 1672, upon taking her vows in the Order of the Béguines, Marguerite-Marie experienced her first encounter with Christ, who spoke to her and dictated her future conduct. As a result of this event, she dedicated herself to curing the sick with strange therapeutic methods, including an uncommon passion for the compulsive devouring of all forms of bodily secretions: the sweat, pus, vomit, and even the diarrhea of those whom she attended daily. From this peculiar diet, she obtained "so many delicacies . . . that she would have liked to find similar ones every day, to learn to

1
For more information on the origins behind the devotion to the Sacred Heart, see Pierre Debongnie, C. SS. R., "Commencement et recommencements de la dévotion au coeur de Jésus" in Le Coeur (Paris: Les Études Carmélitaines chez Desclée de Brouwer, 1950). The quotation is taken from Debongnie, p. 157. This book also contains a selection of articles by several authors that discuss similar cultural phenomena related to the heart in general. In English, see Rev. H.S. J. Noldin, The Devotion to the Sacred Heart of Jesus (New York: Beuzinger Brothers, 1905); and Michel Meslin, "Heart" in The Encyclopedia of Religion, Vol. 6, ed. Mircea Eliade (New York: Macmillan, 1987), pp. 234-237.

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André Cabassut, "Coeurs, Échanges des," in Dictionnaire de Spiritualité, Vol. 11 (Paris: 1948), pp. 1048-1051.

3
Philipe Sollers, "Il cuore cattolico dell'arte," Seagreen no. 9/10 (Winter 1989/1990). Philippe Sollers has discussed her case in some detail: "Mortifications of the flesh, ecstasies, revelations, miracles, prophecies: she predicted the precise hour of her death; [and] on her breast they found, inscribed with a knife in large letters, the name of Jesus. In simple terms, she invented "body art."

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Collection of Mr. and Mrs.
Campbell,
San Francisco, California

conquer herself with only God as witness."[4] Marguerite-Marie invented what might be called a "mysticism of the disgusting," a ritual on the path to a higher spiritual state. One can find similar tendencies in the lives of some of the greatest mystics (including Saint Teresa of Avila, for example), but none came to systematize, as did Marguerite-Marie, the fantasies of absorption and consumption, of rejection and surrender, this path from the repugnant to the ecstatic and all that this implies at the level of human emotion.

For several centuries the Church debated the legitimacy of the visions of Saint Lutgarde, Saint Catherine of Siena and Saint Marguerite-Marie, and the value of giving wide publicity to phenomena that were essentially feminine and folk. For not only was the female body the focus of these mystical events, but the intended audience was generally a popular one, as revealed in Saint Lutgarde's use of early French, rather than Latin, to tell her own autobiography.

This "Cult of the Guts" presented a serious problem for the Church. The undeniably crude representations of the wounds and the heart of Christ suggested an uncontrolled sensuality which bordered on the obscene. But, as Sollers has suggested, the Catholic church took advantage of the "insurmountable wall of hysteria" against which these women were trapped.[5] Behind numerous reservations and prohibitions, one might discern the beginnings of a new puritanical morality – the growing tendency to separate the carnal from the spiritual, the body from the soul.

The devotion to the Sacred Heart falls effectively into a marginal category in which it is quite difficult to distinguish the holy from the perverse, in which declarations of sainthood or accusations of witchcraft can arise arbitrarily according to the moral and political climate of the time. Even though the worship of the Sacred Heart was again promoted in the mid-seventeenth century as a counterpoint to Protestant iconoclast tendencies, the Vatican did not officially recognize the cult until 1856. This tortuous history, however, did not impede the cult's expansion throughout the Catholic world, reaching its greatest prominence – not surprisingly – in the major centers of baroque culture.

2. Opening the Matter

The diverse representations of the Sacred Heart that developed during the baroque centered on an image of a bleeding heart often pierced by arrows. This image fully belonged to Western culture, but most specifically to the Catholic and Latin nations of the world. In the Anglo-Saxon mind, the heart is the simplified and purified (even geometric) form of the playing card and the valentine. In the traditional Spanish deck of cards, one of the four suits is the "copa," a reference to the Holy Grail, which contained the blood of Christ. During the Reformation, this symbol was replaced by the stylized heart-silhouette, still a receptacle and a symbol

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Louis [illegible]

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Sollers, op. cit.
The French Jansenists were the first to reject the validity of these devotions to the Sacred Heart, as well as similar phenomena related to the Heart of Mary and the transfigurations of the souls of Purgatory by the Virgin of Light. In addition, the cult of the Sacred Heart was one of the principal subjects condemned by Luther in his iconoclastic campaign of religious reform.

of love, but without the more direct and bloody references of the actual cup itself. The valentine, too, is a product of the north, a German and English transformation of the bleeding heart into a picturesque symbol of romance. But in these simple designs, clean and hygenic, the crude image of the bloody organ, torn from the body, lost a great deal of its suggestive power.

In the Catholic world, and particularly in Spain, Mexico and the south of Italy, where the devotion to the Sacred Heart has had its greatest impact, images of the heart have none of the northern purity, tending instead to an extreme, at times almost unbearable, realism. The object appears in religious paintings and in popular engravings as a hunk of meat, as a piece of the guts, as a muscle swollen with blood. Removed from the body without losing any of its vitality, it is something more than mere symbol, it is both metaphor and metonym endowed with enormous emotional potential.

Pictorial representations of the heart in baroque art are characteristic of a period in which forms often suggest multiple and – as might be expected – ambiguous connotations. Although an internal organ, the heart is generally shown outside the human body. Its form is compact, closed unto itself, and dense, but hollow at the same time, like the body from which it is taken. Whether violently excised or lovingly offered, the muscle always appears as a contour, an outline, a "skin." The central and invisible space inside embraces closed cells, the auricles and ventricles, but it is not empty, for it contains the blood, as well as other mysterious fluids that emanate from baroque visions of the heart. Its membranes enclose something ungraspable yet drinkable, stilled yet in perpetual movement. And herein lies our first ambiguity, a characteristic of the baroque in general: our heart is at the same time both container and content.

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The heart's symbolic essence as a living image requires that it be shown in action, pulsating; at the same time, as a figural representation of something torn from the body, it seems to float, free of all attachments, in a state of weightlessness. This apparent lightness, however, stands in sharp contrast to the density of its mass.

The exposed heart signifies the exteriorization of the interior, a physical quality that explains its attributed spiritual qualities as well. The arteries and veins, shown as if neatly sliced by the surgeon's scalpel, are open and reveal the "emptiness" of the heart's interior. Curiously, the blood does not escape from these natural openings, but shoots forth from the wounds on the side – wounds inflicted *a posteriori* to the neat surgical removal of the organ. Apparently, the heart thus represented does not function as a physical container of the blood, for the fluid tends instead to escape, to free itself from its "prison." One might imagine the heart as existing on two levels – using a definition of Gilles Deleuze – narrow

below and inflated above, cloaked in a spirituality which prevents it from falling, a balloon drawn ever upwards.[6]

This image reveals the heart as a vessel for the spiritual. But in this case, the spiritual is not only an untouchable and ethereal "soul," an abstract aura that surrounds and contains the body, but a transfiguration of the emotions, which consequently reveals the body, the matrix of these emotions.

From Sicily, the devotion to the Sacred Heart passed to America at the height of the baroque era.[7] The dispersal of heart-related iconography in the New World coincided with the appearance of indigenous subjects of worship and devotion, like the Virgin of Guadalupe in Mexico and the Virgen de la Caridad del Cobre in Cuba, both early manifestations of creole autonomy with respect to Europe. At first, the actual images of the Sacred Heart were not so different from the original European versions, but they enjoyed an exceptional success in America. It would be too easy to attribute this popularity to the cultural beliefs of the ancient past, to find in the embrace of the Sacred Heart the disguised, residual reemergence, two hundred years after the Conquest, of a series of buried myths and rites related to heart sacrifice and worship by prehispanic peoples. What does seem evident, in a reading of certain representations (as in the fresco cycle by Pocasangre in the Convent of Atotonilco [c. 1740-76], the *Via Crucis* at Zumpango [1773], and in innumerable illustrated broadsheets that circulated throughout Latin America) is the unprecedented impact of this genre of images of the heart, particularly among the lower classes, and the broad extension of the devotion to the Sacred Heart.

Some of the most obvious meanings of the Christian icon were superimposed, of course, on the attributes of the prehispanic heart: redemption, self-sacrifice, and interchange with the deity had very similar meanings for Spanish Catholics as they did for the hated practitioners of Aztec human sacrifice.[8] The apparent violence of Aztec ritual – the cause of innumerable misunderstandings and of a consequent satanization by the Spanish of the prehispanic mind, which persists to this day – gained with this transference a perfect object for syncretic symbiosis.

This transplant of the image of the heart reveals the state of the popular devotions in the seventeenth century and functions as a paradigm for the interchanges and the cultural mergings that multiplied in Mexico following the Conquest. The transfiguration is even more interesting if it is understood that herein lie the primary mechanisms behind the mythological creations of modern Mexican culture. From the cults and popular traditions of the colonial period, modified by their supposed prehispanic roots, an entire series of founding myths would be developed.

6
Gilles Deleuze, Le Pli: Leibnitz et le Baroque (Paris: Les Éditions de Minuit, 1988), pp. 41-42.

7
See Alfonso Méndez Plancarte, El corazón de Cristo en la Nueva España (México: Buena Prensa, 1951)

8
The best treatment of this subject is to be found in Christian Duverger, La Fleur Létale: Économie du Sacrifice Aztèque (Paris: Recherches anthropologiques Seuil, 1979). Part of this book has been translated into English: Christian Duverger, "The Meaning of Sacrifice" in Fragments for a History of the Human Body, Michel Feher, ed., Vol. 3 (New York: Zone, 1989). Duverger develops the ideas introduced by Georges Bataille in La part maudite (Paris: Éditions de Minuit, 1967). For an archaeological approach, see Alfredo López Austin, Cuerpo humano e ideología: las concepciones de los antiguos nahuas, 2 vol. (México: Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, 1980).

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[illegible] / piedra
Collection of Wally and Brenda Zollman,
Indianapolis, Indiana

3. With Mortar and Three Drops of Blood

The most important of these myths concerns the founding of Tenochtitlán, the ancient capital of the Aztecs, on the site of what is today modern Mexico City. Of the surviving narratives that record this historical event, the most complete is that found in the *Relaciones de Chalco Amaquemecan* of 1607, a document written in Nahuatl by a descendent of Aztec nobility.[9]

According to the *Relaciones de Chalco*, a Nahuatl-speaking tribe known as the Mexica, worshipers of the invincible Huitzilopochtli, arrived at the shores of the lakes that then filled the Valley of Mexico in a certain year 1-Reed. Rejected by the people already living in the Valley, the Mexica wandered for thirty years, searching for a place to settle. In an attempt to obtain land for his people, Cuauhtlequetzqui, the chief of the Mexica, challenged the Tenoch Tlenamacac of Malinalco, known as Copil the wise, to battle.[10] The all-important duel between the two leaders occurred near Chapultepec. "Cuauhtlequetzqui brought down the astrologer and magician Copil; as soon as he had him well secured, in the same place he brought death to the above-mentioned magician Copil. He sacrificed him, opening a stone-wrought wound in his side with a flint knife, and gave an order to the Tenoch Tlenamacac, saying 'Oh Tenuche, here is the heart of the sacrificed astrologer Copil, go and bury it in the place of the canes and the reeds.' The Tenuch took the heart and ran with great speed to inter it in that place found in Tultzallan and Azcatzallan, that place, so they say, where now is to be found the Main Church [the Cathedral]."

The priest followed the instructions of Cuauhtlequetzqui. He buried the magician's heart, then burned incense and left offerings to Huitzilopochtli, the war god of the Mexica. Then he heard new instructions from his leader: "You must now protect the place where you are, in the middle of the canes and the reeds, permit it not that others attempt to arrive there where you deposited the heart that we tore from the magician Copil. In this place will be born and will grow the heart of Copil, and you, Tenuche, you will go and observe when there springs forth the *tenuchtli*, the Red Prickly Pear, born from the heart of Copil; and you will note the precise moment at which on the top of this cactus there stands an eagle, holding tightly with its talons a half-erect snake, which the eagle mauls, trying to devour it, while the snake hisses and gasps. Thus will occur the omen that means that no one in the world will ever destroy or erase the glory, the honor, the fame of Mexico Tenuchtitlan."

And so it was that over the buried heart of the magician Copil, killed in combat by Cuauhtlequetzqui, the Mexica began the construction of their city, the capital of the empire in the year 10-House, A.D. 1271 in the modern calendar.

9
Francisco de San Antón Muñón Chimalpahin Cuauhtlehuanitzin, Relaciones originales de Chalco Amaquemecan (México: Fondo de Cultura Económica, 1965). The following citations are taken from this edition.

10
"Cuauhtlequetzqui" is Nahuatl for "Bloody Eagle." "Tenoch Tlenamacac" is a religious title meaning "He who offers the [illegible]."

4. "Surrender, haughty West!" (Sor Juana Inés de la Cruz)

Toward the end of the seventeenth century, the creole intellectuals of New Spain began to intellectualize and make concrete the concept of syncretism. This validation of Mexico's cultural *mestizaje* was seen as the only way to control popular religious devotions, and it coincided with an emerging sense of difference, which would culminate in the declaration of Independence in 1810. One especially clear example of this dynamic is the brief *sainete*[11] composed by Sor Juana Inés de la Cruz as an introduction to her religious play *The Divine Narcissus* (1688), in which personifications of the West, America, and Religion engage in a heated debate over the essence of the Great God of the Seeds, Sor Juana's euphemistic term for the Aztec god Huitzilopochtli. Huitzilopochtli was worshipped by the Aztecs in the form of effigies made of amaranth seed mixed with the blood of the sacrificed, which were then ritually consumed. In the sainete, Sor Juana established a daring parallelism between this pagan ritual and the Christian ceremony of the Eucharist.

The prologue to *The Divine Narcissus* and the play itself were performed in Madrid, before the court of Carlos II in 1690, and represented, according to José Joaquín Blanco, "a cry if not of independence then at least of cultural vindication" as well as a defiant political statement. "Sor Juana's jest is excellent: pretending to preach Christianity to the Indians, she introduced Huitzilopochtli to Spain."[12]

Later, the young Mexican nation that emerged from the War of Independence (1810-1821) and, to an even greater extent, the "revolutionary" governments of the twentieth century would systematize similar methods of legitimization. Father Miguel Hidalgo, for example, led his independence forces into battle under a standard bearing the Virgin of Guadalupe (a maternal figure with obvious prehispanic roots), and required all troops to wear her image on their sombreros. These actions transformed the fight against the Spanish into an historical epic in defense of the image itself, with unexpected magical interventions.[13] In the *imaginaire* of Mexican nationalism, this brandishing of the Virgin's image is the fundamental symbolic event of the struggle for Independence; its continuing resonance has displaced from the collective memory the actual declaration of political independence, issued in 1809 by an assembly of creole aristocrats convened by Viceroy José de Iturrigaray to decide whether or not to recognize the regime of the usurper Joseph Bonaparte in Spain.

In 1859, President Benito Juárez issued a series of Reform Laws, which made official the separation of Church and State in Mexico. This creation of a secular state allowed for – it is only an apparent paradox – the establishment of legitimating mechanisms rooted in cultural and religious traditions; from this point forward, syncretism itself is granted a consecrating value. This allowed the differentiation of Mexico in mental and moral terms from the European motherland,

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[illegible] preceded the [illegible] presentation

12
José Joaquín Blanco, *La literatura en la Nueva España II: Esplendores y miserias de los criollos* (México: Cal y Arena, 1989), p. 29.

13
In response, the Spanish forces "armed" the Virgen de los Remedios, the same image supposedly brought by Hernán Cortés to Mexico, by granting her the status of General. They brought the conflict to a personal level, Virgin against Virgin, and converted the war into a sort of fantastic saga in which angels and demons, saints and sinners intervened, a war in which the apparition of Saint James could decide the outcome of a battle. When taken prisoner by the independence forces, the Virgen de los Remedios was publicly humiliated. The defense of these holy images attracted the indigenous masses, thousands of workers, including the unemployed, from the fields and the mines, priests, intellectuals, soldiers, lawyers, and individuals belonging to the middle and lower classes of the cities – thus contributing to the success of the revolution. See Enrique Florescano, *Memoria mexicana* (México: Joaquín Mortiz, 1987), p. 291.

without completely losing sight of the relevance of Western civilization. Thus (official) Mexican culture is defined by a series of missed encounters and misunderstandings (for syncretism is nothing if not these), creators of never-ending tensions, leading to a constant transformation and evolution of the nation's cultural identity.

The constitutive elements of this national culture – what Roger Bartra calls the "opaque phenomenon" – are thus based on spontaneous acts of devotion, upon the naive preservation of archaic forms, on so-called "popular culture." The construction of the *imaginaire* in Mexico involves the transfiguration of objects, rituals, and traditional forms of expression, revised by more or less "modern" meanings in order to elevate them to the rank of high art and to the sophisticated para-mythological constructions of modernity. This is a complex procedure, one which is difficult to fully grasp because its dynamic varies from one moment to the next, and because of the incomprehension that arises from an apparent discontinuity with respect to the Western mainstream, even though the results of the process are generally not understandable without reference to that mainstream.

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In 1921, for example, on the initiative of a group of dissident artists from the Academy of San Carlos in Mexico City, a system of Open-Air Schools of Painting was established, designed to encourage the "artistic genius" deeply fixed within the "racial subconscious" of the Mexican child. Soon converted into an official project, the Open-Air Schools enjoyed unrestricted government support until 1925. The establishment of this "genuine" educational program, however, would not have been possible without an awareness of the European avant-garde, the voyages of Gauguin to the sources of "primitivism," the appropriation of African sculpture by the Cubists, or the theories of spontaneity that would influence, among other things, surrealism.[14] Yet the system remained marginalized, given that the actual cultural referents used by the children and revealed on their canvases were completely foreign to Western culture.

As Roger Bartra has shown:

The myth of a subverted Eden is an unquenchable source from which Mexican culture draws. The present definition of nationality owes its basic structure to this myth. Therefore, it is a cliché to think that the Mexicans, as products of the advent of history, are archaic spirits whose tragic relation with modernity obliges them to perpetually reproduce their primitivism.[15]

This fundamental myth is reconstituted again and again. One of the modern mechanisms behind the perpetual recycling of the past consists in sanctioning a supposed permanence, a non-evolutionary status (a passivity), and a continuity not only of forms, but of the meanings they carry with them. This constant in Mexican culture is the product of the "epistemological cut" of the Conquest, a break which must

14
See Karen Cordero, "Para devolverle su inocencia a la nación," in Abraham Angel y su tiempo (Monclova, Coahuila: Museo Biblioteca Pape, 1984).

15
Roger Bartra, La jaula de la melancolía. Identidad y metamorfosis del mexicano (México: Grijalbo, 1987), p. 36.

be erased or frustrated in one way or another to reestablish – in the mythical order of ideological constructions – the missing links with the past. The result is an artificial easing of the traumas of the Conquest through the assumption that cultural *mestizaje* is an incomplete process, and that the Conquest has not yet ended.[16] Although not unique to Mexico, the system of legitimization acquires here a subtle difference: on the one hand, it sees itself obliged to use objects (forms) that belong to an ancient culture (and which only survive because they have been rehabilitated as objects of modern / contemporary cultural usage, as in the case of "traditional" folk arts); and on the other hand, it must make use of a complex religious history whose mechanisms seem very difficult to understand from the outside and which, therefore, seem overwhelmingly violent from the perspective of the West. The problem here is not only one of contexts – and of the recycling of those contexts – but one that must be understood as the antithesis of Western categories of high and low culture.

The concept of "Mexico," as understood internationally, is thus based on a syncretism rooted in the "spiritual Conquest" of the Indian population. However, to allow its consolidation as a fundamental element of national culture, the essential difference of this syncretism had to be stressed, and this differentiation was defined, in effect, through a series of vertical cuts and a constant displacement of the objects under consideration – a displacement upwards, from the "vernacular" (the spontaneous, the traditional) towards the spiritual (the arts). One can discern similar processes in the art of Europe and the United States, but they remain there as marginal tendencies (like those defined by the para-aesthetic categories of kitsch and camp), while in Mexico the processes define the center, and are therefore the only way to understand Mexico's cultural production in relation to the mainstream.

Two concrete examples of this dynamic follow. The first, begun at the end of the eighteenth century, concerns the aestheticization of the prehispanic past via its cult objects, through which there was an attempt to soften the "black legend" of the Aztec past.

5. The Seduction of Horror (Ch. Baudelaire)

In 1790, public works excavations in the Main Plaza of the capital of New Spain brought to light two colossal stone monuments – the so-called Aztec Calendar Stone and the Coatlicue. The subsequent description of these two monoliths by Antonio de León y Gama, in an essay that marks the "official" inauguration of Mexican archaeology, included a defense of the ancient Indians, highlighting their talents as builders and stonecarvers. As a consequence of this new attention, the Calendar Stone was set into the exterior wall of one tower of the Metropolitan Cathedral, where it remained until its transfer to the National Museum fifty years later. The Coatlicue suffered a different destiny:

16
This phenomenon [illegible] in the [illegible] of [illegible] Mexican art [illegible] in Europe and the United States since the 1930s. All insist on the concept (even spectacle) of cultural continuity: as in the above-mentioned case of the Open-Air Schools, what is [illegible] highlighted is the ever-present artistic genius of the Mexican, rooted [illegible] in the prehispanic past but never in the Spanish element." Octavio Paz, in the catalogue to *Mexico: Splendors of Thirty Centuries*, demonstrates the [illegible] use of this discourse: "[illegible] sculpture, [illegible] painting, every [illegible], song is a form [illegible] by the will to [illegible] time and its erosions. [illegible] wants to be saved, to be converted into stone or drawing, into color, sound or word. This, to me, is the theme this exhibition of Mexican art unfolds before your eyes: the persistence of a single will through an incredible variety of forms, manners and styles." Octavio Paz, "Will for Form," in *Mexico: Splendors of Thirty Centuries* (New York: The Metropolitan Museum of Art, 1990), p. [illegible]. It is precisely this non-evolutionary approach that Roger Bartra has described as "melancholy."

From Rhythms of Recovery: Trauma Nature and the Body

Dr. Leslie Korn

Definitions of Three Major Stress Syndromes

The three stress syndromes reviewed below are: Post -Traumatic Stress, Complex Post traumatic Stress and Acute Stress.

Post-traumatic stress occurs in response to stressful events that overwhelm the individuals capacity to cope. These events, called *stressors* , may include actual or threatened death, serious injury, or a threat of injury to self or others. They would distress virtually anyone, causing intense fear, horror or helplessness. (Davidson and Foa, 1993; Koopman et al., 1995; APA, 1994).

Eight generic dimensions of trauma

Bonnie Green (1993; 135) has outlined eight generic dimensions of trauma. These include:

- Threat to life and limb
- severe physical harm or injury
- Receipt of intentional injury/harm
- Exposure to the grotesque
- Violent /sudden loss of a loved one
- Witnessing or learning of violence to a loved one
- learning of exposure to a noxious agent
- Causing death or severe harm to another.

In response to one or more of these stressors a person experiences a sense of victimization; this includes bereavement, loss of safety and a way of life, loss of family or friends and loss of physical and emotional well-being. The individual also feels betrayed: whether by

a person, by nature, by god, or by their own faith in the goodness and justice of life. The responses to trauma include autonomic arousal manifesting as recurrent, alternating, yet coexistent polarities of intrusion, for example flashbacks and nightmares and avoidance; numbness, affective constriction, depression anxiety negative intimacy, struggles with meaning and death imagery, (Ochberg,1987; Lifton, 1983).

Lifton (1983; 169-170) describes

> the survivor is one who has come into contact with death in some bodily or psychic fashion and has remained alive...The survivor retains an indelible image, a tendency to cling to the death imprint...So bound to the image can the survivor be that one can speak of a thralldom to death or a "death spell".

Complex Post Traumatic Stress

> Joan, an attractive, soft-spoken, accomplished musician of 25 came for an assessment complaining of fatigue and depression. She said she hadn't "felt right" since her parents divorced two years earlier and couldn't motivate herself to play music. She discussed a history of bulimia and current substance abuse, including alcohol, and opiates.
>
> She reported a happy childhood and denied any memories of trauma. However she reported a currently distant relationship with both her parents though she was close with her 2 sisters. She revealed chronic headaches, digestive and reproductive problems and occasional panic attacks while driving and watching movies. She had had three relationships that lasted less than a year

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since she was nineteen and was currently involved, unhappily with her partner of one year.

We proceeded with treatment addressing the issues that she chose for discussion, focusing on substance abuse issues, her relationships and depression. The clinical picture of depression, anxiety, chronic pain, substance abuse, dissociation and amnesia for past events and autonomic nervous system health issues, alongside her insistence about a rosy childhood suggested to me a history of physical and sexual abuse.

One year into treatment, Joan received word that her father had been arrested for abusing his daughters, Joan's younger sisters. The guards of her memories came crashing down and she was flooded with feelings and memories of her own abuse by her father until the age of twelve. Joan entered a period of acute activation of delayed post traumatic stress.

In the early 90's a definition of trauma that more accurately encompassed the effects of chronic, extreme stress on personality development was described by Herman, (1992a,b) called *Complex Post Traumatic Stress Disorder* As a diagnostic category it was proposed for the DSM 4 as Disorders of Extreme Stress Not Otherwise Specified (DESNOS). (van der Kolk et al, 1995). As clinicians listened ever more closely to the horrors of war and sexual trauma, they reached beneath the surface of the often misapplied diagnoses of borderline personality disorder, hysterical psychoses and schizophrenia, to discover that the factor common to up to 70% of patients was their exposure to chronic traumatic events. (Herman et al 1989). One retrospective review of records of chronically

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hospitalized patients, 50 percent of whom had histories of incest had a predominant diagnosis of schizophrenia. (Courtois, 1988). One of the difficulties in assessment is in what Gelinas (1990)refers to as a "disguised" presentation. This is additionally confounded by amnesia for traumatic events.

Definitions of Complex PTSD

- A history of subjection to totalitarian control over a prolonged period (months to years). Examples include hostages, prisoners of war, concentration-camp survivors, and survivors of some religious cults. Examples also include those subjected to totalitarian systems in sexual and domestic life, including survivors of domestic battering, childhood physical or sexual abuse, and organized sexual exploitation.

Alterations in affect regulation, including:
- persistent dysphoria
- chronic suicidal preoccupation
- self-injury
- explosive or extremely inhibited anger (may alternate)
- compulsive or extremely inhibited sexuality (may alternate)

Alterations in consciousness, including:
- amnesia or hypermnesia for traumatic events
- transient dissociative episodes
- depersonalization/derealization
- reliving experiences, either in the form of intrusive post-traumatic stress disorder symptoms or in the form of ruminative preoccupation

Alterations in self-perception, including:
- sense of helplessness or paralysis of initiative
- shame, guilt and self-blame
- sense of defilement or stigma

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- sense of complete difference from others (may include sense of specialness, utter aloneness, belief no other person can understand, or non-human identity)

Alterations in perception of perpetrator, including

- preoccupation with relationship with perpetrator (includes preoccupation with revenge)
- unrealistic attribution of total power to perpetrator (caution: victim's assessment of power realities may be more realistic than clinician's)
- idealization of paradoxical gratitude
- sense of special or supernatural relationship
- acceptance of belief system or rationalizations of perpetrator

Alterations in relations with others, including:

- isolation and withdrawal
- disruption in intimate relationships
- repeated search for rescuer (may alternate with isolation and withdrawal)
- persistent distrust
- repeated failures of self-protection

Alterations in systems of meaning

- loss of sustaining faith
- sense of hopelessness and despair

(Herman, 1992: 121)

Acute Stress Disorder

Case Roger came to treatment with his partner Bob after they were assaulted coming out of a restaurant late one night. During the attack they were called epithets, kicked and threatened with death if they went to the police. One week later, not getting out of bed, Roger reported nightmares, panic attacks, feeling in a fog and not wanting to go to work or see friends.

Acute Stress Disorder occurs in response to the same kinds of stressors that precipitate PTSD. (Brett, 1993: 192), including accidents, death of a loved one and natural or technological disasters.

Symptoms include:

- Dissociative and anxiety symptoms,
- reexperiencing the traumatic event,
- avoidance behaviors are present and interfere with social, task-oriented or occupational functioning.

The episode must last for at least two days and occur within four weeks of the trauma to warrant this diagnosis (Davidson and Foa, 1993). Assessment and treatment must begin immediately following exposure to maximize benefit. If symptoms last beyond a month following the traumatic event, Post Traumatic Stress Disorder (PTSD) may ensue, continuing for months or even years after the precipitating event. (Koopman et al., 1995). The important diagnostic difference between Acute Stress Disorder and PTSD is that ASD is time- limited, occurring within a month after the event and lasting not more than not more than four weeks. (Koopman et al., 1995; 29)

Acute stress can be complicated not only by earlier traumas but by additional stressors of social bigotry. Bigotry against homosexuality resulting in gay-bashing is one trauma. However non-violent bigotry also extends the impact of trauma and the capacity to access social supports for recovery from gay-bashing. Roger's acute stress was prolonged by the homophobia of the health and legal professions. His fear was exacerbated by his concern that police reports would reveal his victimization for being homosexual

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and word would reach his family and colleagues, jeopardizing his job and social network:

> Its bad enough getting beaten up, but then the police acted like I deserved it, and my landlord suggested that if we didn't "look' gay we wouldn't have had any trouble. Then the nurse asked if I had had an AIDS test. I don't feel safe anymore and I don't want to go out.

The *Disaster Syndrome* is another a form of acute stress which affects direct victims and rescue workers alike. The bombing of the federal building in Oklahoma in 1995 acutely traumatized victims and survivors in the building, their friends and families, the rescue workers and personnel and the community at large. Of the disaster syndrome Raphael and Wilson (1994; 333-350) state :

> Individuals are stunned and may wander the scene of devastation, apparently non-responsive to stimuli and unaware of personal danger. This state of numbness may last minutes, hours, or days, and it may seriously interfere with functioning and decision making. The person may need to be protected and cared for.

Keane (1990) has reviewed the disaster literature noting the impact of disaster stressors on workers.

> Studies of workers showed that 81% experienced the work as stressful, with 70% showing some strain (symptoms like PTSD). 32% of the Air Force workers involved in body recovery from Jonestown developed dysphoric reactions. After the Hyatt Regency skywalk collapse, intrusive phenomena, sleep disturbance, and impaired function occurred in more than 40% of rescuers and victims. Studies of voluntary fire fighters after

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> Australian forest fires showed high levels of disorder even 4 year later, with up to 20% being affected by PTSD.

Often an acute stressor activates a powerful response that appears to be multi-layered, with qualities that lead the clinician to suspect previous unresolved traumatic experiences from the past. In this case, acute stress is differentiated from acute activation of (delayed) PTSD, where traumatic stress has been treated but which can be triggered by subsequent life (traumatic) stressors. In these cases it is wise to proceed with establishing safety and addressing the current concerns. The past traumatic events can be addressed after the client has stabilized.

Two factors, social support systems and the meaning of the trauma significantly affect the development and intensity of PTSD. The ameliorative affects of social supports and the (cultural) meaning of the trauma for individuals and the community can be compared by reviewing two divergent disaster experiences-- Oklahoma City federal building bombing of 1995 bombing and the volcanic eruption of Mt. St. Helen in 1985. The bombing in Oklahoma was an unexpected, man- made catastrophe that took lives,(including children), maimed people and brought heightened awareness of terrorist activities in the United States. The eruption of Mt. St. Helen's in Washington state in 1978 was an expected, act of nature. Of those exposed to extreme stress, during the eruption, 40% reported major psychological disturbance three to four years following the disaster (Keane, 1990).

The *Yakima, Cowlitz, Wanapums, Klikitat* Indians who live near the mountain and in the path of the wind reported no incidents of

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traumatic sequelae in response to the mountain. For these tribes, stories about the mountain blowing open had been shared for as long as people could remember. The 'old ones" had predicted its rising and believed that the ashes would renew the earth. (Ryser, 1995). It may be that the elements of group meaning-making and social supports were protective against the development of stress disorders.

One of the dangers of exposure to any trauma may be the development of *counter-trauma syndrome* . This has been observed in civilians and rescue workers as the counter-disaster syndrome: "...an intense and continuing over involvement with disaster roles."(Raphael,1994; 348). Chronic re-exposure to stress, danger or violence (*reenactment*) is an aspect of counter-trauma, among former veterans-turned-mercenaries, some emergency medical personnel, and abuse survivors turned sex workers. It also occurs among therapists, themselves victims of childhood abuse or other traumas, who become over identified or over involved with their clients and have difficulties making important choices for self care

Somatic Symptoms of Trauma

People with traumatic stress experience a nexus of symptoms that include somatization, depression, anxiety and dissociation. They experience musculoskeletal pain that alternates with lack of feeling and sensation. They experience gastrointestinal, (Ross, 1994) heart, respiratory, (Litz, et al 1992) and reproductive problems. Nightmares invade their sleep and waking life is affected by recurrent visual images of the trauma itself. They feel out of control. This perception

in turn drives them to remain on guard, hyper-vigilant and overly controlled. Affective outbursts that include irritability, aggression, and fear, lead in turn to withdrawal and detachment from activities and interpersonal connections.

All of this contributes to high rates of addictive or *self-medicating behaviors:* The use of alcohol and drugs, food fasts and binges as well as other forms of self -injury such as cutting and burning the body may be viewed in part, as (unconscious or conscious) attempts to alter brain chemistry disregulated by trauma. The rates of substance abuse and self-injury are high among trauma victims. Seventy percent of alcoholics report a history of trauma (van der Kolk 1994b) and 75% of Vietnam veterans with PTSD developed problems with alcohol. One study reported that sixty-nine percent of girls with eating disorders had a history of child sexual abuse (van der Kolk and Fisler, 1994). Another study reported that eighty percent of subjects with a history of self-mutilation reported childhood histories of sexual or physical abuse (van der Kolk and Fisler, 1994). Another form of addiction is risk-taking behavior also called *re-enactment.*. *Reenactment* refers to behaviors where the individual reenacts and relives (unconsciously) parts of the trauma. (McCann and Pearlman, 1990). This behavior suggests a biological analogue to what Freud called the *repetition compulsion* and offers a psychobiological theory of why traumatized people engage in reenactment behaviors. For example a high percentage of female and male prostitutes also have histories of child sexual abuse and veterans return to war as mercenaries. Theories that victims are

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"masochistic", or 'cause their own problems', underlies *victim-blaming* by professionals and the public alike. These ideas must be reconsidered and repudiated in the light of what is now understood about the bio-behavioral basis for reenactment and the impairment of self care and self soothing capacities of people who have been exposed to chronic, traumatic experiences. Re-enactment appears to arise in part from a psychobiological imperative to produce *endogenous opioids.* These naturally occurring brain opiates alleviate pain, numb feelings, reduce anxiety and have a tranquilizing effect. Researchers speculate that these naturally occurring opiates are chronically depleted in people with PTSD (van der Kolk, 1987; Hoffman et al 1989). Painful states result in (unconscious) efforts by the victim to stimulate opioid production, either by re-exposure to trauma (which activates brain opiate receptors in the same way as exogenous opioids like heroin (Kolk personal comm. 1994 b) or by other self-harming behaviors, like cutting or burning the body. Prior to self-injury, victims report the overwhelming urge to alleviate to both feel, as well as to relieve anxiety (van der Kolk, in press: Favazza, 1987). Endogenous opioids are also implicated in dissociation and *stress-induced analgesia,* a concept reviewed below in the context of *addiction to trauma* and *addiction to stress.* Helping clients gain control over psychophysiological reactions, including substituting positive sources for production of endogenous opioids, is one element in a comprehensive plan of recovery.

Animals exposed to inescapable stress develop analgesia when exposed to another stressor shortly afterward (Krystal, 1990). *Stress – induced analgesia* is due to the production of *endogenous*

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opioids. Endogenous opioids contribute to complex cyclical patterns of affective and behavioral responses, including the addictions, which I review below. Endogenous opioids are neuropeptides that are found in the brain and in receptors throughout the body. Their discovery has precipitated a revolution in scientific knowledge about the relationship of emotions to chemistry and has begun to illuminate some of the channels by which the brain, mind and body communicate with each other. Dr. Candace Pert discovered the complex pathways of the endogenous opioids (endorphins, enkephalins) and suggests they are " the biochemical correlates of emotions" (Moyers, 1993: 178).

The role of endogenous opioids is central to understanding the biological substrates of traumatic stress. Endogenous opioids are tranquilizing and decrease anxiety, rage, aggression and paranoia. Chronic opioid depletion appears to contribute to substance abuse, self-mutilation and eating disorders and dissociation.

(Figure 4)

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Addiction to Trauma

anxiety
endorphin release
anxiolytic/tranquilizing action
decrease rage/aggression
. decrease paranoia
anti-depressant action
increase sense of well being
increase sense of control
cessation of stimuli
opiate-withdrawal-like syndrome due to
central noradrenergic hyppereactivity
anxiety
irritability
explosive outbursts
insomnia
hyperalertness
emotional lability

Source: Wilson and Walker (1989)

Traumatic exposure stimulates opioid production. This results in stress-induced analgesia, which also contributes to the dissociative process (van der Kolk, in press: 12). Prolonged and repeated exposures leads to opioid depletion and is associated with painful physical and affective states.

Prolonged use of alcohol also depletes endogenous opioids leading to *anhedonia* the lack of ability to feel pleasure (Maliszewski, 1991). Heroin, an *exogenous opioid* which temporarily reduces physical and emotional pain supplants opioid production . This may account for why recovering addicts are often very pain --sensitive

and also respond well to acupuncture which stimulates production of opioids. Therapeutic methods such as acupuncture, massage, exercise and shamanic rituals are effective in part, because they stimulate opioid production and help people find healthy replacements for maladaptive behaviors. Public health programs, recognizing the relationships among chronic exposure to violence, depression, substance abuse and cyclical acts of crime have instituted models in prisons and clinics which combine counseling and acupuncture detoxification therapy.

Stress and the Immune System

Chronic stressors appear to produce cardiovascular reactivity, immunologic, and endocrinologic alterations (Kiecolt-Glaser, 1994). Following the nuclear accident at Three Mile Island, residents had higher blood pressure and depressed immunologic activity (Kiecolt-Glaser et al, 1994; 333). Grief, such as the separation of non human primate offspring from their mothers results in suppression of the immune system (Cohen, 1994). Widows and widowers are also found to be more susceptible to illness during the first year of the loss of their spouse By contrast, high levels of social attachment behaviors appear to be protective against immuno- supression (Cohen et al., 1994). This research points to the importance of strong social connections in order to recover physical and psychological health after trauma. Below I address how attachment, empathy and socially constructed rituals provide a psychobiological basis for the recovery of healing rhythms.

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What are the rates of traumatic stress?

- What events contribute to its development?
- How do different events affect the development of symptoms?

Studies indicate that 39% to 70% of people in U.S. society have been exposed to civilian traumatic events, a major portion of which are serious crimes (Resnick and Kilpatrick, 1994). PTSD rates range from 25% for crimes of a general nature to 32% for completed rape, and rates approaching 50% for those whose crimes include fear of death and receipt of injury (Resnick and Kilpatrick, 1994). A homosexual male person is four times as likely to be a victim of violent crime as a member of the general U.S. urban population. One study revealed that one in five men and one in ten women reported being punched hit, kicked or beaten. (LeBlanc and Weinerman, 1990)

Paykel (1978 : 245) reports:

following a traumatic event there is a six-fold risk of suicide, and a two-fold risk for the onset of depression. About 60% of persons diagnosed as having a mental disorder have experienced a severe life event in the weeks preceding the onset of that disorder, as compared with about 20% in comparison groups not diagnosed as having a mental disorder.

There are complex socio-cultural interrelationships among social and domestic traumas, repetitive violence, self-medicating behaviors and the disproportionate incarceration of minorities in the United States. Approximately 1.5 % of the population in Washington state are American Indians yet they comprise nearly 20% of the prison

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population (Ryser, 1995) . A recent survey showed that 13% of drug users in the United States are Afro Americans. They comprise 55% of the arrests and 75% of the people in prison for drug use (Chasney, 1996)

The long term developmental effects of urban violence trauma syndrome on child victim include:

- a damaged sense of self
- trauma-specific transferences
- adaptations to danger
- cognitive and emotional stress responses
- post-traumatic stress that also manifests in play and health

(Parson, 1994)

SEXUAL VIOLENCE

Cultural myths which deny male sexual victimization have contributed to a ten year lag in research about men as compared to woman (Lisak, 1993). The prevalence of sexual violence against men and boys is reported to be about 20% with female perpetrators accounting for approximately 50% of the assaults (Lisak, 1993).

Data on rape and sexual assault prevalence is no less astounding. One estimate suggests that " over 12 million women in this country have had a completed rape sometime in their lives" (Resnick and Kilpatrick 1994: 1). A recent Justice department report (1994) found 500,00 sexual assaults occurred in the United States-- 80% were committed by people the victim knew personally. The majority of female rape victims are raped by family members and acquaintances. Among women who were raped, 33% were raped between the ages

of 11 and 17, 38% at the age of 18 or over, and 29% at age 11 or younger (Harman and Jackson, 1994) One survey indicated that 31% of all rape victims develop rape -related PTSD sometime in their lifetimes (Harvey and Herman, 1992). The long term impact of sexual assault by people the victim knew has longer lasting and more detrimental effects than assault by strangers (Harvey and Herman, 1992 . When a completed rape included life threat and injury the rates of PTSD soared to 80% (Resnick and Kilpatrick, 1994).

A recent study of undocumented women in the San Francisco area found that 34% of the Latina, 30% of the Chinese and 20% of the Filipina women reported experiencing domestic violence. 48% of the Latina women said that the intensity of the abuse had increased since coming to the U.S. A similar study in the district of Columbia indicates that as many as 77% of undocumented Latina women married to U.S citizens or permanent residents may be battered (National Council for Research on Women, NY; 1993: 12).

White collar rapists are people who under the guise of their professional garb, prey on the vulnerabilities of people they are supposed to care for and protect. Among these are teachers, therapists, physicians, lawyers, and supervisors. One survey found that 15 % of 8-11 graders had been sexually harassed by a staff member at school, 25% of girls and 10% of boys (Goldberg, 1995). Another survey found that 5% of teachers engaged in some form of sexual abuse of children. 13 % of high school graduates responding to a survey in North Carolina said they had sex with a teacher (Goldberg, 1995). Sexual boundary violations increase at the university level. studies consistently report that 20-30% of female

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students have been sexually approached by their professors (Rutter, 1989). One study reported that 17% of female psychology graduate students had been sexually involved with their professors and 30 more had been harassed. (Rutter, 1989). Estimates of prevalence of sexual assault by therapists and other professionals range from 7-10% in self- report based studies (Gartrell et al. 1986). A survey of psychiatrists revealed that 88% percent of the sexual contacts occurred between male psychiatrists and female patients. (Gartrell et al. 1986) and each perpetrator averaged abusing 8 patients. Self reports however are likely to result in under reporting. The abuse of power by a therapist is devastating to the lives of victims. if a victim returns to therapy for treatment, (and many never do because of this betrayal), the new therapist must be prepared to deal with the traumatic transference engendered by the abusive therapy.

The sequelae of therapist-client sex include:

- ambivalence
- a sense of guilt,
- feelings of emptiness and isolation,
- sexual confusion,
- impaired ability to trust,
- identity, boundary, and role confusion,
- emotional lability,
- suppressed rage,
- increased suicidal risk
- cognitive dysfunction (especially in the areas of attention and concentration, frequently involving flashbacks, nightmares, intrusive thoughts, and unbidden images (Pope, 1988; 222)

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Of the victims who initiated court proceedings it took an average of ten years following the end of treatment abuse for victims to file a complaint, and most never do file a complaint. If a complaint is filed, the victim must content with a legal and administrative relief system that is often unbelieving, in denial and often hostile to the victim. The therapist who is counseling a victim of such abuse should be well-versed in both the symptoms and treatment approaches (groups may be more efficacious than individual therapy). Additionally s/he should either be versed or know of peer -support groups, advocacy, legal and forensic support for referrals.

WAR AS CONDONED SOCIAL VIOLENCE

During the South East Asian wars, between the period 1960 and 1980 there were over 3 million veterans who served in the war zone, 10,000 of whom were women (Scurfield, 1993). Approximately 25%, or 750.000 Viet Nam veterans have symptoms of chronic traumatic stress. 85% of whom report they have never seen a mental health professional (Scurfield, 1993). Since 1975 over 700,000 South East Asian refugees have resettled in the United States.(Mollica, 1990). Nearly 100% of the Khmer population living in Santa Clara county had lost relatives (Mollica, 1990). In another survey, 63% of the Khmer had lost close family members, 22% of the Khmer women had lost their husbands, and almost 20% had lost children (Mollica, 1990). Khmer psychiatric patients in the United States have experienced an average of 16 major trauma events, three of which are considered torture. Among these are deprivation, physical injury and torture and incarceration, brainwashing, re-education camps, and witnessing

killings or torture (Resnick and Kilpatrick, 1994). Of a total of 550,000 veterans sent to the 43 day Persian Gulf war approximately 10-15% experience symptoms of traumatic stress. An additional 30,000 complain of as -yet -undiagnosed debilitating disease symptoms called *Gulf war syndrome* .

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Hysteria to Post traumatic stress: a brief history of a diagnosis

Hyster =Greek for womb

The history of Hysteria is ...the his-story of male fear.

G.S. Rousseau

Dis-ease communicates distress, and distress occurs within complex socio-cultural and political environments. The cluster of symptoms now diagnosed as post-traumatic stress has a long history of other names--the most enduring of which was Hysteria. For centuries the name Hysteria was a catch-all diagnosis that encompassed many of the symptoms now recognized as post-traumatic stress. It is useful to examine how the diagnosis Hysteria reflects gender and racial biases of the culture in which it is applied. While the diagnosis of Hysteria has been applied predominantly to women over the centuries, it has also been recognized in men--though often under different names during different epochs (Showalter, 1993).

To illustrate these ideas, this I have chosen some examples of the diagnosis and treatment of symptoms that have gone by various names: Hysteria, witchcraft, shell shock, and post traumatic stress. I focus here on identifying symptoms that today would be diagnosed as traumatic stress and that reflect how gender bias merges with cultural expectations and categories to determine treatment. I have also chosen examples which present some treatment methods, not unlike those known today. This serves a secondary purpose of contextualizing current methods.*

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* There are at least two dangers to analyzing the past from this perspective. One is the danger inherent in applying twentieth century standards to the past--the second, is the translation and interpretation of literature--which only recently has reached levels of accuracy influenced by post-modern relativisim. However, even with these two caveats--my attempt here is to identify the presence of universal issues, however markedly they may differ across

HYSTERIA

"What had presented itself to the Greeks as a fiery animal, an overheated, labile, voracious, and raging uterus, was now, in Charcot's world, diagnosed as a sexually diseased and morally debauched female imagination. G. S Rousseau

Loss of speech, and its various permutations throughout the ages is an important symptom of hysteria. Today, while men and women do not as often lose function of their vocal cords , they as often have no words to feed them. The current vernacular focuses on (girls and women) "finding their voice" or not losing their voice (Belenky ,et al. 1986). This culture-based phenomenon is rooted, some researchers believe, in the patriarchy's deafness to girls and women's experience (Gilligan, 1982). As I explore in Chapter 5, this loss of voice by abuse survivors is quite literal: many are threatened with death, or the death of loved ones if they speak the truth. Public legal proceedings often reinforce this demand of silence lest an even greater price be exacted.*

The psychological revolution in the 19th century began with the stories of 'hysterical' women— Augustine, Bertha Papenheim (Anna "O"), Ida Bauer ("Dora")- are among those patient-subjects their doctors Charcot, Breuer and Freud, respectively, chronicled. The stories these women told contributed to an understanding of how the (unconscious) psyche found a language through somatic expression. This led to Freud's theory called *somatic compliance-;* the body *(soma)* told the story the mind (psyche) couldn't put to words. However

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time and culture. These biases continue to affect human intercourse-- violence and trauma- and gender role definitions in illness and healing.

* I refer here to people like Anita Hill and Patricia Bowman.

these women's stories were filtered through the reigning paradigm of the day and much was misunderstood and ultimately (re)codified in the male model of development that underscored psychoanalysis. Recent developments in women's psychology in the United States offers a new and multivarious paradigm of women's development. French post -modern feminists offer an interpretation of hysteria as..."a specifically feminine protolanguage, communicating through the body, languages that cannot be verbalized." (Showalter 1993). These scholars have created a 'politics of writing (the) body,' called *Ecriture feminine.*

HYSTERIA IN ANCIENT GREECE

A woman of ancient Greece felt a terrible pressure rise from her belly, move up through her diaphragm, and suffocate her speech as it rose to her throat. The 4th century physician Galen's diagnosis was *hysterike pnix,* the 'suffocating womb '. The suffocating uterus was deemed the cause of hysteria for which prescriptive treatment included massage, venesection, and inhalation of essential oils whose healing properties altered moods like today's aromatherapy. The early association of possession, paralysis, and prostration with woman, womb and hysteria, codified the origins of medical misogyny that permeated rational Greek culture, and later became the foundations of western medicine (King, 1993). The general consensus was that women's sexuality was at the root of their pathology. Martial (40-104 A.D.) refers to women feigning hysteria in order to have intercourse with young doctors (then an established treatment for hysteria) (King, 1993). This reference to women's sexuality is re-introduced in the 16th century when Van Forest states that "some women simulate hysterical suffocation by imagining sexual intercourse " (King, 1993: 62).

HYSTERIA IN CHINA AND JAPAN

The symptoms and diagnosis of hysteria were not limited to ancient Greece and the western world. Ilsa Vieth, one of the first contemporary historians of hysteria, suggests that the major difference between hysteria as a diagnosis in western cultures and hysteria and possession which grew out of the animistic religions of Japan and China, was that no "personal responsibility (and therefore no blame) attached itself to the victims of such forces" (Vieth, 1965:75).

In ancient China, scholars theorized that mental disorders developed as a result of the imbalance of *yin* and *yang* – that one had lost the way of the *Tao* * or the correct path of life. According to Vieth, popular beliefs in Asia centered on the supernatural. Stories about "apparitions, described as hairy, of monstrous height, and intent on violating maidens were known to cause madness in those that beheld them" (1965: 78). Perhaps these 'supernatural' stories were but cloaks around the reality of assault in women's lives. Cures, carried out by the *Wu*, a male or female healer designated to expel evil influence took the form of exorcisms during the T'ang dynasty (A.D. 618-906). One such cure describes a daughter... {with} fits of madness, in which sometimes inflicted injuries on her own self, jumping into fire or running into water; and meanwhile she became pregnant as if by sexual commerce with men. (79).

The healer, Vieth (79) goes on to say "succeeded in inducing a deep slumber in the patient. and the next day she was released from her obsession." This clinical picture shares much in common with the symptoms of today's victim of sexual assault who reenacts the trauma through self- mutilation or by working as a prostitute. Likewise, the reference to "inducing a deep slumber" may refer to hypnotic induction.

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* (Lao Tzu the reported author of the Tao Te Ching, the major philosopical treatise outlining the Tao, wrote about 600-500- B.C, the same time the Hippocratic corpus was developing, neither group of scholars knew of the other's existence)

The relationship between women and hysteria becomes linked to demonology during the middle ages in the west (Rousseau, 1993). Evidence is found in their (perverse) sexuality, their worship of nature, their use of hallucinogenic plants and their communion with animals (all of which ran counter to the Church canons). They were 'witches' who "talked to plants and animals" and whose "numbed patches of skin (Roussaeu, 1993; 98) (numbness is the signature of Hysteria, demons and traumatic stress (and traumatic counter transference!) signified their demoniacal nature. The 17th century physician Sydenham who followed the adage *vis medicatrix naturæ* , brought hysteria out of the dark ages of its demonological associations when he observed "hysteria imitates culture" (Rousseau, 1993: 102) However concepts of Woman have changed since medieval times, images and beliefs about Her debauchery still infect the practice of modern medicine. The resulting persecutions have merely mutated. Martin Charcot, the 18th century neurologist referred to the bodily signs of hysteria as 'the stigmata' drawing on the Inqusition's*stigmata diaboli* that marked the bodies of witches. Charcot wrote:

> You will meet with { simulation } at every step in the history of hysteria, and one finds himself sometimes admiring the amazing craft, sagacity, and perseverance which women, under the influence of this great neurosis, will put in play for the purposes of deception - especially when the physician is to be the victim...It is incontestable that, in a multitude of cases, they have taken pleasure in distorting, by exaggerations, the principal circumstances of their disorder, in order to make them appear extraordinary and wonderful (Gilman, 1991: 61-62).

In 1909 Jung wrote Freud for advice about his patient, Sabina Spielrein, a brilliant young Russian Jewish medical student whom Jung had diagnosed with hysteria and who was now perilously distraught by Jung's betrayal of her as a result of his adulterous and abusive sexual relationship with her:

> Since I knew from experience that she would immediately relapse if I withdrew my support, I prolonged the relationship over the years... She was, of course, systematically planning my seduction, which I considered inopportune. Now she is seeking revenge. (Kerr, 1993: 218).

To which Freud replied:

> The way these women manage to charm us with every conceivable psychic perfection until they have attained their purpose is one of nature's greatest spectacles (Kerr, 1993: 219).

And in 1920 a a Harvard lecture, Pierre Janet, the French neurologist whose work on hysteria and dissociation has been recently resurrected as seminal (van der Kolk and van der Hart, 1989) "reinforced the belief that all the hysterics were women... {and} that hysteria was frequent only among the French women, which astonished nobody, on account of their bad reputation" (Showalter, 1993; 314) .

The majority of patients diagnosed with Borderline Personality disorder are women. The diagnosis is often applied to patients who have been (sexually) abused by therapists and used as a defense in the courts. In spite of some gains within the professions, clinicians use language that betrays pervasive professional attitudes about the role of women's sexuality as a cause of their betrayal: " Gutheil writes:

> Patients with Borderline Personality disorder are particularly likely to evoke boundary violations of various kinds, including sexual acting out in the transference-counter-transference. Patients with Borderline Personality Disorder apparently constitute the majority of those patients who falsely accuse therapists of sexual involvement (Gutheil, 1989: 597).

Hysteria has long been considered a dynamic disease category that reflects the *mores* and attitudes of the culture it reflects. Yet it may be precisely because hysteria (and I would submit complex PTSD) mirrors culture back to itself, that societies across national and cultural boundaries have a difficult time recognizing and believing the realities of the victimization that precipitates it. Recognizing victimization and hysteria among men has also been fraught with denial. Today, denial about male victimization is reflected in the dearth of data about male sexual abuse (Lisak 1993). Yet through the ages male hysteria could not be denied. The voiceless permutations of distress expressed themselves throughout the centuries via somatic complaints, wherever culture was pitted against gender and behavior. However these symptoms often were given different names.

This took many forms. Showalter suggests:

> throughout history, the category of feminine "hysteria" has been constructed in opposition to a category of masculine nervous disorder whose name was constantly shifting. In the renaissance, these gendered binary oppositions were set up as hysteria/melancholy' by the seventeenth and eighteenth centuries, they had become hysteria/hypochondria. In the late nineteenth century they were transformed into hysteria/neurasthenia; during world war one they change yet again to hysteria/shell shock; and within Freudian psychoanalysis, they were coded as hysteria/obsessional neurosis.

After all, hysteria was a wom(b)ans disease—or was it?

The term *shell shock* coined during World War 1 by Dr. Charles Myers who observed that the symptoms of hysterical women were similar to the " amnesia, impaired vision and emotional distress among British soldiers in France" (Showalter, 1993; 321). Since the dominant nosology leading into *fin de siecle* medicine suggested hysteria was a feminine complaint, the soldiers' symptoms

had to be traced to a physical injury, from the shock of an exploding shell. (Showalter, 1993; 321). Gender role oppression, and the stoic silence it demanded, hurt men as well. As Showalter points out:

> If the essence of manliness was not to complain, then shell shock was the body language of masculine complaint, a protest against the concept of manliness as well as against war." (Showalter, 1993; 325).

Karl Abraham, a prominent turn of the century analyst articulated that shell shock or male hysteria occurred in" passive, narcissistic, neurotic and latent homosexuals" (Showalter, 1993: 324). Even as these 19th and early 20th century therapists named the realities of victimization, most wilted under the various influences that distorted their theories and therapeutic outcomes. W. H. Rivers, a psychologist and anthropologist who was known for his compassionate, successful treatment of traumatized first World War British soldiers (Showalter, 1993: 325) may have had a more accurate understanding of "difference" than did doctors such as Abraham, because his own somatic symptoms (Showalter, 1992) and homosexuality had prepared him for the turf of difference. This is all to suggest ways in which the fears of (sexual) difference embedded in the culture of Victorian Europe affected diagnosis as well as treatment. These fears extended beyond gender relations, to its epistemic twin of race relations. While it is beyond the scope of this paper it is important in any discussion of diagnostic foundations and nosologies to mention the role of racial bigotry that often occludes the vision of science. Psychiatric historian Sander Gilman has written persuasively about how anti-Semitism profoundly affected Freud's development of psychoanalysis, and how Freud's internalized oppression as a Jew – was projected onto women.

When Freud was attempting to unravel the mysteries of the hysterics symptoms in the early 20th century, he was subject to the pressures of his professional milieu. When he suggested that hysteria was based in early childhood sexual trauma (Kerr,1993).he was ridiculed and threatened with censure by his colleagues . The effect of this scorn was overdetermined however, for as Gilman points out, Freud was already an outsider by virtue of his being a Jew.

The dominant European attitude of the era was that Jews (especially Jewish men) were subject to hysteria by virtue of their (genetic) effeminism and debased (incestuous) sexuality (Gilman, 1991). As it was, Freud's mentor, neurologist and hypnotist Martin Charcot was a rabid anti-Semite. This revelation compelled Freud to distance himself from Charcot, who also believed in the traumatic sexual etiology of hysteria. Freud charted a separate course, turning to study with Bernheim, a Jewish physician living outside of Paris whose hypnotic technique was devoid of the theatrical showmanship which ultimately discredited Charcot. However this contributed to Freud's negation of his seduction theory and led to his fantasy that little girl's (and boys) desired their parents sexually. (the Oedipal complex). Gilman suggests that indeed much of the basis for psychoanalytic theory, and I suggest, the modern reaffirmation of woman-as-hysteric, rests with Freud's displacement of his own sense of pathology (the "otherness" of being a Jew) onto woman-as-other.

From a somatic perspective, Gilman points out, this took form in the psychoanalytic method of laying on the analytic couch and being "heard" and not "seen". For the couch assured one lay (or sat) out of visual, somatic range. With the late 19th century emphasis in diagnostic nosologies (and continuing into 21st century popular western cultures) on "looking like a Jew", the substitution of verbal language assured a "raceless" neutrality. The results

however, translated into what linguist Robin Lakoff asserts, pervade current clinical attitudes to this day:

> The short-sightedness (emphasis mine) of those parts of psychoanalytic theory that concern female psychology not only so permeates the whole that it is impossible to expunge, but informs and indeed creates the backbone of all individual, insight-oriented therapies.

This leads one to examine the whole area of the influences on Freud and others of the inter-generational transmission of Jewish beliefs and laws about women

During the early twentieth century the symptoms of hysteria, (which was the predominant neurological disease of its time) were separated into several categories. Today these symptom clusters may be found in Post Traumatic Stress disorder, Somatization disorder, Dissociative disorders, Conversion disorder, Anxiety disorder, Borderline Personality disorder and Histrionic disorder. The current professional consensus that hysteria no longer exists is taken up by Rousseau, who following Sydenham's lead argues that hysteria imitates culture. He suggests, it may just have donned a new costume:

> For if the medieval hysteric's geographical locale was the farm on which she toiled and conversed with family and neighbors; if the Georgian woman's world was the Ranelagh and Vauxhall Gardens where she paraded, and the town and country houses where she sought pleasure; if the Victorian woman's interior purview was the dark bedroom in which she pretended to see nothing at night, certainly not her husband's naked body and aroused sexual organs; then today these locales have not disappeared but have been transformed into other social locations: the health club, the bedroom with its paraphernalia of biofeedback machines, the therapist's waiting rooms, the pain clinics, even the beauty salons and ever-proliferating malls. Paradoxically, it seems today that these are the locales of health and therefore of pleasure and happiness. Yet it may be, upon closer observation, that they are merely the places where modern hysteria - what our vocabulary

calls stress - has learned to disguise itself as health. (Rousseau, 1993; 100)

There remain to examine, two intersecting historical parallels to this current ethos of controversy: women's rights and the publicization of sexual assault. Current controversies about "false memories" and "memory implantation" by therapists in both the U.S. and Europe are an example of societies' denial of the prevalence of sexual abuse. When Freud first presented his theory of the etiology of hysteria in 1896, to the Viennese Society of physicians, Krafft-Ebing said that it sounded " like a scientific fairy-tale" and still others accused him of suggesting the repressed memories of abuse to his patients (Kerr, 1993: 38). Of this dilemma Kerr writes: " Understandably, Freud's claim {of the abuse etiology of hysteria} raised epidemiological eyebrows. Hysteria was enormously widespread. It simply did not seem possible that child abuse had occurred in every case." (Kerr, 1993 : 37).

Like today these struggles, not coincidentally took place in an era in which "the feminist challenge to patriarchy," Tomes (1994) points out:

had become extremely threatening by the late 1800's; the womens rights movement had made substantial progress in expanding educational, political, legal and at least among the avant garde. sexual freedoms for women...

However with Freud's disavowel of the seduction theory came :

the amunition for a counter revolutionary backlash; it deflected feminisms challenge back on its proponents by labeling them neurotic and maladjusted and sending them to the analysts couch.

As we near our own end of a millenium, Solomon suggests that contemporary mental health professionals deny because:

{they} are unable to transcend prevailing cultural and social norms; (b) they are "blinded" by professional theories; and (c) denial may stem from a fundamental human difficulty in comprehending and

acknowledging our own vulnerability (Solomon, 1995; trauma volume).

Summary

By identifying some of the recent cultural and historical foundations that inform the practice of treatment over the past several hundred years, I have contextualized, not only the range of theories, often invisible or unspoken, and generally compartmentalized assumptions in the practice of therapy.

Not to question the bases for clinical assessment, diagnosis and treatment, destines us to repeat archetypal patterns of power imbalances, betrayal and poor treatment, resulting in *iatrogenic* dis-ease. It is essential not to lose sight of the individual who presents herself for treatment. Ultimately diagnosis and treatment centers on the unique characteristics and humanity of the person who walks through our door

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Culture and assessment

"For all beings on our planet there is no greater pull on the body and the soul than the attraction felt for the earth itself. It is this place that each precious being develops its community, its way of consuming and producing, its spiritual life. This intimate relationship between being and place, the evolving oneness, that each community of beings has is what we all know as culture--the worship of land, of place .

Rudolph C. Ryser

When I was training in psychotherapy in a community hospital in Cambridge Lupita Martinez was referred to me after extensive physical work-ups had found "nothing ' wrong, in spite of her insistence that she had terrible pain. Lupita's pains and symptoms brought her repeatedly to the emergency ward where she said she was having a stroke. She was referred to psychiatry, which was an affront to her; *No hay un problema con el mente! Es el cuerpo, No me intienden.* (There's no problem with my mind! Its my body! They don't understand me!.) I went to her home to see her for an appointment and entered a tiny apartment steamy with beef *caldo* and brightened by dozens of neon *Virgins* and baby *Christos.* She was seated at a small window overlooking a train track. She spoke only Spanish and if we were to communicate I needed to speak her langauge. More than conversing in Spanish, I neededto understand what she meant when she spoke her words, indeed listen through her ears and not that of European psychotherapy. In her experience, mental problems held great shame. I asked her to tell me about her symptoms, explaining that I did *masajes(massages)* and used *hierbas.* (herbs). She sat with her back to me and I touched the areas of pain in her shoulders and chest. Within a few moments out came a flood of tears; the

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pain of relocation from rural Santo Domingo—the loss of her husband—the new life her children had made—life was leaving her behind. The loss and grief she felt poured out over several weeks during which we worked together. By speaking her language, linguistically and somatically, we formed a bridge. She felt understood. We communicated and she felt my willingness to speak her language—as well, she must have felt my own yearning for life in a small tropical village not much different from her own Our worked spanned three months during which time her symptoms abated. Together we developed ways for her to stay connected with the past yet also move forward in her present. By validating and responding isomorphically to her pain we were able to bridge our cultural differences and find the rhythm of a "third culture" which held her healing.

DEFINITION OF CULTURE

In order to understand the role of culture in assessing traumatic stress it is essential to understand what is meant by *culture.* Any definition of culture must first focus closely on the root words, *cult* and *ure,* which means worship (of the) earth. (Ryser, 1994a). Culture is thus defined in terms of the connections between people to their land and to their "'shared creativities' which include values, art, language, and other symbols of collective life" (Comas-Diaz and Griffith, 1988).

The relationship between trauma and cultural losses (of homeland) is extensive. There are an estimated 44 million refugees worldwide, eighty percent of whom are women and their children. (Women's Commission for Refugee Women and Children Annual Report 1993). The United Nations High Commissioner for Refugees estimates that there are about 12 million political refugees in the world-- four million are in exile in Australia, North America, and Western Europe. At least 20% of the political refugees in the Western countries have suffered torture (Agger and Jensen, 1993). Refugee

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status is less a product of ethnic differences than a result of disagreements and fighting over home and land. (Ryser, 1994a). The elemental loss of a safe abode that many people experience reflects the foundation upon which culture and human connectedness to self and others depends. Disintegrating social connections is one of the persisting losses endured by Viet Nam veterans including the lack of "home-coming " and the denial of a place in which to locate their bodies (Korn 1987). High rates of homelessness among both Viet Nam and Gulf war veterans persist. An estimated 271,000 of the nations 26.4 million veterans are homeless, 10-15% of gulf war veterans have PTSD (Schmitt, 1995).

The United States is a country of immigrant populations reflecting wide cultural diversities. Effective assessment and treatment depends upon understanding the complex relationship between culture and trauma , including the *intergenerational transmission* of trauma.

Intergenerational transmission of trauma refers to the transmission of victimization, traumatic exposures and traumatic meaning-making systems from one generation to another. I also use it to refer to how whole cultures pass this information along. Everyone has a cultural heritage and we are often influenced by several, which reach back many generations. A common *ethnocentric* mistake is to regard ones own culture as the "norm" or dominant culture and another's culture as a minority or "other." Another form of ethnocentrism is called *cultural reductionism.* This reduces behaviors to their cultural influence and may include idealization or denigration of culture-specific behaviors. When a therapist clarifies her or his own positive and negative cultural legacies, it decreases the ethnocentric impact on assessment, facilitating empathic regard.

Traumatic experiences have affected every cultural group in the United States today. Before the 17th century arrival of religious refugees escaping persecution in

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England, the Spaniards arrived in what is now called Mexico, Puerto Rico and California. Their impact on the lives of Indians on the continent was often traumatic to indigenous peoples. Chinese, Philippine and Afro-American people all arrived under traumatic conditions, as slaves, between the 16th and 19th centuries. The arrival of the Europeans had a varied affect on the five hundred tribes of indigenous peoples populating every corner of the continent. Popular (stereotyped) notions about the current lives of American Indians, who are represented by membership in over five hundred tribes, illustrates the complex role of trauma and culture and the tendency toward cultural reductionism. Attempts to classify people by their cultural heritage or in particular their "color" risks gross simplification and perpetuation of oppressive stereotypes. The tribes of North America all had varied experiences with the Europeans, ranging from productive to differing degrees and types of trauma. Vestiges of the traumatic past remain strong today, especially where they are reinforced by government and social policies. Among non -Indian populations however American Indians are an "invisible peoples." Traditionally anthropologists and social service providers have paid little attention to the creative resiliency of many tribes. Charting the specific traumatic exposures and successful coping strategies tribes and their members have employed in the face of genocide counteracts the tendency toward cultural reductionism. While the depth this requires is beyond the scope of my current analysis, a brief example may illustrate the kind of work which could be done in the context of understanding community trauma and the intergenerational transmission of trauma

Bigotry abounds in the United States, yet cultural reductionism is bigotry with another face. Americans of European and African descent still live with the bigotry and perpetuating violence resulting from the unresolved cultural trauma of slavery. And yet popular media and scholarly media perpetuates the myth that people who are

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"black"--have a homogenous experience in the U.S. Clinicians must be careful not to perpetuate this folly. Research suggests that various "minorities" in the U.S suffer disproportionately from post traumatic stress.

How does the experience of social oppression and trauma among minorities increase vulnerability to PTSD?

Based on research about Viet Nam war veterans Scurfield suggests:

> ...all minority veterans of color, to varying degrees, have had their prewar, war, and postwar experiences complicated and exacerbated by what has been described at the triple oppression of poverty, racism, and cultural oppression ..." Complications specific to minority veterans included fighting a white man's war against a Third World country, blatantly racist attitudes and behaviors by the military ...racist incidents in country that occurred in rear-echelon areas, and continuing racist issues in the United States." (Scurfield, 1993; 292)

Culture and the Meaning of Trauma

As I discussed earlier, the meaning of the traumatic experience is a central to the development of PTSD. The individual's personal appraisal of the event(s) is affected by both implicit and explicit cultural expectations and assumptions about victimization. Examining the symbolism and meaning of sickness, intra personally, (within the individual) inter-personal (between individual and practitioner/healer) and intra-culturally (between individual and culture), provides a solid foundation for understanding the impact as well as the paths to recovery

Anthropology has traditionally focused on the polarities of *universalism* which emphasizes the similarities underlying human cultures and *cultural relativism* , which emphasizes the untranslatable differences between cultures (Agger and Jensen 1993) Geertz suggests an approach in which peoples of different cultures maintain their own views and patterns, not taking on those of the others and thereby their communication becomes a new *third culture* (Agger and Jensen, 1993).

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By reviewing the impact of human mediated violence and accidental/natural disasters, we can begin to appreciate the scope and affects of trauma currently in the United States. In order to understand the range and impact of trauma on peoples lives, its contribution to physical and mental health problems it is useful to understand the current social context and prevalence of traumatic etiologies.

- What are the rates of traumatic stress?
- What events contribute to its development?
- How do different events affect the development of symptoms?

Studies indicate that 39% to 70% of people in U.S. society have been exposed to civilian traumatic events, a major portion of which are serious crimes (Resnick and Kilpatrick, 1994). PTSD rates range from 25% for crimes of a general nature to 32% for completed rape, and rates approaching 50% for those whose crimes include fear of death and receipt of injury (Resnick and Kilpatrick, 1994). A homosexual male person is four times as likely to be a victim of violent crime as a member of the general U.S. urban population. One study revealed that one in five men and one in ten women reported being punched hit, kicked or beaten. (LeBlanc and Weinerman, 1990)

Paykel (1978 : 245) reports:

> following a traumatic event there is a six-fold risk of suicide, and a two-fold risk for the onset of depression. About 60% of persons diagnosed as having a mental disorder have experienced a severe life event in the weeks preceding the onset of that disorder, as compared with about 20% in comparison groups not diagnosed as having a mental disorder.

There are complex socio-cultural interrelationships among social and domestic traumas, repetitive violence, self-medicating behaviors and the disproportionate incarceration of minorities in the United States. Approximately 1.5 % of the population

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in Washington state are American Indians yet they comprise nearly 20% of the prison population (Ryser, 1995). A recent survey showed that 13% of drug users in the United States are Afro Americans. They comprise 55% of the arrests and 75% of the people in prison for drug use (Chasney, 1996)

The long term developmental effects of urban violence trauma syndrome on child victim include:

- a damaged sense of self
- trauma-specific transferences
- adaptations to danger
- cognitive and emotional stress responses
- post-traumatic stress that also manifests in play and health

(Parson, 1994)

SEXUAL VIOLENCE

Cultural myths which deny male sexual victimization have contributed to a ten year lag in research about men as compared to woman (Lisak, 1993). The prevalence of sexual violence against men and boys is reported to be about 20% with female perpetrators accounting for approximately 50% of the assaults (Lisak, 1993).

Data on rape and sexual assault prevalence is no less astounding. One estimate suggests that " over 12 million women in this country have had a completed rape sometime in their lives" (Resnick and Kilpatrick 1994: 1). A recent Justice department report (1994) found 500,00 sexual assaults occurred in the United States-- 80% were committed by people the victim knew personally. The majority of female rape victims are raped by family members and acquaintances. Among women who were raped, 33% were raped between the ages of 11 and 17, 38% at the age of 18 or over, and 29% at age 11 or younger (Harman and Jackson, 1994) One survey indicated that 31% of all

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rape victims develop rape -related PTSD sometime in their lifetimes (Harvey and Herman, 1992). The long term impact of sexual assault by people the victim knew has longer lasting and more detrimental effects than assault by strangers (Harvey and Herman, 1992 . When a completed rape included life threat and injury the rates of PTSD soared to 80% (Resnick and Kilpatrick, 1994).

A recent study of undocumented women in the San Francisco area found that 34% of the Latina, 30% of the Chinese and 20% of the Filipina women reported experiencing domestic violence. 48% of the Latina women said that the intensity of the abuse had increased since coming to the U.S. A similar study in the district of Columbia indicates that as many as 77% of undocumented Latina women married to U.S citizens or permanent residents may be battered (National Council for Research on Women, NY; 1993: 12).

White collar rapists are people who under the guise of their professional garb, prey on the vulnerabilities of people they are supposed to care for and protect. Among these are teachers, therapists, physicians, lawyers, and supervisors. One survey found that 15 % of 8-11 graders had been sexually harassed by a staff member at school, 25% of girls and 10% of boys (Goldberg, 1995). Another survey found that 5% of teachers engaged in some form of sexual abuse of children. 13 % of high school graduates responding to a survey in North Carolina said they had sex with a teacher (Goldberg, 1995). Sexual boundary violations increase at the university level. studies consistently report that 20-30% of female students have been sexually approached by their professors (Rutter, 1989). One study reported that 17% of female psychology graduate students had been sexually involved with their professors and 30 more had been harassed. (Rutter, 1989). Estimates of prevalence of sexual assault by therapists and other professionals range from 7-10% in self- report based studies (Gartrell et al. 1986). A survey of psychiatrists revealed that 88% percent of the sexual contacts occurred between male

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psychiatrists and female patients. (Gartrell et al. 1986) and each perpetrator averaged abusing 8 patients. Self reports however are likely to result in under reporting. The abuse of power by a therapist is devastating to the lives of victims. if a victim returns to therapy for treatment, (and many never do because of this betrayal), the new therapist must be prepared to deal with the traumatic transference engendered by the abusive therapy.

The sequelae of therapist-client sex include:

- ambivalence
- a sense of guilt,
- feelings of emptiness and isolation,
- sexual confusion,
- impaired ability to trust,
- identity, boundary, and role confusion,
- emotional lability,
- suppressed rage,
- increased suicidal risk
- cognitive dysfunction (especially in the areas of attention and concentration, frequently involving flashbacks, nightmares, intrusive thoughts, and unbidden images (Pope, 1988; 222)

Of the victims who initiated court proceedings it took an average of ten years following the end of treatment abuse for victims to file a complaint, and most never do file a complaint. If a complaint is filed, the victim must content with a legal and administrative relief system that is often unbelieving, in denial and often hostile to the victim. The therapist who is counseling a victim of such abuse should be well-versed in both the symptoms and treatment approaches (groups may be more efficacious than

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individual therapy). Additionally s/he should either be versed or know of peer - support groups, advocacy, legal and forensic support for referrals.

WAR AS CONDONED SOCIAL VIOLENCE

During the South East Asian wars, between the period 1960 and 1980 there were over 3 million veterans who served in the war zone, 10,000 of whom were women (Scurfield, 1993). Approximately 25%, or 750.000 Viet Nam veterans have symptoms of chronic traumatic stress. 85% of whom report they have never seen a mental health professional (Scurfield, 1993). Since 1975 over 700,000 South East Asian refugees have resettled in the United States.(Mollica, 1990). Nearly 100% of the Khmer population living in Santa Clara county had lost relatives (Mollica, 1990). In another survey, 63% of the Khmer had lost close family members, 22% of the Khmer women had lost their husbands, and almost 20% had lost children (Mollica, 1990). Khmer psychiatric patients in the United States have experienced an average of 16 major trauma events, three of which are considered torture. Among these are deprivation, physical injury and torture and incarceration, brainwashing, re-education camps, and witnessing killings or torture (Resnick and Kilpatrick, 1994). Of a total of 550,000 veterans sent to the 43 day Persian Gulf war approximately 10-15% experience symptoms of traumatic stress. An additional 30,000 complain of as -yet -undiagnosed debilitating disease symptoms called *Gulf war syndrome* .

In the "unmelted pot" of the United States the *culture of psychology* changes in response to changing cultural attitudes. Some notable examples since the mid-nineteen sixties include the depathologizing of homosexuality, attempts to recategorize so-called 'gendered' behaviors previously referred to as masochistic, or self-defeating, and the widespread acknowledgment of the ubiquity of child sexual abuse. Previous treatments for homosexuals included aversion therapy-- battered women were called

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masochistic--(and there was never discussion about husband abuse) and people with traumatic flashbacks were labeled schizophrenic. Current challenges to the culture of psychology are improved understanding about the prevalence and diagnosis of *Satanic ritual abuse* and *experienced anomalous trauma syndrome,* the diagnostic term most often applied to people who report they have been abducted by unidentified flying objects. Experienced anomalous trauma refers to signs of traumatic stress in the absence of a readily identifiable traumatic event. (Laibow and Laue, 1993; 93)

Laibow and Laue (1993) describes this diagnostic term:

- post-traumatic stress disorder is frequent in these patients
- these people are generally free of major psychopathology
- may show physical and emotional traumatic sequela.
- prior to treatment, memory like traces may or may not be present for scenarios which correlate with the psychological and physical stigmata of the stressful event.
- may be seen in patients in any ethnic and/or demographic cohort.

Ten years ago reports of alien abduction were ignored or considered the basis for a diagnosis of psychosis. While reports of UFO abduction challenge consensus reality there are many therapists who are take these phenomena seriously (Vacarr, 1993) and believe in the reality of these experiences.

CULTURE AND TREATMENT

An earlier chapter I reviewed the complex nature of culture and trauma and treatment of individuals and families. Comas- Diaz (1988; 263) suggests:

Every aspect of treatment, from community acceptance of the clinic to the proper dose of medication, must be defined and arranged within an interlocking web of culturally appropriate services.

The APA publishes Guidelines for Providers of Psychological Services to Ethnic, Linguistic, and Culturally Diverse Populations (1990). LaDue identifies the needs of

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indigenous Americans suggesting that clinicians from one cultural group sensitize and orient her or his perspective to the specific needs of the one being served. She writes:

Non native professionals working in Indian country will need to be flexible, willing make home visits, to serve as crisis counselors, social workers, and therapists. They should also be prepared to act as consultants, community educators, and to work in conjunction with, sometimes as assistant to, medicine people (1994: 107).

Ladue's (1994: 106-7) list of criteria for working with members of American Indian nations has application with diverse peoples and includes understanding:

- The Role of the Family– working with extended family structure with the natural helpers in the family.
- The Role of the Community. Identifying community standards for acceptable behavior of its members and the role of the professional. It is important for the professional to identify these lines as well as the community gatekeepers, natural helpers, and power-brokers
- The Role of the Traditional Healer- requires, basic knowledge understanding, accepting, and acknowledgment of the validity of traditional healing methods.

Summary

Disease conceptions and clinical practice are informed and prescribed by cultural context (Kleinman, 1980; Showalter, 1993; Rousseau, 1993). Understanding the cultural and historical foundations of current diagnostic and treatment methods adds breadth and perspective to understanding and utilizing current nosology. Categories of the past reflected cultural beliefs, and continue to exert influences on current diagnostic and treatment paradigms. When therapists understand the impact of socially-ordained beliefs, prevents a static definition of the individual, and contributes to more humane and effective treatment.

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Chapter Five: **Assessment and diagnosis**

What's the use of their having names," the Gnat said, "if they won't answer to them?" "No use to them," said Alice, "but it's useful to the people that name them, I suppose.

Lewis Carroll

Introduction

This section focuses on the assessment and diagnosis of traumatic Stress. The stress syndromes can be divided into three distinct yet interrelated diagnostic categories: Post-traumatic Stress disorder (PTSD) (acute, chronic or delayed onset), Complex Post Traumatic Stress Disorder (CPTSD) and Acute Stress Disorder, (ASD) . Early and correct differential diagnosis, based on compassionate methods of assessment will help a therapist establish trust and initiating effective treatment strategies. When we understand the social, political and historical underpinnings of diagnostic nosologies contextualizes treatment and prevents clinical rigidity. Trauma occurs in both a culture specific and universal context. The assessment of traumatized individuals must consider the content and meaning of experiences in both a culture -specific and a universal context.

In this section I :

- define Acute Stress Disorder (ASD), Post Traumatic Stress Disorder (PTSD) and Complex Post Traumatic Stress Disorder (cPTSD)
- review models and paradigms of diagnosis
- review philosophy, methods and tools of assessment
- present cross-cultural issues of assessment
- consider socio-historical interface of hysteria and trauma

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Models of Assessment

A *Post trauma model* of assessment posits that trauma is the central cause of the individual's presenting symptoms. These symptoms include anxiety, depression, physical ill health, dissociation, self-harm, and often substance abuse. *Multicultural and cross-cultural model* s of post-trauma assessment incorporates an understanding of the cultural and ethnic heritage(s) of the individual. It also explores the diversity among cultures and the myriad ways people express pain. This perspective requires that the therapist examine her or his own cultural value systems and how they impact on treatment. A *feminist model of post-trauma assessment* brings to treatment an analysis of how gender-relations contribute to complex trauma--the abuse and misuses of power that generally manifests as power over individuals in contrast to sharing power. This model of assessment is not static but requires ongoing evaluations of the socio-political underpinnings of trauma in specific contexts. A *holistic post-trauma* model of assessment is a comprehensive approach to the physical, emotional, mental and spiritual sequelae of trauma and incorporates the above models. Because most clinicians work in conventional treatment settings, I have tried to present a model that bridges conventional methods with a feminist, cross-cultural and multicultural analysis. Because I believe complex trauma is a social disease, assessment must also be rooted in an understanding of social oppression.

The task of assessment is to:

- elicit the clients history,
- identify the traumatic antecedent(s),
- assess current (intensity of) symptoms, level of functioning
- establish empathy and reassure the client about the causitive role the trauma has played in causing presenting symptoms.

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Objectives of Assessment

Assessment is an interactive communication process.

The objectives are to:

- provide a safe climate for the client to tell the trauma story.
- Disclose the limits of confidentiality, including a handout detailing policies about fees, cancellation and phone call policies.
- apply appropriate methods of evaluation
  These may include: open-ended questions, structured interviews and self reports based on verbal dialogue, written response to questionnaires, non-verbal, expressive methods such as art or somatosensory response to bodywork methods. Clients may share journal entries or write parts of the story that she cannot yet speak out loud.
- evaluate current mental health status: assess suicidality, levels of substance use and danger of self harm.
- titrate the pace of assessment to the client's capacity to tolerate affect.
- arrive at a working conception (diagnosis) (because post traumatic states are often complex and clients often present with a variety of previous diagnoses, it is important to remain open.

What is Diagnosis? What is Nosology?

Nosological categories everywhere are not simply diseases but conceptions of diseases.

Arthur Kleinman

Nosology or nomenclature is the study of and naming or classification of disorders. Nosological classifications reflects what society agrees to allow into social consciousness. The practice of assessment of mental health disorders in the United States proceeds from diagnostic nosologies, within and outside of the Diagnostic and Statistical Manual 4 (APA, 1994). Diagnostic tools provide an interpretive map of the victim's symptoms , behaviors and stories, which as a result of trauma, can at first appear disjointed, disconnected and incoherent. It is the difficulty in articulating the

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traumatic events that have shattered the victims life, that is a defining picture of trauma.

Purpose of Assessment

In practical terms, nosology determines not only what is treated and how, but often affects how the patient is regarded. It forms the basis for diagnosis, which in contemporary life often determines who, if anyone, will pay for the victim's treatment. This may include the Veterans administration, insurance companies, victim's compensation as a result of civil or criminal litigation , and for how long. Identifying the purpose of the assessment, whether for crisis intervention, brief or long term therapy, compensatory or forensic purposes will address the needs of the client.

epidemic, as well as by applying those few social and technical controls available at the time. In our own time, the threat of man-made catastrophe raises similar questions of suffering; yet the societal response is almost entirely limited to rational-technical manipulations aimed at controlling practical problems, with scant attention to their deeper significance. Indeed, one reason for lay misinterpretations of the scientific discourse on risk is the tendency of laymen to reinterpret, in qualitative, absolute, personalized (nonrandom) terms, the scientists' quantitative, bell-shaped curves of the random distribution of risks in the population. That is to say, questions of the cultural significance of risk as bafflement come to the fore in spite of professional (and societal) attempts to expunge meaning and value from the equation of care. Suffering is not easily put aside by biomedical science; it remains central to the experience of illness, a core tension in clinical care.

2

The Personal and Social Meanings of Illness

Unscientific utterances can, and indeed usually do, have double meanings, implied meanings, unintended meanings, and can hint and insinuate, and may indeed mean the opposite of what they apparently mean, especially if they are said in a certain tone of voice.

—CHARLES RYCROFT (1986, 272)

In successfully identifying and understanding what someone else is doing we always move towards placing a particular episode in the context of a set of narrative histories, histories both of the individuals concerned and of the settings in which they act and suffer.

—ALASTAIR MACINTYRE (1981, 197)

Life World as Meaning

Illness has meaning in a third sense, a sense so central to understanding chronic illness that I will spend much of the rest of this book elaborating and illustrating it and expanding on its therapeutic implications. For in the context of chronic disorder, the illness becomes embodied in a particular life trajectory, environed in a concrete life world. Acting like a sponge, illness soaks up personal and social significance from the world of the sick person. Unlike cultural meanings of illness that carry significance *to* the sick person, this third, intimate type of meaning transfers vital significance from the person's life to the illness experience.

A flareup in the heart disease of an elderly business executive in North American society can become a part of his bereavement for the wife who died six months earlier. This illness incorporates his worsening alcohol abuse and his bitter conflict with his children over control of the family business. It assimilates his fear of dying and guilt over being a lapsed believer, along with his lifelong psychological conflict stemming from fears of passive dependence and of being controlled by others—fears that took origin from a demoralizing relationship with a brutally authoritarian father. Having become an integral element of the illness experience, those fears have recrudesced under the threat of serious incapacity and the undisguised aim of his children to persuade him to enter a nursing home. They are also intensified by his powerful need near the close of life to make sense of key losses by working out the denouement of the narrative of his life's course. The detailed empirical and symbolic particularities of this life trajectory, like those of every other, create a unique texture of meaning—external layers written over internal ones to form a palimpsest—for each person's experience of chronic illness.

This third type of illness meaning is best illustrated with case examples. I will present on the following pages a brief vignette to illustrate the web of meaning that links illness experience to life world. Here the meanings relate to a worsening course and difficult complications of illness at certain critical points in the life course. The central meaning is loss, a common significance of chronic disorder. Care becomes an opportunity to grieve. In the chapters that follow, the cases, which are described at greater length, principally illustrate this third type of illness meaning, though because they are cases from real life they include other types, too. But I take personal and interpersonal meanings to be clinically the most important ones. In fact, it is only in the detailed context of a lengthy case description that we fully appreciate the personal and social meanings of illness. This truncated vignette can offer only a superficial glimpse of how illness absorbs and intensifies life meanings while creating circumstances for which new interpretations are needed.

THE CASE OF ALICE ALCOTT

Alice Alcott is a forty-six-year-old white Protestant female from New Hampshire with a history of juvenile onset diabetes mellitus

compounded by cardiovascular complications.* She was referred by her attending surgeon for psychiatric evaluation during recovery from the amputation of her leg below the knee due to a gangrenous ulcer on the left foot; she was tearful and sad to a degree that her physicians and family felt was out of keeping with her prior experiences with the effects of her chronic disorder.

Mrs. Alcott has been married for twenty-three years to a banker in a small New Hampshire town. Three generations of her family have been born and raised in this town. Alice herself was born in the town and attended the local schools. At age ten she developed diabetes, was treated by the town's only medical group, and was hospitalized frequently in the small local hospital. She married a childhood boyfriend, raised two children (Andrew, now twenty, and Christine, seventeen), and became a leading citizen and director of the local public library, historical society, and birding club.

Between the ages of ten and eighteen, she was hospitalized at least once each year for problems related to control of her diabetes. These hospitalizations included two for diabetic coma and several for hypoglycemia owing to exogenous insulin; she has by now had to use the drug for more than thirty-five years.

From the time she went away to college at age eighteen until the birth of her first child when she was twenty-six, Alice had no further hospitalizations. She learned to manage her own disorder on a daily basis, which is in keeping with her independent personality and family tradition. Although Mrs. Alcott was told that pregnancy could make her diabetes worse, and she did experience considerable difficulty with both pregnancies, she delivered two normal babies.

At age thirty Mrs. Alcott experienced some visual problems, and her local physician diagnosed diabetic retinopathy. Over the years she has been treated for this condition at the Massachusetts Eye and Ear Infirmary in Boston, most recently with laser photocoagulation therapy. While her vision has worsened, she is able to read, drive, and carry out almost all other daily activities. At age forty Mrs. Alcott developed a gangrenous toe on her left foot, and the toe was amputated. When she was forty-two another toe was amputated.

*All the cases described in these pages have fictitious names to protect their real identity. I have also changed place names, geographical areas, and certain additional details to assure anonymity and confidentiality. Otherwise, the case histories are described as I elicited them either in clinical interviews or in research encounters in patients' homes as well as in clinical settings.

Two and one-half years ago she began to experience pain in both feet when walking fast. Her physician diagnosed intermittent claudication (pain in the legs with exercise because of circulatory insufficiency). With a program of exercise training, relaxation, and progressively longer walks, Mrs. Alcott was able to control this problem. Twelve months before our first meeting, Mrs. Alcott developed chest pain (angina) when walking fairly briskly or climbing stairs. At first she denied the significance and nature of the problem, even though her eighty-year-old mother had developed angina three years before. But her progressive disability became so noticeable to family and friends that Mrs. Alcott felt obliged to visit her physician. She underwent an electrocardiogram (EKG) and treadmill test, which documented coronary artery insufficiency. Mrs. Alcott rejected the recommendation that she have coronary arteriography. She did accept a calcium blocker and nitroglycerine tablets. The former led to substantial side effects of fatigue and weakness.

For the first time in the course of caring for this patient over twenty years, her physician found her irritable and depressed. Her husband, children, and parents corroborated his assessment.

Six months before her initial psychiatric evaluation, Mrs. Alcott developed an ulcer on her left ankle. She had had a similar episode before, caused by compromised venous circulation, and her ulcer had responded well to conservative medical management. On this occasion, however, the ulcer rapidly deteriorated, and osteomyelitis (infection in the bone) was diagnosed by X-ray. The decision to amputate was made only with great reluctance and much anger by the patient, and following a trial of a high-dose intravenous antibiotic.

When I first interviewed Alice Alcott, she was sitting up in her hospital bed looking out her window fixedly, with tightly pursed lips and a mixture of anger and sadness in her expression. She had refused physical therapy, and she had requested that her husband, children, parents, and two sisters not visit her for several days. When her local physician had called to speak to her she had refused to answer the telephone. On morning work rounds her attending surgeon had found her silently crying. She refused to discuss her sadness with the attending surgeon or house staff. She became irascible when her nurses and physical therapist confronted her with the implications of her withdrawal and noncompliance. As a result, the request for psychiatric assessment was made and I found myself entering Alice Alcott's room—and soon thereafter, her world.

At first she refused to speak to me. But no sooner had she angrily dismissed the concerns that led to my visit than she apologized and admitted she needed help.

> It's the final loss. I can't take it anymore. This is too much for me, for anyone. I want to give up. I don't want to try anymore. What's the use? I've contended with this thing since I was a child. It's been one darn thing after another. All losses. What I could eat. What I could do. Diet, insulin, doctors, hospitals, then my eyesight, my walking, my heart, now my leg. What's left to give up?

It was apparent that Mrs. Alcott was grieving her many losses. I would later learn that she was inwardly preparing herself to deal with what she regarded as her final loss, her death, which she thought would not be far off. It was not death that she feared, she would tell me, but the seemingly relentless march toward becoming an invalid. Loss of her leg forced the realization that she was now partially dependent and that one day she would be more completely so.

Alice Alcott, a fifth-generation American, had grown up in a middle-class business family of tough, stoical, dour Yankees. Her ancestors were yeoman farmers from Yorkshire, England, who had settled several small valleys in southern New Hampshire. Her Calvinist cultural background emphasized values of rugged individualism, self-reliance, industry, perseverance, and moral strength. When she was sick as a child, her grandparents told her it was good to endure suffering because it tested and tempered one's character. When she felt self-pity for being the only child with diabetes in her elementary school, her parents and grandparents chided her for being weak and not meeting God's test.

In spite of her diabetes and the frequent hospitalizations, Alice participated actively in high school activities, including sports. During her college years, her diabetes was so well controlled that Alice at times fantasized that she was no longer chronically ill. When they married, she and her husband did not think about

what problems or restrictions diabetes would create in their lives. Although she was urged by her physician to consider not having children, Alice Alcott rejected the idea outright. She had successfully coped with her illness, she could do so again. Both pregnancies caused problems with the management of her diabetes, but Alice accepted the difficulty willingly. However, she and her husband agreed to limit their family to two children. Later in life, Alice would remark that this was one of her first significant losses; they had wanted a big family.

In her late twenties and thirties Alice did not let her disease significantly affect her child-rearing plans. She also lived a life of extraordinary energy in community service and as a librarian. The Alcotts were active birders with great interest in the outdoors; they camped, climbed, hiked, and went canoeing and white-water rafting with little attention to Alice's condition.

All of this began to change with the effects of the diabetic retinopathy. Her visual problems were substantial enough to interfere with library work. Eventually she gave up her job and took up the largely honorary position of director of the library committee. Characteristically, Alice denied her symptoms and did not seek medical help until her retinopathy was advanced. Her ophthalmologist and primary care physician admonished her for this behavior and pointed out that the retinopathy would have been easier to treat and less disabling had it been diagnosed earlier.

When Alice was forty a gangrenous toe resulted from another delay in seeking care. Alice had treated the infected toe on her own, as she was accustomed to treating herself with insulin and doing her own blood- and urine-sugar tests. The loss of the toe came as a shock. Alice said that she had had the ominous feeling that this was the beginning of more serious problems. The intermittent claudication was an even more substantial blow. She had felt at first that her outdoor activities, active lifestyle, and work would end. But as with so many other of the problems that had arisen, this, too, seemed to come under control.

Then the angina started. Terrified by the implications of this problem, Alice responded with even more substantial denial than she had used to deal with the earlier complications of the diabetes. Alice experienced pain as she shopped, visited the library, and went out with friends and family. It became obvious to many in her town

that something was seriously wrong. Her husband, children, and parents had to work hard to force Alice to admit that she had to see the doctor.

"By that time I couldn't face up to it anymore. I didn't want Dr. Torres to tell me that my diabetes had reached my heart. I didn't want to know."

Alice did not take the doctor's news well; she began to feel hopeless and demoralized.

How was I going to live with this limitation? What a burden I would be on my family and friends. I feared becoming the town invalid. I was terribly guilty. I had felt all along that my illness had interfered with my relationship to my children. I never had enough time to give them. I was more preoccupied with myself than with their problems. I was in the hospital at critical times for them. Now I would be nothing but a burden. As far as my husband goes, the guilt was worse. After the chest pain, I feared having sexual relations. We became celibate. The claudication, the angina, they interfered with the things we loved: long walks in the country, birding, climbing, sports. I had to become self-centered in order to control my condition. I felt like a survivor—all I was good for was hanging on. . . .

The calcium blockers at first made things worse. The side effects of weakness and exhaustion frightened Alice Alcott even more than the chest pain.

That was when I began to see how terrible it would be to be incapacitated—to give up even the semblance of my independence, my control, my role in the family and in the community. What a relief to learn it was the side effect of the medication. The dosage was reduced, and either the side effects lessened or I learned to control them. Anyway, I had fought my way back once more. I was getting back to myself. I was able to be a wife and mother again, albeit with plenty of guilt and self-doubts. And then this ankle. It was the last straw. Not another problem. Not another loss. I felt like I couldn't go on. About the only things left to go were my kidneys, and when they did I felt it was all over for me. I began to feel really helpless, and lost my sense of worth. I was shattered and broken. How much more could I deal with before I gave up?

When she had experienced the angina, Alice had also begun to feel considerable anger. She felt she had done all the things she was supposed to do for her diabetes (carefully regulating her diet, taking insulin daily, testing blood and urine sugar since childhood). She had avoided the hypertension that other diabetic patients she knew had developed. She worked hard to control her risk factors, and still it had done no good.

"I was tremendously angry. Angry at the doctors, at myself, at the diabetes. Angry even at God. Why was He doing this to me?"

The loss of the foot, coming so close on the other problems, seemed overwhelming. Mrs. Alcott became demoralized; as she put it:

> I was ready to give up. I felt as if I were grieving for my lost health and life itself. Death might be better. Certainly being very dependent on others, being an invalid, looked bad, very bad. I had run out of alternatives. I felt I might just as well wallow in my own misery.

From a psychiatric standpoint Alice Alcott was deeply distressed and depressed in response to her chronic illness, but although she was desperate, her state did not warrant the clinical diagnosis of major depressive disorder or any other serious psychiatric syndrome. Her problem was not a mental disease but a reaction, in large part (it seemed to me) justified by her suffering and disablement. I saw her periodically over the next few years, whenever she was in Boston. Her emotional state improved as she became more effective in dealing with her amputation. Eventually she got back to many of the activities that made up her world. She is a remarkably resilient woman with great adaptive strengths and a marvelous support system. Early in psychotherapy, our sessions centered on grief for her multiple losses. But as her spirits lifted, she returned to her characteristic denial. The last few times we met, she would discuss her children's problems, her parents' problems, anything but her own.

I choose to remember Alice Alcott by a statement she made at our third or fourth meeting in the hospital room. Her words have left a powerful mark on my work with the chronically ill:

> Time is running out for me, doctor. For others there is hope of cure. But for me this disease can never go away. The complications get more severe. The losses are greater. Soon, if not now, there will come a time when those losses are so great I will not want to bounce back. I have lost all confidence in my body. My disease has taken over. If not now, then next week, next month, next year—things will be worse again. In the meantime, what is there for me: no left foot, a bad heart, poor circulation even to my good leg, failing vision. Parents I can't take care of, children for whom I am unavailable. A husband as exhausted and despondent as I am. Myself, doctor, facing the long downhill road. Perhaps speaking to you will help me now, but can it change that road? No! I will do my best again to fight back. I will try to get on top of this thing. Yet in the long run, I will go down that road myself. Neither you nor anyone else can prevent it, or control it, or understand it for me. Can you give me the courage I need?

For Alice Alcott, a stoical style of expressing illness problems (especially serious ones), a characteristic use of denial, and a crescendo of symptoms that are specially serious for her illustrate the first layer of illness meanings. Her diabetes has no special cultural cachet in present-day North America. But she confided that her friends seemed to regard diabetes as a relatively minor problem when compared to other chronic disorders, one they thought would not lead to significant disability. This erroneous view angered her because she knew diabetes to be very serious and found that others' misconceptions were burdensome and needed to be responded to. At the third level of illness meanings, Alice Alcott was absorbed by many losses: she grieved for the loss of a body part, physical function, body- and self-image, and way of life; she also experienced bereavement in anticipation of her own demise. The psychotherapeutic treatment she received involved the work of grieving; in my experience, psychotherapy for the chronically medically ill is often a kind of mourning. But clinical actions to remoralize patients may follow other paths. The practitioner helps patients (and their families) to gain control over fear and to come to terms with their overwhelming anger at functional limitation. He or she helps the patient to restore confidence in body and self. The work of the healer is also to educate sick persons to escape both excessive feelings of guilt over failures in life activities and jealousy toward others who are free of serious disorder. Finally, the practitioner will help the patient to prepare for death.

UNDERSTANDING THE PATIENT'S INNER WORLD

For analytical purposes, I will canvass the third type of illness meaning, illustrated by the case of Alice Alcott, beginning with the private, inner world of personal experience and thereafter moving outward through the webs of interpersonal significance that bind a person to the social world. Yet I do not want to distort the interconnections between affect, cognition, and local social system that make of each life a seamless whole: social structure is an integral

part of inner experience, and fantasies and emotions are equally integral to the very stuff of the social world.

Much of the most original work of twentieth-century psychiatrists and psychologists who have studied either medical disorders or the inner world of the person has emerged from investigations of the peculiar personal significance of chronic illness. Freud devoted his prodigious critical skills to this problem, which, after all, in the guise of hysteria was the founding clinical problem for psychoanalysis. Among his followers, Paul Shilder, Franz Alexander, Felix Deutsch, Michael Balint, and Georg Groddeck were as intrigued as the master himself by the workings of the symbolic continuum between psyche and soma, which each could see held rich therapeutic implications for a thoroughly psychosomatic approach to medicine.

To begin with, symptoms were interpreted by the early analysts as symbols indexing deeply personal significations: sexual conflicts, issues in dependency and passivity, drives to control and dominate. At times these meanings were held to cause the symptoms with which they were associated, through a process of psychosomatic transduction that materialized psychic conflicts as somatic complaints. Such symptoms were thought to be a symbolic expression of core unconscious themes in the repressed neurotic conflict of the patient's psychic life. Although the model proved to be a useful explanation of the classical symptoms of hysterical conversion (conversion disorder), it was shown not to apply to most psychosomatic or chronic medical conditions (Lipowski 1968, 1969). Indeed, there has not been empirical support for the association of particular symptoms either with particular personality types or with particular neurotic conflicts. To the contrary, the same psychological problems seem either to be nonspecifically associated with the entire gamut of psychosomatic and chronic medical problems or not to be related at all to such problems.

The narrowly psychoanalytic approach to the interpretation of illness meanings has become an extremely difficult path to follow, a tortuous lane, which, for all its fascination and promise, leads to the dead end of speculation and an absence of research.

In some cases of classical conversion, however, the unaccepted meanings of inner psychic conflict can quite literally be seen to

materialize as symptom symbols, the disappearance of which can be brought about by the deeply felt expression or symbolic manipulation of the unconscious conflict. Hence the original insight into the problem continues to intrigue and provoke. For example, I once evaluated a patient with acute paralysis of the legs (paraplegia), which his neurologist suspected was conversion because the neurological examination revealed no clear-cut pathology; the patient had previously been in good physical health. During our interview the patient, a vulnerable man in his late twenties who was quite obviously in the throes of a major neurotic conflict, revealed that he was deadlocked in a no-win battle with his father. The father insisted that the patient take over the family business and adamantly refused to consider his son's poignant request that he be allowed to pursue a career as a painter and sculptor. The patient broke down into tears as he recounted his father's overbearing, insensitive attitude and his own fear that his father would force him to renounce his dreams. After lamenting that his father regarded his artistic interests as silly and unmanly and had always criticized his son for being "effete and effeminate," the patient began to rehash a lifetime of frustrating interactions with this family autocrat who had terrorized the patient since childhood.

"I never have been able to stan, stan, stand up on my own two feet before my, my, my father," he stuttered. Moments later, almost as suddenly as it had come on, his paralysis began to disappear. Over the course of a half hour it was entirely gone, leaving no physical consequences.

The symbolic meaning in this case was not terribly complex or original: the patient's paralysis of the legs expressed graphically the his childlike helplessness in not being able to resist his father's dominance and choose an autonomous career in keeping with his own adult self-image. How paralyses like this are actually caused and what mediating psychophysiological processes in catharsis and abreaction are responsible for their resolution constitute a great mystery at the heart of psychosomatic medicine. Nonetheless, enough is known about conversion symptoms to describe them as the literal embodiment of conflicted meanings, somatic symbols that have psychological and social uses. Here the paralysis of muscle covertly expresses the patient's paralysis of will, while the resulting

disability has the practical effect of legitimately preventing the patient from doing what his father demands but what for him is unacceptable. The problem with psychoanalytic interpretations is that their creators are dissatisfied with this level of analysis and reach for "deeper" meanings for which there is usually little clinical or scientific justification. A single-minded quest for psychoanalytic reality can dehumanize the patient every bit as much as the numbing reductionism of an obsessively biomedical investigation.

Symptom onset in this case, and in many similar ones treated by psychiatrists, is interpreted in the context of the special meanings within which the illness is embedded. Symptom and context can be interpreted as symbol and text. The latter extends and clarifies the significance of the former; the former crystallizes the latent possibilities of the latter. The text is laden with potential meanings, but in the symptom-symbol only one or a few become effective. There is, of course, both sufficient redundancy in the living symbolism of the symptoms and density of meanings in the life text and enough uncertainty and ambiguity in their interpretation to make this aspect of clinical work more like literary criticism or anthropological analysis of a ritual in an alien society than like the interpretation of a laboratory test or a microscopic slide of a tumor. And yet there is also something similar in the interpretive process of these human actions of reconfiguring illness as disease, especially as they are affected by the exigent context of illness and the therapeutic mandate to intervene to relieve suffering, that makes each of these clinical behaviors diverge from the methods of physical science. Perhaps I am describing what it is in the nature of illness behavior (for, after all, patient and family are actively engaged in interpretation, too) and the tasks of doctoring that suggests both are closer to the human sciences, where the work of interpretation is now seen to be a fundamental activity.

Although the contribution of bodily symbols, as illustrated by the case of hysterical paralysis, is not significant, nor need be so, in most cases of chronic illness, health professionals have become accustomed in cases like Alice Alcott's to examining (usually intuitively and casually) how the personal domain of passions and inner turmoil worsen the illness experience. Freud's great contribution here was to authorize the interpretation of the biography of the patient

and the interpersonal context of disorder as an appropriate component of the practitioner's craft. For Freud and his followers, events in the kitchen, the office, the schoolroom all were necessary to interpret the text of illness fully. This vision continues to attract numbers of psychiatrists, psychologists, primary care physicians, nurses, social workers, and other members of the helping professions to construct a new language of general health care that addresses the deeply private significance of illness.

When the patient under examination disrobes to expose a body covered with the ugly scars of eczema or with the raw, red, flaking plaques of psoriasis, the practitioner should recognize that shame, hurt, anger, despair, or other constellations of feelings probably are present. As key ingredients of the illness experience, these feelings are likely to affect the patient's life experiences in general, the illness per se, and the response to care. The role of the health professional is not so much to ferret out the innermost secrets (which can easily lend itself to a dangerous kind of voyeurism) as it is to assist the chronically ill and those around them to come to terms with—that is, accept, master, or change—those personal significances that can be shown to be operating in their lives and in their care. I take this to constitute the essence of what is now called empowering patients.

Explanation and Emotion as Meaning

Alice Alcott's case is an example of yet another kind of illness meaning, the struggle of sick persons, their families, and practitioners to fashion serviceable explanations of the various aspects of illness and treatment. Roughly speaking, these explanatory accounts seem to respond to any or all of the following questions: What is the cause of the disorder? Why did it have its onset precisely when it did? What does the illness do to my body? What course is it following now, and what course can I expect it to follow in the future? What is the source of improvements and exacerbations? How can I control the illness, its exacerbations, and its consequences? What are the principal effects the illness has had on my

(our) life? What do I most fear about this illness? What treatment do I wish to receive? What do I expect of the treatment? What effects of the treatment do I fear? Although I have stated the questions in the terms of the sick person, these are also the concerns of the family. When practitioners engage patients' views of illness, they, too, must respond to these concerns.

These questions are not asked simply to obtain information. They are deeply felt. The facial expression, tone of voice, posture, body movements, gait, and, especially, the eyes expose the emotional turmoil that is so much a part of the long-term experience of chronic illness. The manner in which difficult sentiments—anger, despair, guilt, worry—are expressed and dealt with also reveals how the sick person and the family are handling the illness. For affective turbulence is not so much a reaction to the chronic problem as an expectable part of being chronically ill. Such turbulence, furthermore, is an expression of a physiological dialectic that can produce or result from major alterations in the illness. Change in chronic illness is almost never inconsequential. The chronically ill live at the margins. Even a modest change can be the difference between acceptable, if frustrating, quiescence, and an eruption of symptoms distressing enough to yield a condition that is unacceptable and, not infrequently, dangerous.

Chronic illness behavior can mask a mood with a dissimulating smile or a stiff upper lip; on the other side, it can be as limpid as a gush of tears or a bloody curse of frustration. It has been said of Mozart's music that even where all seems quiet and under control it is best regarded as a formal Italian garden built on the side of an active volcano. The undercurrent of chronic illness is like the volcano: it does not go away. It menaces. It erupts. It is out of control. One damned thing follows another. Confronting crises is only one part of the total picture. The rest is coming to grips with the mundaneness of worries over whether one can negotiate a curb, tolerate flowers without wheezing, make it to a bathroom quickly enough, eat breakfast without vomiting, keep the level of back pain low enough to get through the workday, sleep through the night, attempt sexual intercourse, make plans for a vacation, or just plain face up to the myriad of difficulties that make life feel burdened, uncomfortable, and all too often desperate. It has always seemed to

me that there is a kind of quiet heroism that comes from meeting these problems and the sentiments they provoke, of getting through each day, of living through the long course with grace and spirit and even humor; sick persons and their families understand the courage, even if most others do not.

Chronic illness also means the loss of confidence in one's health and normal bodily processes. The asthmatic can no longer count on unobstructed breathing or a quick end to a fit of coughing. The epileptic lives under the very point of the sword of Damocles, uncertain when a fit will come. The sufferer of chronic sinusitis goes from partially blocked nasal passages on one side to some obstruction on both sides, then to completely stopped up passages with fullness, pounding in the ears, and mouth breathing—which interferes with sleep and causes air swallowing and its effects (gas, abdominal cramps). The sick person intervenes with nasal inhalers or oral decongestants. The former are transiently useful, but over time have less effect and may produce rebound sinus congestion. The latter may produce abdominal discomfort and lethargy, and they may worsen asthma. All of this endured, calculated, worried over, so as to avoid the next episode of illness. Each time the cycle of symptoms begins, the sufferer loses faith in the dependability and adaptability of basic bodily processes that the rest of us rely on as part of our general sense of well-being. This loss of confidence becomes grim expectation of the worst, and, in some, demoralization and hopelessness.

A closely related feeling, illustrated by our case vignette, is grief and wretchedness over loss of health, a mourning for the bodily foundation of daily behavior and self-confidence. The fidelity of our bodies is so basic that we never think of it—it is the certain grounds of our daily experience. Chronic illness is a betrayal of that fundamental trust. We feel under siege: untrusting, resentful of uncertainty, lost. Life becomes a working out of sentiments that follow closely from this corporeal betrayal: confusion, shock, anger, jealousy, despair.

Physiological aspects of chronic illness shape explanatory models and the meanings they encapsulate. Helman (1985) shows that the explanations given by asthma and ulcerative colitis patients are different in large measure owing to the experience of two distinctive

kinds of pathological change: acute threat to vital processes and chronic discomfit, respectively. Meaning and physiological experience intertwine so that dread and self-defeating self-concept cascade, provoking physiological processes already poised and conditioned to tumble. From there the vicious cycle can commence with symbol or symptom. The worst outcome is giving up, which registers in the explanatory account of patients as an inveterate, unappeasable, inexorable expectation of decline.

Patients and families are coping with a day-by-day course that encompasses many individual episodes and events. There are serious consequences, some avoidable, others not. There are spells of improvement and periods of worsening (at times understandably, at other times inexplicably, linked). And there are threats to daily activities, special occasions, career, relationships, and, perhaps most distressingly, self-esteem. The treatment of chronic illness brings added difficulties. Expenses are substantial. Enormous blocks of time are spent traveling to and from clinics, sitting and standing in doctors' offices, undergoing laboratory tests, lying in hospital beds, waiting. Time is also dissipated prodigally in special treatment regimens that can interfere significantly with diet, life style, recreation, and the otherwise taken for granted activities of daily living. Symptoms must be explained to receptionists, nurses, and different doctors. The same questions are answered over and over again. The patient must wait for the pharmacist or doctor or insurance company to call. All are exhausting. They create frustration, irritability, and not infrequently a low-grade rebelliousness that periodically explodes into open revolt. There are also disturbing and unpredictable side effects of medications. Risky tests and new interventions have iatrogenic consequences. Many chronically ill persons experiment with health foods, acupuncture, self-hypnosis, and the whole gamut of alternative therapists who, on the one hand, like the snake-oil salesmen of old, live off the inefficacy of available orthodox cures, yet, on the other hand, give hope and sometimes help. Self-treatment, lay advice, and doctor shopping are routine. So are problems in therapeutic relationships with practitioners who often are as frustrated and impotent feeling as patients. Moreover, this panoply of activities takes up the interest and energy of the social network too, so that, with time, frustrating resentment and exasper-

ation spread to others. And behind the frenetic activity and worry and uncertainty looms the threat of awful complications and untimely death.

For the chronically ill, details are all. To cope with chronic illness means to routinely scan minute bodily processes. Attention is vigilantly focused, sometimes hour by hour, to the specifics of circumstances and events that could be potential sources of worsening. There is the daily quest for control of the known provoking agents. Enervating decisions must be made about when to initiate or terminate an activity, when to move from baseline medication to second-level drugs, and when to seek professional help. And all this occurs in the context of active lives that are filled with the same pressures, threats, vagaries, and exultations that make of normal living such a "blooming, buzzing confusion" (James [1890] 1981, 462). Is it any wonder that exhaustion is one of the common shared experiences of chronic illness?

There are hundreds of varieties of chronic illness. Several chronic illnesses per person are the norm among the frail elderly, those over seventy-five years of age. Most individuals over sixty experience at least one chronic disorder. And chronic illness is also common in the other stages of the life cycle. Thus, we are discussing an immense burden of morbidity, present in all societies. Through the personal and economic costs of distress and disability chronic illness leaves no unit of society unaffected. The chronically ill, if not you or I, are our parents, grandparents, children, siblings, aunts and uncles, friends, neighbors, co-workers, or clients. With such a ubiquitous problem, one can only marvel at the societal devices of denial that keep this normative aspect of life so well hidden. Images of widespread chronic illness are not what capitalist or socialist ideologies want to represent to their members as the states try to encourage consumption or mobilize enthusiasm for governmental campaigns. The imagery of infirmity and disorder provokes moral questions that most social systems prefer not to encourage. In the current age, where image making is the essence of politics, no regime wants to expose these realities lest they threaten the naive optimism they seek to maintain in the population.

To try to deal with the difficulties I have reviewed, questions about cause and effects and effective ways of managing illness must

arise. The answers to these questions come not only from the sick person but from anyone in the social network, the media, or the orthodox and alternative therapeutic systems. These explanatory accounts are essential for the more immediate tactics of tacking through the rough seas of chronic illness; moreover, the long-term strategies for assessing the deeper, more powerful currents that influence the chronic course of disorder also require continuous surveillance and information gathering. Thus, the chronically ill are somewhat like revisionist historians, refiguring past events in light of recent changes. (They are, unfortunately, also frequently condemned to repeat history even when they learn from it.) Interpreting what has happened and why and prognosticating what might happen make of the present a constant, self-reflective grappling with illness meanings. Does this event portend a break in the dike of therapeutic and preventive defenses? Did that experience mean I can no longer rely on this coping strategy? Will that upcoming circumstance provoke an exacerbation, as it did a year ago, or pass by unnoticed, as it did two years ago?

The chronically ill become interpreters of good and bad omens. They are archivists researching a disorganized file of past experiences. They are diarists recording the minute ingredients of current difficulties and triumphs. They are cartographers mapping old and new territories. And they are critics of the artifacts of disease (color of sputum, softness of stool, intensity of knee pain, size and form of skin lesions). There is in this persistent reexamination the opportunity for considerable self-knowledge. But—as with all of us—denial and illusion are ready at hand to assure that life events are not so threatening and supports seem more durable. Myth making, a universal human quality, reassures us that resources conform to our desires rather than to actual descriptions. In short, self-deception makes chronic illness tolerable. Who can say that illusion and myth are not useful to maintain optimism, which itself may improve physiological performance (Hahn and Kleinman 1982; Tiger 1980)? The point I am making is that the meanings of chronic illness are created by the sick person and his or her circle to make over a wild, disordered *natural* occurrence into a more or less domesticated, mythologized, ritually controlled, therefore *cultural* experience.

Patients' explanatory models of chronic illness open up practical

behavioral options in its treatment; they also enable sick persons to order, communicate, and thereby symbolically control symptoms. One of the core tasks in the effective clinical care of the chronically ill—one whose value it is all too easy to underrate—is to affirm the patient's experience of illness as constituted by lay explanatory models and to negotiate, using the specific terms of those models, an acceptable therapeutic approach. Another core clinical task is the empathetic interpretation of a life story that makes over the illness into the subject matter of a biography. Here the clinician listens to the sick individual's personal myth, a story that gives shape to an illness so as to distance an otherwise fearsome reality. The clinician attends to the patient's and family's summation of life's trials. Their narrative highlights core life themes—for example, injustice, courage, personal victory against the odds—for whose prosecution the details of illness supply evidence.

Thus, patients order their experience of illness—what it means to them and to significant others—as personal narratives. The illness narrative is a story the patient tells, and significant others retell, to give coherence to the distinctive events and long-term course of suffering. The plot lines, core metaphors, and rhetorical devices that structure the illness narrative are drawn from cultural and personal models for arranging experiences in meaningful ways and for effectively communicating those meanings. Over the long course of chronic disorder, these model texts shape and even create experience. The personal narrative does not merely reflect illness experience, but rather it contributes to the experience of symptoms and suffering. To fully appreciate the sick person's and the family's experience, the clinician must first piece together the illness narrative as it emerges from the patient's and the family's complaints and explanatory models; then he or she must interpret it in light of the different modes of illness meanings—symptom symbols, culturally salient illnesses, personal and social contexts.

Illness story making and telling are particularly prevalent among the elderly. They frequently weave illness experience into the apparently seamless plot of their life stories, whose denouement they are constantly revising. In the terminal phase of life, looking backward constitutes much of the present. That gaze back over life's difficult treks is as fundamental to this ultimate stage of the life

cycle as dream making is in adolescence and young adulthood. Things remembered are tidied up, put in their proper place, rethought, and, equally important, retold, in what can be regarded as a story rapidly approaching its end: the tale of the aged. Constructing a coherent account with an appropriate conclusion is a final bereavement for all that is left behind and for oneself.

Illnesses, like other misfortunes, occupy an edifying place in this tale as exemplary difficulties and determinant forces, something that was formidable, now to be smiled over. Illness, assimilated to a life story, helps the elderly patient illustrate life's high and low points. The very same process of narratization that is central to the psychobiological transformation of this developmental phase, not very surprisingly then, is an integral component of the elderly patient's response to illness, past and present. Telling this tale is of great significance. It establishes a kind of final expertise to authorize the giving of advice and to reaffirm bonds with the young and with those survivors who will carry on the account after a person's death. For the care giver what is important is to witness a life story, to validate its interpretation, and to affirm its value.

Most of us figure out our own thoughts by speaking them to the persons whose reactions are as important as our own. Something like this happens as the elderly rehearse with us their stories, though with the cognitive losses of advanced aging the former dialogues more and more become soliloquies. Few of the tragedies at life's end are as rending to the clinician as that of the frail elderly patient who has no one to tell the life story to. Indeed, becoming a surrogate for those who should be present to listen may be one of the practitioner's finest roles in the care of the aged.

Restrospective narratization is also frequent in situations where an illness had a catastrophic end, or when such an end has narrowly been avoided. In these instances, the narrative may hold a moral purpose; it acts something like the recitation of myth in a ritual that reaffirms core cultural values under siege and reintegrates social relations whose structural tensions have been intensified. Illness narrative, again like the ritual use of myth, gives shape and finality to a loss (cf. Turner 1967). The story of a sickness may even function as a political commentary, pointing a finger of condemnation at perceived injustice and the personal experience of oppression

(Taussig 1980). For these reasons, retrospective narratization can readily be shown to distort the actual happenings (the history) of the illness experience, since its raison d'être is not fidelity to historical circumstances but rather significance and validity in the creation of a life story.

A more ominous kind of retrospective narratization occurs in the tendentious reworking of an account of illness and treatment to fit the line of argument of a disability suit or malpractice litigation. There is a reciprocal activity in the physician's recording of the case, where disease episodes are at times reconstructed with an eye on peer review and official examination of the record; the account may serve to protect the practitioner from bureaucratic criticism and legal sanction. In an era of epidemic medical-legal suits with unprecedented peer review pressures, we can expect this aspect of illness meanings to take on increasingly menacing personal and public significance. Of course, retrospective narratization by the practitioner often serves functions reciprocal to those described for lay persons: cautionary tale, moral exemplar, final reckoning of a patient's life, and so forth. Inasmuch as all practitioners need to believe in their own professional competence, which comes under acute assault in the unpredictable, poorly controlled course of chronic disorder, the health professional's creation of a narrative may function as a kind of second guessing that protects against feelings of inadequacy and even failure.

There is an analogue of the patient's and family's explanatory models of illness in what the clinician *interprets* for the illness behavior of a particular patient with a particular disorder in a particular situation at a particular time. Clinicians (and researchers, too) come to recognize not only the disease. They also see the personal significances and social uses of chronic illness. But physicians' visions are not panoramic. Rather they focus upon different elements in their explanatory accounts: the person, the setting, the illness, or an aspect of the illness behavior. Every journeyman clinician knows that chronic illness is overdetermined and conveys several and often many meanings: not this or that, but this and that—and that. How does the clinician decide in a given case which meanings are primary and which secondary? The process of selective interpretation reflects the interests of the observer-professional and the intended uses of

the interpretations for the care of a chronically ill patient. This practical therapeutic orientation constrains the interpretation as much as do the interests of the patient and family. I will disclose this process in the illness accounts that are described in chapter 7, and in the two concluding chapters I expand on this topic as part of my consideration of the relationship of illness meanings to the work of the practitioner. Here I simply wish to point out that personal (countertransference) and professional (disease) interests of the clinician strongly influence the illness interpretation. The clinical account, in turn, is perhaps better regarded as the active creation of illness meanings in a dialogue with the subject than as the resultant of passive observation of them in the patient as an object.

That is to say, illness has particular meanings for practitioners who listen to a patient's account of illness in light of their own special interests (therapeutic, scientific, professional, financial, personal). Even before the physician entifies an elusive illness into a precise disease, the very ways of auditing the illness account influence the giving of the account and its interpretation. Patients are usually aware of the demands of different settings—home, public clinic, private office, disability agency, courtroom—and how these help cast the story in a certain form. Similarly, health professionals, when they stop to think about it (and in the exigency of the clinical day most do not), recognize that how they listen to these accounts constrains the telling and the hearing. The busy surgeon in an emergency unit, the obstetrician on hospital rounds, the internist in a union or industry clinic, the psychiatrist in a state hospital ward or in a private office, the exhausted intern, the professor out to make a point about bioethics—all attend differently. The way they nod their head, fidget, or look at the patient influences how the patient tells the illness story. Moreover, the priorities of the practitioner lead to selective attention to the patient's account, so that some aspects are carefully listened for and heard (sometimes when they are not spoken), while other things that are said—and even repeated—are literally not heard. The physician's training also encourages the dangerous fallacy of over-literal interpretation of accounts best understood metaphorically.

I regard these phenomena as the way *clinical reality*—the definition of the problem at hand and the awareness of the others' expectations about how to act therapeutically—is constructed differently by different health professionals interacting with different patients in different settings. Financial issues, the ubiquitous bottom line in a capitalist society, loom large as a not-so-hidden interest in clinical encounters and not infrequently distort clinical communication and practice. Clinicians (and researchers, too) need to unpack their own interpretive schemes, which are portmanteaus filled with personal and cultural biases. They also must rethink the versions of the clinical world they create. They must be certain where therapeutic interests are being altered by concerns of theory validation, research publication, or just plain making a living and advancing a professional career. The professional biases that underwrite invidious stereotypes of certain categories of chronic patients (for example, as "crocks" or "trolls" or "your typical pain patient") are another example. These human interests need to be the subject of ongoing self-reflective sorting by the interpreters of patient accounts to be sure that the interpretations they render are not tendentious delegitimations of the illness experience, obstacles to effective care. This is a simply enormous problem in clinical practice and research with chronic patients that has not been adequately addressed.

At this fourth level of illness meanings, Alice Alcott's physicians did not want to hear or see her demoralization. Denial is most often a social act. They were deeply threatened by her tacit explanatory model that the course of her illness would lead relentlessly downhill (an expectation they came to share silently). Alice Alcott stopped short of giving up, and she adapted once again to a serious loss. She has insight into her own tendency to give up and its dangerous implications. And her practitioners came to terms with their own feelings of frustrating impotence. Dr. Torres, a Hispanic-American physician, learned to change his ethnic biases about New England Yankees, namely, that they are cold and insensitive. He eventually saw Alice as neither of these. He came to recognize that his stereotype was a means of avoiding his own grieving for her condition. As the consulting psychiatrist, I had to overcome both my tendency to insist on diagnosing a treatable psychiatric disease (that is, major depressive disorder), in spite of evidence to the contrary, and my desire to place Alice on antidepressant pharmacologic agents that would, I fantasized, lead to a cure.

Remoralization in the progressively incapacitating downhill phase of illness derives, I believe, not from a particular technique but from the combination of many clinical acts. I have emphasized empathic witnessing. That is the existential commitment to be with the sick person and to facilitate his or her building of an illness narrative that will make sense of and give value to the experience. But the practitioner also struggles to model courage and to see it in others. Doctors also sanction suffering by drawing on irony, paradox, humor, and what wisdom they have acquired—including the knowledge of when to stop. This I take to be the moral core of doctoring and of the experience of illness. The commoditization of the healer–sick person relationship as an economic transaction cannot quantify this aspect of the relationship, which, as a shared virtue, is not captured by a cost/benefit equation or financial bottom line. It is rather the healer's gift as well as that of the patient.

William James, addressing the distinguished audiences assembled in Edinburgh for his 1896 Gifford lectures, which would become his still-influential masterpiece, *The Varieties of Religious Experience,* spoke of two kinds of practical personal perspectives on experience, which—with a sensitivity to the problem of suffering and also to his audiences' likely stereotypes of Europeans as sophisticates and Americans as innocents—he aptly characterized the once and twice born. The once born James took to be native optimists who tended to see everyday life and religion on the surface: hopeful, positive, well-ordered, progressive. The twice born, in contrast, were more pessimistic. They tended to focus on the darker underside of experience. The twice born were absorbed by questions of social injustice and personal pain.

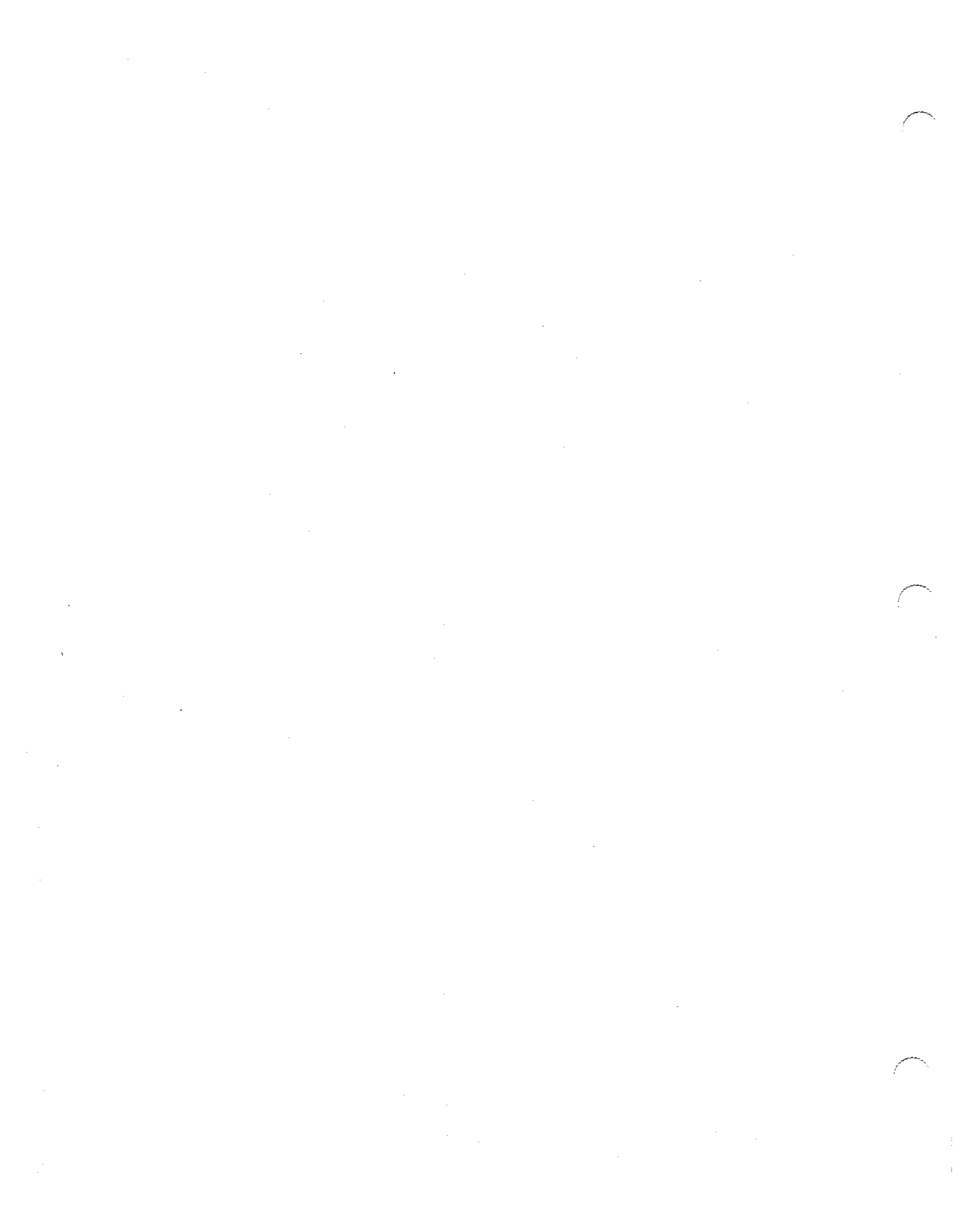
The experience of chronic illness often converts the once born into the twice born. As the Soviet dissident and now émigré poet Irina Ratushinskaya (1987, 19), meditating on her own hard-won wisdom, ironically puts it in one of her poems about her brutal prison experience:

> Such a gift can happen only once,
> Perhaps one needs it only once.

The moral lesson illness teaches is that there are undesired and undeserved pains that must be lived through, that beneath the

façade of bland optimism regarding the natural order of things, there is a deeper apprehension of a dark, hurtful stream of negative events and troubles. Change, caprice, and chaos, experienced in the body, challenge what order we are led to believe—need to believe—exists. Disability and death force us to reconsider our lives and our world. The possibility for human transformation, immanent or transcendent, sometimes begins with this disconcerting vision. Literalists about behavior and its sources may thus acquire a more textured, figurative, self-reflective vision of the world. The rational calculus that is supposed to make "supply and demand" the hard-headed wisdom of economic man will seem to mystify what is at stake in self-knowledge for man the afflicted. For the seriously ill, insight can be the result of an often grim, though occasionally luminous, lived wisdom of the body in pain and the mind troubled. For family members and practitioners, moral insight can emerge from the felt experience of sympathy and empathy. It is this particular sense that I take to be the inner moral meaning of chronic illness and care.

These four kinds of illness meanings, and the variety of subtypes I have traced out in these pages, are not meant to be exhaustive. There are surely other types. But I believe that I have covered the most important varieties. My intention has been to set out a theoretical grid that we can use to analyze actual cases of chronic illness and thereby generalize from the issues outlined in these first chapters. In the human context of illness, experience is created out of the dialectic between cultural category and personal signification on the one side, and the brute materiality of disordered biological processes on the other. The recurrent effect of narrative on physiology, and of pathology on story, is the source of the shape and weight of lived experience. That felt world combines feeling, thought, and bodily process into a single vital structure underlying continuity and change in illness. Coming to terms with this human dialectic transforms our understanding of the difficult life problems that issue from chronic illness and of how they are best treated; it also alters our appreciation of what medicine and health care are all about. I turn now to detailed descriptions of the illness experiences of actual patients with distinctive illness problems.



T S I

Trauma Symptom Inventory

John Briere, Ph.D.

______________________	______	__/__/__
Name	*Age*	*Test Date*

__/__/__	______________	______	______________
Birth Date	*Education*	*Sex*	*Ethnicity*

DIRECTIONS: ***Please indicate how often each of the following experiences have happened to you in the*** ***<u>last six months</u>.***

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		Never			Often
1.	Heart pounding or beating too fast	0	1	2	3
2.	Nightmares or bad dreams	0	1	2	3
3.	Trying to forget about a bad time in your life	0	1	2	3
4.	Unwanted sexual thoughts	0	1	2	3
5.	Irritability	0	1	2	3
6.	Stopping yourself from thinking about the past	0	1	2	3
7.	Getting angry about something that wasn't very important	0	1	2	3
8.	Feeling empty inside	0	1	2	3
9.	Sadness	0	1	2	3
10.	"Flashbacks" (sudden memories or images of upsetting things)	0	1	2	3
11.	Not being satisfied with your sex life	0	1	2	3
12.	Not being able to say "no" when someone wanted to have sex with you, but you didn't want sex	0	1	2	3
13.	Feeling like you were outside of your body	0	1	2	3
14.	Lower back pain	0	1	2	3
15.	Sudden disturbing memories when you were not expecting them	0	1	2	3
16.	Wanting to cry	0	1	2	3
17.	Bad feelings about sex	0	1	2	3
18.	Not feeling happy	0	1	2	3
19.	Becoming angry for little or no reason	0	1	2	3
20.	Feeling like you don't know who you really are	0	1	2	3
21.	Feeling depressed	0	1	2	3
22.	Being bothered by memories	0	1	2	3
23.	Having sex with someone you hardly knew	0	1	2	3
24.	Thoughts or fantasies about hurting someone	0	1	2	3
25.	Your mind going blank	0	1	2	3
26.	Fainting	0	1	2	3
27.	Not enjoying things you used to enjoy	0	1	2	3
28.	Periods of trembling or shaking	0	1	2	3
29.	Pushing painful memories out of your mind	0	1	2	3
30.	Not understanding why you did something	0	1	2	3
31.	Threatening or attempting suicide	0	1	2	3
32.	Feeling like you were watching yourself from far away	0	1	2	3
33.	Feeling guilty	0	1	2	3
34.	Feeling tense or "on edge"	0	1	2	3
35.	Getting into trouble because of sex	0	1	2	3
36.	Not feeling like your real self	0	1	2	3
37.	Wishing you were dead	0	1	2	3
38.	Worrying about things	0	1	2	3
39.	Not being sure of what you want in life	0	1	2	3
40.	Feeling like you weren't really yourself	0	1	2	3

	Never			Often
41. Bad thoughts or feelings during sex	0	1	2	3
42. Being easily annoyed by other people	0	1	2	3
43. Starting arguments or picking fights to get your anger out	0	1	2	3
44. Suddenly feeling afraid for little or no reason	0	1	2	3
45. Having sex or being sexual to keep from feeling lonely or sad	0	1	2	3
46. Getting angry when you didn't want to	0	1	2	3
47. Not being able to feel your emotions	0	1	2	3
48. Confusion about your sexual feelings	0	1	2	3
49. Using drugs other than marijuana	0	1	2	3
50. Feeling jumpy	0	1	2	3
51. Absent-mindedness	0	1	2	3
52. Feeling paralyzed for minutes at a time	0	1	2	3
53. Needing other people to tell you what to do	0	1	2	3
54. Yelling or telling people off when you felt you shouldn't have	0	1	2	3
55. Flirting or "coming on" to someone to get attention	0	1	2	3
56. Sexual thoughts or feelings when you thought you shouldn't have them	0	1	2	3
57. Intentionally hurting yourself (for example, by scratching, cutting, or burning) even though you weren't trying to commit suicide	0	1	2	3
58. Aches and pains	0	1	2	3
59. Having a feeling that something bad was about to happen	0	1	2	3
60. Sexual fantasies about being dominated or overpowered	0	1	2	3
61. High anxiety	0	1	2	3
62. Problems in your sexual relations with another person	0	1	2	3
63. Wishing you had more money	0	1	2	3
64. Nervousness	0	1	2	3
65. Getting confused about what you thought or believed	0	1	2	3
66. Avoiding things that you knew would upset you	0	1	2	3
67. Feeling tired	0	1	2	3
68. Feeling mad or angry inside	0	1	2	3
69. Getting into trouble because of your drinking	0	1	2	3
70. Staying away from certain people or places because they reminded you of something	0	1	2	3
71. One side of your body going numb	0	1	2	3
72. Wishing you could stop thinking about sex	0	1	2	3
73. Suddenly remembering something upsetting from your past	0	1	2	3
74. Wanting to hit someone or something	0	1	2	3
75. Feeling hopeless	0	1	2	3
76. Hearing someone talk to you who wasn't really there	0	1	2	3
77. Suddenly being reminded of something bad	0	1	2	3
78. Getting into relationships that were bad for you	0	1	2	3
79. Sudden feelings of anger	0	1	2	3

		Never			Often
80.	Trying to block out certain memories	0	1	2	3
81.	Sexual problems	0	1	2	3
82.	Using sex to feel powerful or important	0	1	2	3
83.	Violent dreams	0	1	2	3
84.	Acting "sexy" even though you didn't really want sex	0	1	2	3
85.	Just for a moment, seeing or hearing something upsetting that happened earlier in your life	0	1	2	3
86.	Using sex to get love or attention	0	1	2	3
87.	Frightening or upsetting thoughts popping into your mind	0	1	2	3
88.	Getting your own feelings mixed up with someone else's	0	1	2	3
89.	Wanting to have sex with someone who you knew was bad for you	0	1	2	3
90.	Feeling down and unhappy	0	1	2	3
91.	Feeling ashamed about your sexual feelings or behavior	0	1	2	3
92.	Trying to keep from being alone	0	1	2	3
93.	Losing your sense of taste	0	1	2	3
94.	Trouble paying attention to people	0	1	2	3
95.	Having the same (or nearly the same) bad dream over and over again	0	1	2	3
96.	Your feelings or thoughts changing when you were with other people	0	1	2	3
97.	Having sex that had to be kept a secret from other people	0	1	2	3
98.	Worrying that someone is trying to steal your ideas	0	1	2	3
99.	Taking drugs or alcohol to stop your feelings	0	1	2	3
100.	Not letting yourself feel bad about the past	0	1	2	3
101.	Feeling like things weren't real	0	1	2	3
102.	Feeling like you were in a dream	0	1	2	3
103.	Not eating or sleeping for two or more days	0	1	2	3
104.	Drinking or taking drugs to stop certain thoughts or memories	0	1	2	3
105.	Trying not to have any feelings about something that once hurt you	0	1	2	3
106.	Painful or disturbing memories	0	1	2	3
107.	Daydreaming	0	1	2	3
108.	Trying not to think or talk about things in your life that were painful	0	1	2	3
109.	Feeling like life wasn't worth living	0	1	2	3
110.	Being startled or frightened by sudden noises	0	1	2	3
111.	Seeing people from the spirit world	0	1	2	3
112.	Trouble controlling your temper	0	1	2	3
113.	Being easily influenced by others	0	1	2	3
114.	Wishing you didn't have any sexual feelings	0	1	2	3
115.	Wanting to set fire to a public building	0	1	2	3
116.	Feeling afraid you might die or be injured	0	1	2	3
117.	Feeling so depressed that you avoided people	0	1	2	3
118.	Thinking that someone was reading your mind	0	1	2	3
119.	Feeling worthless	0	1	2	3

TSI Scoring Sheet (final version)

Directions: Sum individual items to form scale scores. Critical items are interpreted individually.

Client Name: ____________________________

Validity Scales

Atypical Response	Response Level
26____	5____
52____	7____
71____	9____
76____	14____
93____	18____
98____	34____
103____	38____
111____	58____
115____	63____
118____	67____
Sum____	Sum____

Clinical Scales

Anxious Arousal	Anger / Irritability	Defensive Avoidance	Depression	Dissociation
28____	5____	3____	9____	13____
34____	19____	6____	16____	25____
38____	42____	29____	21____	32____
50____	43____	70____	37____	36____
61____	46____	80____	75____	47____
64____	54____	100____	109____	51____
110____	68____	105____	117____	101____
116____	74____	108____	119____	102____
	112____			107____
Sum____	Sum____	Sum____	Sum____	Sum____

Dysfunction Sexual Behavior	Intrusive Experiences	Impaired Self Reference	Sexual Concerns	Tension Reduction Behavior
23____	2____	8____	11____	31____
35____	10____	20____	41____	43____
45____	15____	30____	48____	45____
55____	73____	39____	56____	54____
82____	77____	53____	62____	55____
84____	83____	65____	72____	57____
86____	85____	88____	81____	82____
89____	87____	96____	91____	92____
97____		113____	114____	
Sum____	Sum____	Sum____	Sum____	Sum____

Critical Items

Critical Items
24____
31____
35____
37____
49____
57____
60____
69____
109____

Chapter 4
The Adrenal Gland and the Kidney

ANATOMY AND PHYSIOLOGY

Both the kidney and the cortex of the adrenal gland are derived from the urogenital ridge and are mesenchymal. The medulla of the adrenal is neuroectodermal. Although they are embryologically quite distinct, they are linked functionally and this explains their close anatomical relationship.

Kidney and adrenal cortex

Renin from the juxtaglomerular cells is necessary for secretion of aldosterone from the zona glomerulosa of the adrenal cortex.

Adrenal cortex and medulla

The enzyme which catalyses the formation of adrenaline from noradrenaline — phenylethanolamine-*N*-methyltransferase — is potentiated by glucocorticoids. These shared functions are directed towards preventing excessive salt and water loss and towards maintaining the effective circulation of blood.

The adrenal gland

The adrenal gland on each side weighs approximately 6 g, and lies above the kidney. The left adrenal is longer and thinner and reaches down the medial side of the upper pole of the kidney (Fig. 4.1). There is a capillary network which derives its arterial supply from the inferior mesenteric and renal arteries, as well as the aorta. The blood drains centripetally into the sinusoids (Fig. 4.2) and then through the medulla into the adrenal vein. The left adrenal vein drains into the left renal vein, and the right drains directly into the inferior vena cava.

Adrenal cortex

The cortex is divided into three zones: glomerulosa, fasciculata and reticularis (Fig. 4.2). The zona glomerulosa (Latin, *glomerulus*: blackberry) secretes predominantly mineralocorticoids. The fasciculata ('small ropes or cords' of cells) is the main source of glucocorticoids. The reticularis ('network' of cells) secretes glucocorticoids and androgens. However, the different zones are interchangeable: in response to adrenocorticotrophic hormone (ACTH) stimulation in Cushing's disease, the divisions become blurred. Moreover, zona glomerulosa cells in culture secrete glucocorticoids rather than mineralocorticoids.

Adrenal medulla

The secretory cells of the medulla are polyhedral and arranged in a loose meshwork of interconnecting cords. They are richly innervated by acetylcholine-

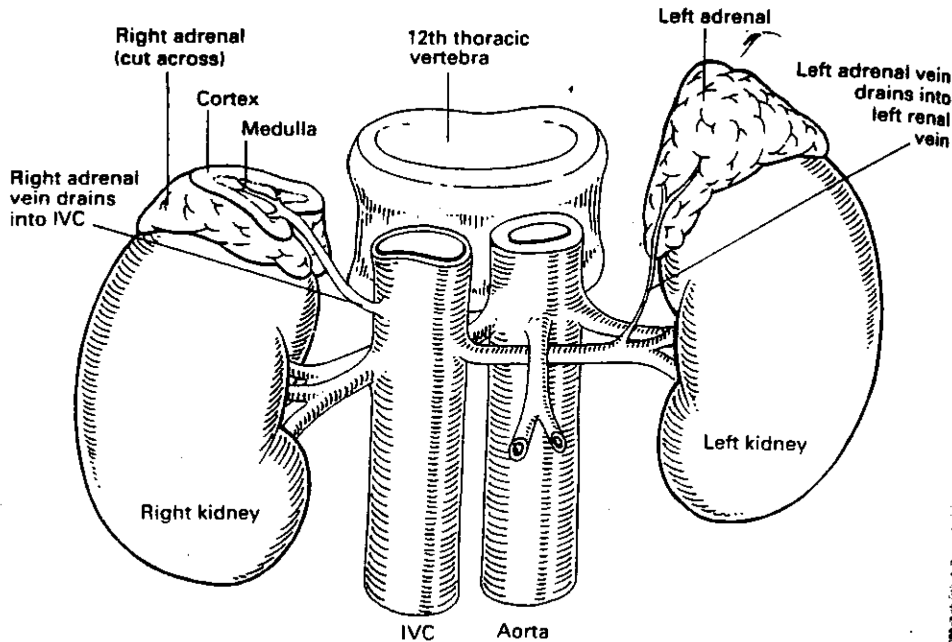


Fig. 4.1. Anatomical relations of the adrenal glands. IVC, inferior vena cava.

secreting preganglionic sympathetic fibres, and bathed in sinusoidal blood which drains centripetally from the cortex. Corticosteroids in this blood are essential for the formation of adrenaline from noradrenaline.

The secretory cells are called chromaffin cells, because they were shown (in 1900) to stain yellow–brown with chromium — hence 'affinity' for 'chromium'. Other chromaffin cells are distributed through the body in the liver, kidney, gonads, heart, carotid body, appendix and Peyer's patches of the small bowel. There are two types in the adrenal medulla: those which secrete noradrenaline, and those which secrete adrenaline. Both contain typical secretory granules — it is these that stain with chromium. The granules also contain a protein, chromogranin A, the function of which is unknown, as well as small quantities of leucine and methionine enkephalin. There is a third sort of cell — the pericyte — which is very closely related to the walls of capillaries and sinusoids, and which presumably modifies their function.

Hormones of the adrenal cortex

The adrenal cortex secretes steroids and these are divided into three groups, depending on their predominant biological actions: glucocorticoids, mineralocorticoids and sex steroids. The synthetic pathway of corticosteroids is given in Fig. 1.11. The main glucocorticoid in humans is cortisol, but in rodents it is corticosterone. The main mineralocorticoid in humans is aldosterone.

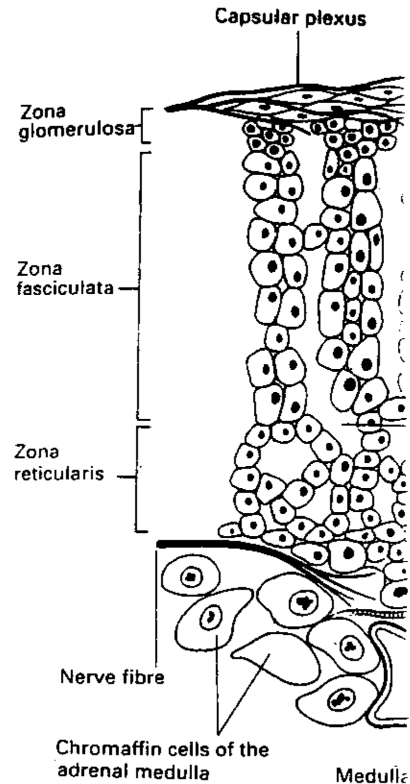


Fig. 4.2. Structure of the adrenai

Glucocorticoids

Actions

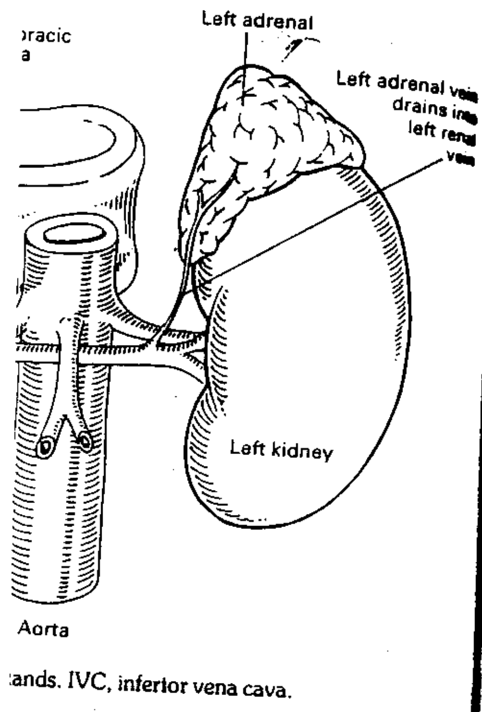
Glucocorticoids have many a
actions of mineralocorticoids.
modify DNA transcription and
derivatives. Glucocorticoids are
bilateral adrenalectomy.

Effects of glucocorticoid excess

The effects of excessive gluco
glucocorticoids) are listed in Ta
corticoid excess.

Effects of glucocorticoid deficiency

The symptoms and signs of glu



:ands. IVC, inferior vena cava.

, and bathed in sinusoidal blood which
osteroids in this blood are essential for
aline.

in cells, because they were shown (in
ım — hence 'affinity' for 'chromium'.
rough the body in the liver, kidney,
l Peyer's patches of the small bowel.
a: those which secrete noradrenaline,
ntain typical secretory granules — it is
es also contain a protein, chromogra-
well as small quantities of leucine and
of cell — the pericyte — which is very
nd sinusoids, and which presumably

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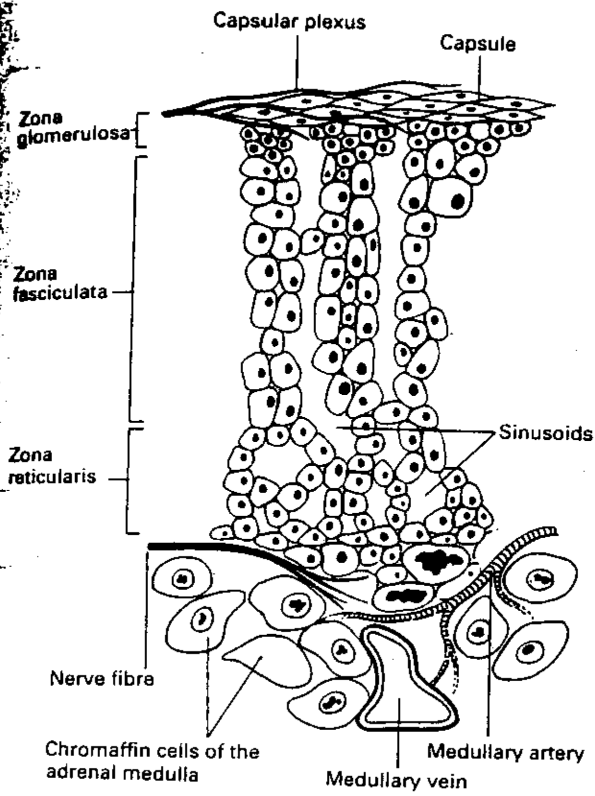


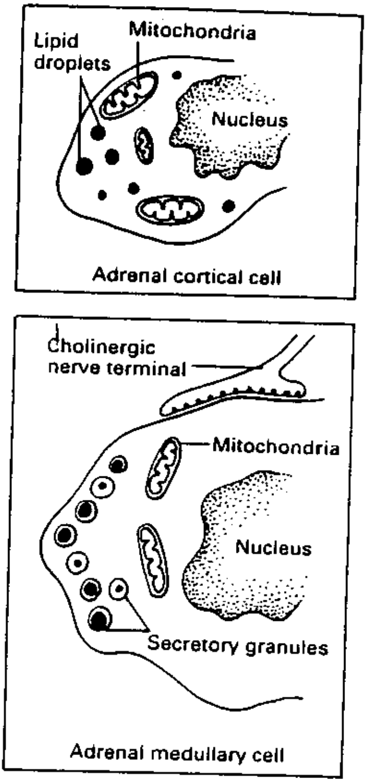


Fig. 4.2. Structure of the adrenal cortex and medulla.

Glucocorticoids

Actions

Glucocorticoids have many actions (Table 4.1). They also share some of the actions of mineralocorticoids. Glucocorticoids interact directly with X-protein to modify DNA transcription and the intracellular metabolism of arachidonic acid derivatives. Glucocorticoids are essential for life: an animal will die within days of bilateral adrenalectomy.

Effects of glucocorticoid excess

The effects of excessive glucocorticoid secretion (or excessive treatment with glucocorticoids) are listed in Table 4.2. Cushing's syndrome is caused by glucocorticoid excess.

Effects of glucocorticoid deficiency

The symptoms and signs of glucocorticoid deficiency are listed in Table 4.3.

Table 4.1. Main actions of glucocorticoids

Carbohydrate metabolism
Raise blood glucose by stimulation of glycogenolysis and gluconeogenesis

Protein metabolism
Increased breakdown, with overall negative nitrogen balance

Fat metabolism
Selective lipolysis, with loss of body fat in the limbs, but accumulation over the lower face and trunk

Suppression of inflammation
Reduced synthesis of prostacyclins; sequestration of eosinophils

Endocrine
Suppression of pituitary hormones: ACTH, LH, FSH, TSH, GH

Table 4.2. Effects of glucocorticoid excess (Cushing's syndrome)

Hyperglycaemia
From stimulation of gluconeogenesis and glycogenolysis

Negative nitrogen balance with protein loss
Osteoporosis, muscle wasting, reduced fibrogenesis, with thin skin and easy bruising

Salt and water retention
With tendency to congestive cardiac failure
Associated hypokalaemia

Reduced immune response
Increased susceptibility to infection

Abnormal fat metabolism
With increased fat deposition in central areas: face and trunk

Suppression of ACTH secretion

Neutrophilia

Mental effects
Including depression and confusion
Occasionally frank psychosis occurs

Mineralocorticoids

Actions

The predominant action of mineralocorticoids concerns the balance of salt, potassium and hydrogen ions: salt and water retention at the expense of K^+ and H^+. Mineralocorticoids also have weak glucocorticoid activity. Aldosterone is

Table 4.3. Effects of glucocortic

Increased sensitivity to insulin: te
Reduced mobilization of periphe
Reduced gluconeogenesis
Inability to excrete a water load
Loss of salt and water: hyponatra
Reduced neutrophils and increas
Loss of feedback suppression of
Non-specific malaise, with fatigua

thought to be responsible for
the 24-hour secretion rate is
20–25 mg.

Effects of mineralocorticoid excess

Excessive secretion of aldoste
K^+ and H^+. This cases hyper

Effects of mineralocorticoid deficien

Salt and water deficiency ca
There is associated hyperkala
effects of mineralocorticoid d
glucocorticoid deficiency — A

Sex steroids

The adrenal cortex secretes a
The biological significance of
and those from the gonad, is r
in small amounts, they mair
androsterone sulphate (DHE

Effects of sex steroid excess

Androgens
The effects of androgen exce
adult men. There are two c
congenital adrenal hyperplasi
with body and facial hair (h
clitoromegaly and deepening
puberty growth spurt. Boys
small), and girls can develop

Oestrogens
The main effect of oestrogen
women it is menstrual disturb

Table 4.3. Effects of glucocorticoid deficiency

- Increased sensitivity to insulin: tendency to hypoglycaemia
- Reduced mobilization of peripheral protein and fat
- Reduced gluconeogenesis
- Inability to excrete a water load
- Loss of salt and water: hyponatraemia and hyperkalaemia
- Reduced neutrophils and increased eosinophils
- Loss of feedback suppression of ACTH
- Non-specific malaise, with fatiguability and gastrointestinal upset

thought to be responsible for 75% of the salt and water retaining effect, although the 24-hour secretion rate is much less than that of cortisol: 0.125 mg versus 20–25 mg.

Effects of mineralocorticoid excess

Excessive secretion of aldosterone results in salt and water retention, with loss of K^+ and H^+. This cases hypertension, with hypokalaemic alkalosis.

Effects of mineralocorticoid deficiency

Salt and water deficiency causes volume depletion with postural hypotension. There is associated hyperkalaemia and mild metabolic acidosis. In practice, the effects of mineralocorticoid deficiency are nearly always associated with those of glucocorticoid deficiency — Addison's disease.

Sex steroids

The adrenal cortex secretes androgens and oestrogens in both men and women. The biological significance of this, and the relationship between these sex steroids and those from the gonad, is not clear. Although the adrenals secrete testosterone in small amounts, they mainly produce weak androgens such as dehydroepiandrosterone sulphate (DHEAS) and androstenedione (see Fig. 1.11).

Effects of sex steroid excess

Androgens

The effects of androgen excess may be seen in women and children, but not in adult men. There are two causes: androgen-secreting tumours (p. 209), and congenital adrenal hyperplasias (pp. 92–6). Women may develop increased acne, with body and facial hair (hirsutism), frontal balding, increased muscle bulk, clitoromegaly and deepening voice (virilism). Children of both sexes enter a false puberty growth spurt. Boys develop signs of pseudopuberty (the testes remain small), and girls can develop clitoromegaly.

Oestrogens

The main effect of oestrogen excess in men is gynaecomastia. In premenopausal women it is menstrual disturbance with breakthrough bleeding.

Effects of sex steroid deficiency

There are none if gonadal function is intact. Children with Addison's disease go through a normal puberty.

Control of adrenocortical function

The control of secretion of glucocorticoids and sex steroids is different from the control of mineralocorticoids.

Glucocorticoids and sex steroids

Secretion is under the control of pituitary ACTH. If ACTH secretion is deficient, the person is cortisol-deficient. ACTH itself is under the predominant control of the hypothalamic releasing hormone CRH (corticotrophin-releasing hormone) and is released in three different ways:

1 Circadian rhythm: high in the early hours and morning, low in the evening.

2 Stress: physical and psychological stresses result in increased ACTH and cortisol secretion.

3 Negative feedback: ACTH secretion is suppressed by circulating glucocorticoids.

Mineralocorticoids

The main factor controlling aldosterone secretion is angiotensin II (AII). AII production is stimulated by the secretion of renin from the juxtaglomerular cells of the kidney (Fig. 4.3). However, other factors also act on the zona glomerulosa to increase aldosterone secretion:

1 Hyperkalaemia
2 Hyponatraemia
3 ACTH (to a small extent)
4 Other ACTH-related peptides
5 Prostaglandin E

Even though ACTH plays a small part, it is not significant in clinical practice. When a person is deficient in ACTH (from a pituitary tumour, for example), cortisol is low but aldosterone is normal.

Hormones of the adrenal medulla

Details of synthesis, secretion and clearance are given in Chapter 1. The effects of stimulation of α- and β-receptors by catecholamines are listed in Table 1.1.

The adrenal medulla secretes catecholamines (dopamine, noradrenaline and adrenaline) and peptides (enkephalins, somatostatin), often together. The main stimulus for hormone release appears to be stress, preparing the animal for 'fight or flight'. Thus the secretion of catecholamines will result in a differential supply of blood to brain, liver, muscles and kidney, and release glucose and fatty acids, which are then available as an energy source. However, the different roles of the different catecholamines and peptides is not clear, and neither is the relationship between the adrenal medulla and the rest of the sympathetic nervous system. The adrenal medulla is not essential, and an animal which has lost both is just as able to fight or be frightened as one which has not.

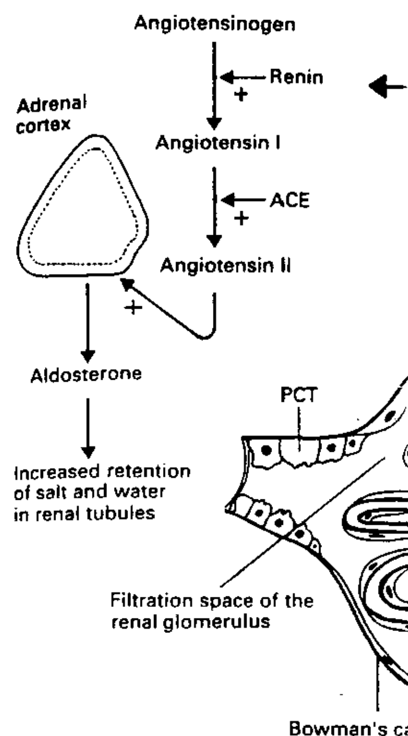


Fig. 4.3. Functional integration o
angiotensin–aldosterone system. A
convoluted tube; PCT, proximal cc

Hormones and the kidney

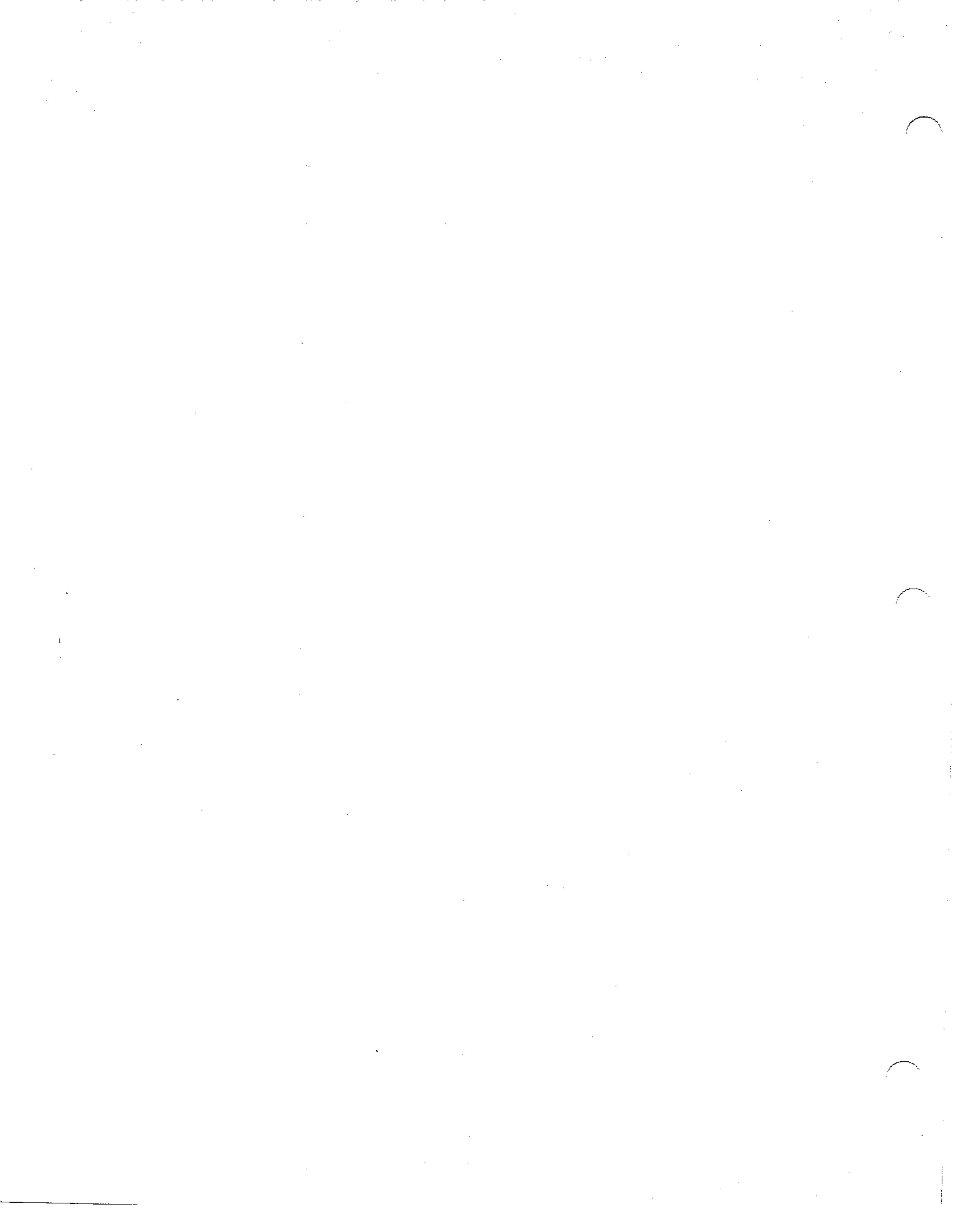
The kidney has complex endoc
1 It secretes hormones, e.g. r
2 It activates prohormones, e
3 It mediates the action of hc
terone, parathyroid hormone (
4 It inactivates and clears hor

Erythropoietin

The source of EPO in the kidne
EPO has 166 amino acids (r
response to falling tissue oxyge
blood-cell production. Anaemi
deficiency. Some renal adeno
polycythaemia.

Renin–angiotensin system

Renin is a glycoprotein of 347



Prostitution, Violence, and Posttraumatic Stress Disorder

Melissa Farley, PhD
Howard Barkan, DrPH

ABSTRACT. One hundred and thirty people working as prostitutes in San Francisco were interviewed regarding the extent of violence in their lives and symptoms of posttraumatic stress disorder (PTSD). Fifty-seven percent reported that they had been sexually assaulted as children and 49% reported that they had been physically assaulted as children. As adults in prostitution, 82% had been physically assaulted; 83% had been threatened with a weapon; 68% had been raped while working as prostitutes; and 84% reported current or past homelessness.

We differentiated the types of lifetime violence as childhood sexual assault; childhood physical abuse; rape in prostitution; and other (non-rape) physical assault in prostitution. PTSD severity was significantly associated with the total number of types of lifetime violence ($r = .21$, $p = .02$); with childhood physical abuse ($t = 2.97$, $p = .004$); rape in adult prostitution (Student's $t = 2.77$, $p = .01$); and the total number of times raped in prostitution (Kruskal-Wallace chi square = 13.51, $p = .01$). Of the 130 people interviewed, 68% met

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Melissa Farley is at Prostitution Research and Education, a sponsored project of San Francisco (California) Women's Centers and Kaiser Foundation Research Institute, Oakland, California. Howard Barkan is a statistician and consultant in health services research methods from Berkeley, California.

A version of this paper was presented at the NGO Forum on Women, Fourth World Conference on Women, Beijing, China, September 4, 1995. The research was supported in part by a grant from the Bay Area Homelessness Program, San Francisco State University. Rebecca Z. Holder was an interviewer; and Ruth Lankster entered data. Ms. Della Mundy and the Department of Medical Editing, Kaiser Foundation Research Institute, Oakland, California provided editorial assistance.

Address correspondence to Melissa Farley, Box 16254, San Francisco, CA 94116-0254, USA.

Women & Health, Vol. 27(3) 1998
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DSM III-R criteria for a diagnosis of PTSD. Eighty-eight percent of these respondents stated that they wanted to leave prostitution, and described what they needed in order to escape. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: getinfo@haworthpressinc.com]*

INTRODUCTION

Most discussions of the public health risks of prostitution have focused on sexually-transmitted disease (Weiner, 1996; Plant et al., 1989). A recent editorial in a major medical journal acknowledged the danger of violence to those prostituted, yet concluded that the overall health risks of street prostitution were minimal (Lancet, 1996). In this paper, we discuss a study of the violence experienced by people working as prostitutes in a city in the U.S.A., and some of the consequent harm to physical and emotional health.

The diagnosis of posttraumatic stress disorder (PTSD) describes symptoms which result from trauma. In the language of the American Psychiatric Association (1994), PTSD can result when people have experienced "extreme traumatic stressors involving direct personal experience of an event that involves actual or threatened death or serious injury; or other threat to one's personal integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate."

Exposure to these events may lead to the formation of a variety of symptoms: re-experiencing of the trauma in various forms, efforts to avoid stimuli which are similar to the trauma, a general numbing of responsiveness, and symptoms of physiologic hyperarousal. The grouping of such symptoms following trauma has been recognized as the clinical syndrome of Post-Traumatic Stress Disorder (PTSD). Authors of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) comment that PTSD may be especially severe or long lasting when the stressor is of human design (for example, rape and other torture).

Several previous studies suggest that the incidence of PTSD among those prostituted is likely to be high. First, most people working as prostitutes have a history of childhood physical and sexual abuse (Belton, 1992; Simons & Whitbeck, 1991; Giobbe, 1990; Bagley & Young, 1987; Silbert & Pines, 1981; Silbert & Pines, 1983; James & Meyerding, 1977). Second, sexual and other physical violence is a frequent occurrence in adult prostitution (Hunter, 1994; Vanwesenbeeck, 1994; Baldwin, 1993; Silbert & Pines, 1982). Third, the presence of dissociative symptoms, which often occur in conjunction with PTSD, has been noted among people working as prostitutes (Vanwesenbeeck, 1994; Ross, 1990; Silbert et al., 1982b).

Given the extent of violence in their lives, and the presence of dissociative symptoms, we predicted that people who worked as prostitutes would also experience PTSD. Although numerous populations have been sampled for incidence of PTSD, the frequency of the diagnosis has not been investigated among those prostituting.

Our study was designed to investigate the history of violence and the prevalence of PTSD among people working as prostitutes in San Francisco. We explored the etiology of PTSD by inquiring about interviewees' lifetime experiences of sexual and physical violence. We used a standard psychometric instrument to identify the sequelae of violence and to diagnose PTSD. We also inquired about respondents' current needs.

METHOD

We interviewed respondents from several regions in San Francisco where street prostitution occurs.

Upon our query, those who told us that they were currently working as prostitutes were asked if they would fill out 2 questionnaires which would take about 10 minutes.

Respondents read and signed a consent form. We offered to read the questions and write in the answers for those who appeared hesitant to write or who had difficulty reading. Respondents were offered the first author's phone number for referral in the event that they were distressed by the questions.

Instruments

Interviewees responded to a 23-item questionnaire which inquired about their histories of physical and sexual violence, and what was needed in order to leave prostitution.

Interviewees also completed the PTSD Checklist (PCL) which asks respondents to specify the presence and severity within the last 30 days of each of the symptoms of PTSD identified in DSM IV (Weathers et al., 1993). The PCL includes B symptoms of PTSD (intrusive re-experiencing of trauma); C symptoms of PTSD (numbing and avoidance); and D symptoms (physiologic hyperarousal). A diagnosis of PTSD requires that the person have at least 1 B symptom, 3 C symptoms, and 2 D symptoms. Weathers et al. (1993) used the rule that if a subject scores 3 or above

("moderately," "quite a bit," or "extremely") on any item, that person can then be considered as having that symptom of PTSD. A diagnosis of partial PTSD requires that the person meets at least 2 or the 3 criteria for PTSD (Houskamp & Foy, 1991). We report the number of respondents who scored at symptomatic level for each of the 17 items, and the proportions reporting symptoms justifying diagnoses of partial and full PTSD.

Analyses

Standard descriptive statistics have been used to analyze the responses to the two questionnaires. Percentages were calculated for those who responded to each item. The strengths of associations between pairs of measurements were analyzed with correlation coefficients. The statistical significance of the associations between measurements was evaluated using standard parametric and non-parametric tests as appropriate.

RESULTS

Gender, Race, and Age

Of the 136 people who were working as prostitutes we approached, 4% refused to participate in this research. Several of those who refused were in the process of being hired by a customer; two appeared to be pressured by pimps into refusing.

Seventy-five percent of the 130 interviewees recruited for this study were women, 13% were men, and 12% were transgendered. Thirty-nine percent were White European American, 33% were African American, 18% were Latina, 6% were Asian or Pacific Islander, and 5% described themselves as of mixed race or left the question blank.

Mean age was 30.9 yr., with a standard deviation of 9.0 yr. Median age was 30.0 yr., with a standard deviation of 9.0 yr. Ages ranged from 14 to 61 yr.

Childhood Violence

Fifty-seven percent reported a history of childhood sexual abuse, by an average of 3 perpetrators. Forty nine percent of those who responded reported that as children, they had been hit or beaten by a caregiver until they had bruises or were injured in some way.

Violence in Prostitution

Eighty-two percent of these respondents reported having been physically assaulted since entering prostitution. Of those who had been physically

assaulted, 55% had been assaulted by customers. Eighty-eight percent had been physically threatened while in prostitution, and 83% had been physically threatened with a weapon. Eight percent reported physical attacks by pimps and customers which had resulted in serious injury (for example, gunshot wounds, knife wounds, injuries from attempted escapes).

Sixty-eight percent of these respondents reported having been raped since entering prostitution. Forty-eight percent had been raped more than five times. Forty-six percent of those who reported rapes stated that they had been raped by customers. Forty-nine percent reported that pornography was made of them in prostitution; and 32% had been upset by an attempt to make them do what customers had seen in pornography.

We examined the relation of gender to level of violence experienced in prostitution. The 3 gender groups differed in incidence of physical assault and in incidence of rape. Among those working as prostitutes, women and the transgendered were more likely than men to experience physical assaults in prostitution (chi square = 8.96, df = 2, p = .01). Women and the transgendered were more likely than men to be raped in prostitution (chi square = 9.68, df = 2, p = .01).

We did not find differences in likelihood of physical assaults and rapes on the basis of race.

Homelessness

Eighty-four percent of these interviewees reported current or past homelessness.

Physical Health

Fifty percent of these respondents stated that they had a physical health problem. Fourteen percent reported arthritis or nonspecific joint pain; 12% reported cardiovascular symptoms; 11% reported liver disorders; 10% reported reproductive system symptoms; 9% reported respiratory symptoms; 9% reported neurological symptoms, such as numbness or seizures. Eight percent reported HIV infection. Seventeen percent of these respondents stated that they would choose immediate admission to a hospital for an acute emotional problem or drug addiction or both. Five percent reported that they were currently suicidal.

A drug abuse problem was reported by 75% of these respondents and an alcohol abuse problem by 27%. Duration of the drug or alcohol problem ranged from 3 mo to 30 yr (mean = 6.5 yr.; standard deviation = 8.2 yr.).

Posttraumatic Stress Disorder

We summed respondents' ratings across the 17 items of the PTSD Checklist (PCL), generating a measure of PTSD symptom severity. Overall mean PCL score for our respondents was 54.9 (SD = 17.81). Table 1 describes the percentage of our 130 respondents who had each of the 17 symptoms of PTSD, and the means for each of the 17 PCL items.

Eighty-eight percent of these respondents reported one or more B symptoms; 79% reported 3 or more C symptoms; and 74% reported 2 or more D symptoms. On average, these respondents scored at PTSD symptom level for 2 of the 4 DSM III-R B criteria, for 5 of the 7 DSM III-R C criteria, and for 4 of the 6 D criteria.

Sixty-eight percent of our respondents met criteria for a PTSD diagnosis. Seventy-six percent met criteria for partial PTSD.

Relation Between History of Violence and PTSD

PTSD severity was related to childhood physical abuse (Student's $t = 2.97$, $df = 60$, $p = .004$), but was not related to report of childhood sexual abuse.

PTSD severity was related to occurrence of rape in adult prostitution (Student's $t = 2.77$, $df = 103$, $p = .01$), and the number of times raped in adult prostitution (chi-square = 13.51, $df = 4$, $p = .01$).

PTSD severity was significantly related to interviewees' report of having been upset at being pressured into imitating pornography (Student's $t = -2.60$, $p = .01$). PTSD severity was significantly related to report of chronic physical health problems (Student's $t = 2.11$, $df = 85$, $p = .04$). PTSD severity was not here related to physical assault in prostitution, or length of time spent in prostitution. Neither race nor gender affected overall PTSD severity.

We investigated four different types of lifetime violence experienced by these interviewees: childhood sexual assault, childhood physical assault, rape in adult prostitution, and physical threat and/or assault in adult prostitution. Only 6% reported no violence, while 16% reported one of these four types of violence; 30% reported two different types of violence; 33% reported three types of violence, and 15% reported all four types of violence.

We investigated the cumulative effect on PTSD of the four types of lifetime violence. The more types of violence reported, the greater the severity of symptoms of PTSD ($r = .21$, $p = .02$), and the greater the likelihood of meeting criteria for a PTSD diagnosis ($r = .18$, $p = .04$). There was a significant association between the number of types of life-

TABLE 1. Group Means and Percentages of People Working as Prostitutes Who Experienced Each of 17 Symptoms of Posttraumatic Stress Disorder

Description of item		Mean	SD	Percentage of persons with symptom at "moderate," "quite a bit," or "extremely"
Intrusive re-experiencing (B symptoms)				
Memories of stressful experiences from the past	(B1)	3.20	1.42	65%
Dreams of stressful experiences from the past	(B2)	2.71	1.46	47%
Act/feel as if stressful experiences happening again	(B3)	2.97	1.34	62%
Very upset when reminded of stress from past	(B4)	3.27	1.42	67%
Numbing and avoidance (C symptoms)				
Avoid thinking or feeling about past stress	(C1)	3.37	1.40	71%
Avoid activities which remind you of past stress	(C2)	3.25	1.45	69%
Trouble remembering parts of stress from past	(C3)	2.75	1.48	63%
Loss of interest in activities you used to enjoy	(C4)	3.43	1.47	71%
Feeling distant or cut off from people	(C5)	3.50	1.43	69%
Emotionally numb; unable to have loving feelings	(C6)	3.01	1.54	59%
Feel as if future will be cut short	(C7)	3.34	1.46	67%
Hyperarousal (D symptoms)				
Trouble falling or staying asleep	(D1)	3.08	1.63	59%
Feeling irritable or have angry outbursts	(D2)	3.23	1.49	63%
Difficulty concentrating	(D3)	3.01	1.14	62%
"Superalert" or watchful or on guard	(D4)	3.65	1.40	78%
Feeling jumpy or easily startled	(D5)	3.33	1.49	67%
Physical reactions to memories of past stress	(D6)	3.16	1.54	63%

time violence and average severity of C (numbing) criteria symptoms of PTSD ($r = .19$, $p = .03$). There was also a significant association between number of types of lifetime violence and average severity of D (hyperarousal) criteria symptoms ($r = .21$, $p = .02$). There was a trend toward an association between average severity of B (intrusive re-experiencing) criteria symptoms and number of different types of lifetime violence reported ($r = .14$, $p = .11$).

Current Needs of Interviewees

Eighty-eight percent of these respondents stated that they wanted to leave prostitution. They also voiced a need for: a home or safe place (78%); job training (73%); treatment for drug or alcohol abuse (67%); health care (58%); peer support (50%); and self-defense training (49%). Forty-eight percent stated that they needed individual counseling; 44% wanted legalized prostitution; 43% needed legal assistance; 34% needed childcare; and 28% wanted physical protection from pimps.

DISCUSSION

We investigated history of violence and its association with the symptoms and diagnosis of PTSD among our 130 respondents, who were working as prostitutes on the streets of San Francisco.

The 57% prevalence of a history of childhood sexual abuse reported by these respondents is lower than that reported for those working in prostitution in other research. It is likely that, in the midst of ongoing trauma, reviewing childhood abuse was probably too painful. Several respondents commented that they did not want to think about their past when responding to the questions about childhood.

Many seemed profoundly uncertain as to just what "abuse" is. When asked why she answered "no" to the question regarding childhood sexual abuse, one woman whose history was known to one of the interviewers said: "Because there was no force, and, besides, I didn't even know what it was then–I didn't know it was sex." A number of respondents reported having been recruited into prostitution at the age 12 or 13, but also denied having been molested as children.

All participants either filled out the questionnaires themselves or were assisted by interviewers who read the questions and recorded subjects' responses. Intoxication from alcohol or crack cocaine may have contributed to some interviewees' inability or unwillingness to delve into past

trauma. As noted in Results, 75% of our respondents reported having a drug abuse problem, while 27% reported having an alcohol abuse problem. However, previous research with addicts has noted their high degree of accuracy in reporting life events (Bonito et al., 1976).

Whether drug abuse tends to precede prostitution, or whether drugs were used after entering prostitution to numb the pain of working as a prostitute is unclear. Clinical experience suggests that drug and alcohol abuse may begin in latency or adolescence as a form of self-medication after incest or childhood sexual assault.

Pervasive violence was evident in the current lives of these people, with 82% reporting physical assault since entering prostitution and 68% reporting rape in prostitution. Female and transgendered people experienced significantly more violence (physical assault and rape) than did men. To be female, or to be perceived as female, was to be more intensely targeted for violence.

Sixty-eight percent of our respondents met criteria for a diagnosis of PTSD, with 76% qualifying for partial PTSD. These figures may be compared to those of help-seeking battered women, where PTSD incidence varies from 43% when self-rating scales are used (Houskamp & Foy, 1991) to 84% with use of clinical interviews (Kemp et al., 1991).

Our 130 interviewees' overall mean PCL score of 54.9 (an index of PTSD severity) may be compared to means of several other samples on the same measure: 50.6 for 123 PTSD treatment-seeking Vietnam veterans (Weathers et al., 1993); 34.8 for 1006 Persian Gulf war veterans (Weathers et al., 1993); and in a random sample of women in an HMO, 30.6 for 25 women who reported a history of physical abuse in childhood; 36.8 for 27 women who reported a history of physical and sexual abuse in childhood; and 24.4 for 26 controls in the same study (Farley, unpublished data).

Eighty-eight percent of these interviewees reported one or more B symptoms of intrusive reexperiencing of trauma. It is likely that memories of past traumatic events were triggered by the similarities in current violence.

Seventy-nine percent of our respondents reported 3 or more C symptoms of numbing and avoidance. When in the middle of the "combat zone" (as some areas of prostitution are called), it may be emotionally unsafe to acknowledge either one's trauma history or the extent of current danger.

Vanwesenbeek (1994) found that dissociation in people working as prostitutes was significantly related both to experiences of childhood violence and to violence in prostitution. A formal measure of dissociation

would have been informative. Dissociative amnesia may have been intensified among our respondents because of their ongoing trauma.

Seventy-four percent of these respondents reported 2 or more D symptoms of physiologic hyperarousal. Hypervigilance is necessary for survival while working as a prostitute.

Following Follette et al. (1996), we investigated the cumulative effect of different types of trauma on symptoms of PTSD. We looked at the effects on PTSD severity of four types of lifetime violence: childhood physical abuse, childhood sexual abuse, physical assault in prostitution, and rape in prostitution. The more types of lifetime violence reported, the higher the overall PTSD severity, and the more often respondents tended to report C (numbing/avoidance) and D (physiological hyperarousal) symptoms of PTSD. B symptoms (intrusive re-experiencing) showed a similar trend but did not quite attain statistical significance. We interpret these results to mean that traumatic events accumulated over one's life increase the likelihood of PTSD-like symptoms.

This study is one of several current research projects which investigates the range of emotional and physical health consequences of prostitution. El-Bassel et al. (1997) found significantly more psychological distress among women who used drugs and who also prostituted than among drug-using women who did not prostitute. The authors suggest that their findings, like ours, indicate a need for assessment and treatment of psychological distress among women working as prostitutes. One of our respondents noted the failure of therapists to connect her history of violence with symptoms of PTSD: "I wonder why I keep going to therapists and telling them I can't sleep, and I have nightmares. They pass right over the fact that I was a prostitute and I was beaten with 2 × 4 boards, I had my fingers and toes broken by a pimp, and I was raped more than 30 times. Why do they ignore that?"

When prostitution has been discussed in the health literature, there has been a tendency to focus almost exclusively on STD, especially HIV. In a literature review, Vanwesenbeeck (1994) commented: "Researchers seem to identify more easily with clients than with prostitutes . . . ." Although HIV has certainly created a public health crisis, we propose that the violence which is described here, and the psychological distress resulting from the violence must also be considered a public health crisis. Any intervention attempting to reduce HIV risk behavior among people working as prostitutes must also address physical violence and psychological trauma.

Eighty-eight percent of this group of prostituted people expressed a desire to leave prostitution, with 84% reporting current or past homelessness. Homelessness is connected with prostitution in that survival may involve the exchange of sexual assault for a place to stay, and food. Our interviewees said that they needed the same services which were proposed by El Bassel et al. (1997): housing, education, viable employment, substance abuse treatment, and participation in the design of treatment interventions for their communities.

Trauma research has been criticized for its failure to attend to social attitudes and behaviors which cause trauma (Allen, 1996). One of Vanwesenbeeck's (1994) respondents described prostitution as "volunteer slavery," clearly articulating both the *appearance* of "choice" *and* the overwhelming coercion behind that "choice." The extreme violence suffered by these respondents suggests that we cannot view prostitution as a neutral activity or simply as a vocational choice. Instead, prostitution must be understood as sexual violence against women (Dworkin, 1997; Jeffreys, 1997; MacKinnon, 1993). We must focus our attention on changing a social system which makes prostitution possible.

Without an understanding of the psychological harm resulting from prostitution, treating prostitution survivors is impossible. We recommend further study of the effect of prostitution on the development of physical symptoms, on PTSD, and on dissociation and multiplicity. It is not clear whether the sequelae of street prostitution discussed here also occur in outcall, massage parlor and brothel prostitution. This is an important question which is currently being investigated by the authors. We encourage others to more fully investigate the physical and psychological consequences of prostitution.

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Relief from Chronic Low Back Pain in Just 30 Minutes

by Stuart Taws

Sound to good to be true? Not if you understand the reality of piriformis syndrome and know how to relieve it in one thirty-minute treatment. Still sound too good to be true? Please follow me, test this out and join a small group of therapists routinely taking people out of pain in periods of time previously thought to be impossible.

Most of our traditional therapies are simply not doing the job...taking pain victims to a permanent pain-free condition in just a few weeks. We are all in positions of trust. We need to be sure that the information we give our clients about their chronic pain condition is correct.

What do you do if your patient tells you that his doctor has determined that the reason for their chronic pain is that they have a bulging or herniated disc, or a degenerating disc condition. What if the doctor has decided that the neurological deficits down the leg and low back pain require a surgical procedure to alleviate root nerve pressure at L4/L5 or between L5/S1, the MRI suggests root nerve involvement. As a massage therapist, *can you have a different point of view? Yes, you can.*

What Your Doctor Will Not Tell You

"The rate of back surgery in the United States has continued to increase and is about 5 times that of other developed countries. In spite of the increasing surgical rates, *there has been no evidence of a corresponding decrease in the rates of disability due to low back problems.*" (Taylor, 1994; Cherkin 1994a)

"Less than 5% of back pain is caused by anatomical problems that require surgery." (Deyo, 1992)

"*Surgery is almost always elective,* possibly providing faster relief of symptoms but having no effect on long-term outcomes." (Weber, 1983)

"*Most herniated discs resolve without surgery* and have been found to be surprisingly common even in asymptomatic adults." (Wiesel, 1984; Boden, 1990)

"Some patients might have *degenerative changes* found on imaging studies but such changes are *common even in asymptomatic adults* and are therefore of questionable diagnostic value." (Turner, 1992b)

"Finally, some patients will be diagnosed with 'spinal instability' but there is little agreement about the appropriate diagnostic criteria *or the value of surgery for this condition.*" (Turner, 1992b)

Who is promoting all these studies? The government, in their "Low Back Pain and Associated Treatment Options" Discussion Papers, provided to all medical practitioners on the subject of low back pain.

Reality Check

We need to review these medical findings—your client's medical doctor or surgeon may not be aware of these studies and their significance, or may not pass this information along:

- Surgery is not decreasing the problem of low back pain.
- There are no long-term benefits to back surgery.
- Herniated discs resolve by themselves.
- Adults with no pain have degenerating disc conditions even by the age of 20.
- Degenerating or bulging discs are *not responsible* for nearly all low back pain.
- About 97% of low back pain is caused by soft tissue problems.
- There is no value to surgery for so called "spinal instability."

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What Your Surgeon Will Not Tell You

• "In spite of the increasing surgical rates, there has been no evidence of a corresponding decrease in the rate of disability due to low back problems. Relatively high rates of imaging studies, referrals and surgery within the health care system indicate premature or otherwise inappropriate use of these interventions." (Cherkin, 1996)

• "Because only a small fraction of low back pain patients present with the 'red flags,' frequent use of diagnostic tests is not necessary. The likelihood that a diagnostic test is ordered depends more on the speciality of the provider (Carey, 1985; Cherkin, 1994b), the proximity of radiographic equipment (Hillman, 1990), and the characteristics of the health care system (Carey 1995) *than on the clinical presentation of the patient.* Similarly, variations in rates of lumbar surgery reflect differences in the availability of surgeons rather than differences in patient need." (Cherkin, 1994b)

The Saddest Words You Will Ever Hear

• "The doctor says I've got a degenerating disc condition—and wants to operate." (discectomy)
• "The doctor says I have a herniated/ruptured disc between L4/L5—and wants to operate."
• "The doctor says I've got a spinal stenosis/facet syndrome—and wants to operate." (fusion)
• "The doctor says I've got a pinched nerve—and wants to operate." (laminectomy)

It has been my experience that herniated disc material is rarely responsible for pain or any other neurological symptom. It is so rare that, for all practical purposes, it does not exist.

This is a minority opinion, but I am not alone. Dr. Hubert Rosomoff is a well known neurosurgeon and department chairman at the University of Miami. Through his years of surgery he has come to the conclusion that herniated, bulging, slipped or degenerating discs have no relationship to the pain experienced. He printed his findings in a medical paper titled: "Do Herniated Discs Produce Pain?" published in *Advances in Pain Research and Therapy,* (edited by Fields, Dubner, Cervero, Jones, et al, 1985). He based his conclusions on observed inconsistencies and the logical facts of neurological pathophysiology. *Continued compression of a nerve will cause it to stop transmitting pain messages after a short time. The result is numbness! How could the herniation then cause continuing pain?*

Dr. Alf Nachemson, of Sweden, concluded in his article "The Lumber Spine: An Orthopedic Challenge" published in *Spine,* (Vol. 1, p.59), that the cause of back pain was unknown in the majority of cases and almost all should be treated non-surgically.

This herniated disc, pinched nerve, spinal stenosis (bone spurs) diagnosis is fraught with difficulty and rests on shaky concepts that cannot explain the following:

• These exact same pain symptoms appear in young adults who have no herniated discs or bone spurs, associated with arthritis of the spine in older people. Young adults with *no pain* also have herniated, bulging and degenerating discs, observed by cross-section MRI radiology, that would indicate surgery if they are in continued pain (Bradswaski, 1992).
• Bone spurs are extremely common and increase in number and size with age, so that by middle age the whole population should have neck and arm pain from them, but does not. Neuroradiologists tell us the spurs would have to obliterate the foramen before compression of the nerve would occur, something one rarely sees.
• Persistent compression of a nerve will produce objective numbness (absence of pain on testing). This is not the subjective sensation of numbness that patients describe in sciatica.
• Medical literature details large growths in the spine, benign tumors, that produce no pain.

Conclusion: A wise man, three thousand years ago, simply said: "Let the reader use discernment."

Common Sense to the Rescue

• "The piriformis muscle syndrome frequently is characterized by such bizarre symptoms that they may seem unrelated." (E.Retzlaff)
• "Symptoms of the piriformis syndrome are easily confused with those of a herniated intervertebral disc. Recognition of the piriformis syndrome may avoid needless laminectomies." (Travell)

The reason that the number of surgeries is actually increasing is that pain patterns from nerve compression and entrapment caused by the piriformis mimic exactly the neurological deficits created by rare nerve root impingements. The sophisticated software for MRI radiology that can help doctors or surgeons tell the difference is not widely available. And even if they could, they don't have a clue what to do with spasms in the soft tissue.

To reiterate: I have *never* had a client diagnosed with

.bnormalities of the discs or vertebra, and not been able to provide *some immediate relief*...which would be impossible if it were not a soft tissue problem. The few that were non-responsive were those who had undergone multiple surgeries, multiple fusions, rods up the spine, years of medication, or the subsequent depression of the immune system and the human spirit, having believed the disinformation that there was something structurally wrong with them.

As Janet Travell says, "recognition of the piriformis syndrome" can avoid all this—and it only takes thirty minutes. The title of this article mentions giving relief quickly to people with low back pain. This figure is anecdotal and is based on the reports from therapists using Soft Tissue Release techniques for many years and statistical observations of results in a pain clinic. The figure of 50% is conservative.

Piriformis: The Cruel Trickster

Piriformis syndrome involves pain in the low back, the groin, into the hip, the buttocks down the back of the leg and down to the heel. When you ask your client, "Where does it hurt?", they will use a rather vague hand movement over the SI joint, n the direction of the greater trochanter. Sometimes they feel it in the 'hip' and describe it as hip pain. The description involves severe radiating low back pain that goes from the sacrum to the hip, over the gluts and down to the back of the knee, down to the heel, giving the symptomatic description of sciatica.

As nerve enervation for all the gluteal muscles travels through piriformis, you will get the common description of extreme tenderness, just touching the buttocks can be uncomfortable. Have you had clients like that? Well, that is piriformis syndrome.

- The pain is exaggerated by sitting, and if you watch them it's as though they have restless leg syndrome, never getting comfortable, always squirming and moving. Changes in position do not provide relief, neither sitting down or standing.
- Any sideswipe in an auto accident is likely to fire piriformis.
- Any repetitive motion that has to do with lifting and turning will also fire piriformis. Think about the constant motion of a golfer and the classic drive down the fairway; that will effect piriformis and Quadratus Lumborum.
- As massage therapists, we use piriformis to block our body weight when constantly poised over clients for an hour. Your table is too wide. Get a narrow table with an hourglass shape and your back pain will disappear overnight.
- There is intense pain sitting or squatting, in the rectum and during defecation—all piriformis problems.

One of the most perplexing problems arising from piriformis syndrome is the involvement of the pudendal nerve and blood vessels, not the more commonly identified sciatic nerve and vessels. This nerve, with its branches, provides the major sensory innervation of the perineal skin and of the external genitalia of both men and women. The pudendal nerve, after passing through the greater sciatic foramen, re-enters the pelvis by way of the lesser sciatic foramen. It then divides into three branches which in turn supply the clitoris or penis, the labia

"...we are improving the quality of lives that exist in a world of instant gratification"

majora or scrotum. Obviously the compression of the pudendal nerve, its vessels and branches can result in serious problems involving the functioning of the genitalia for both sexes. As external rotation of the upper legs is required for women during coitus, piriformis is maximally being shortened, nerve compression is greatest, then pain during intercourse is excruciating. Men are rendered impotent. Women are rushing to their gynecologist for an answer, and men, in embarrassment, go to their urologist, spending thousands, and the answer is not there.

Suddenly we can see that we are doing more than just helping people with low back pain—we are improving the quality of lives that live in this world of instant gratification.

The Answer to 50% of All Chronic Pain: Piriformis Release

The publishers of this magazine have been kind enough to detail an injury treatment technique that is known in the U.S. as Soft Tissue Release (STR). Please refer to the previous articles that detail the technique. STR simply involves precise pressure through a specific stretch. The plane of the stretches keep changing along with the rhythmic change in compressions. This makes sure that the "line of injury" (Travell) is effected during a precise compression, *activating muscle memory.* The speed of release is a phenomenon, because this is not 'injury' work—it is amnesia recovery work. I love the piriformis release. The reason is you can make a change in just a few minutes. The positional releases available in some traditional therapies do not create fast enough change for the

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results to be permanent. For anything to be permanent you need speed of results through instant muscular re-education. That has to do with the speed of the autonomic nervous system and the language of the brain. We are the high commanders of an amazing healing vessel—we need to know the operating instructions to get to warp speed healing.

STR Piriformis Release Techniques

The patient is in the prone position with the knee flexed. As illustrated, let's presume we are working on the left piriformis. With the right hand, gently grasp the ankle and move it away from you across the midline effecting full lateral rotation of the thigh.

With a straight left arm, I use the heel of my hand and using body movement, 'lean' into the belly of the piriformis, and at the exact same time, gently pull the ankle toward you, creating extreme internal rotation. (It looks like I'm in an English pub pulling a really nice pint of Guinness!) This is repeatedly changing the plane of the stretch and the compression each time. In severe cases you may only be able to do this for a minute or two. The stretch is more important than the compression. After 15 minutes you will have made such a profound difference, it will never be the same again. It takes the client up to twelve hours sometimes to realize the profound change. It looks so simple that you can hardly imagine it could give relief to over half of the 31 million Americans in low back pain today if we could get to them all. There are many positions that can be employed, any that involve hip flexion are very effective.

The Pursuit of Excellence

I've been very impressed by the body of work some students of STR are now producing after a couple of years of being playfully inventive with this technique. Two of them have come up with the same findings with spectacularly consistent results, and I would like to pass them on to you. Anita McComb-Ramirez from Pleasanton, California, writes: "Working in an exclusive health club setting gave me the opportunity to work on athletes of all levels, from the weekend warriors to some well-known professional football players. I could help their chronic pain patterns but could not always resolve them. After learning STR and integrating the piriformis technique into a session, I would say that this alone benefitted well over fifty percent of my clients. I've found, secondary to piriformis, gluteus minimus to be a key player in the dance of chronic low back pain, creating deep and unrelenting pain in the hip that refers down the IT band. In an era in which commuters spend many hours behind the wheel (and the brake pedal), one can almost count on finding a compromised muscle length in minimus. It's release brings the success rate in treatment up further still. And in the combined release of the piriformis and

STR practitioner gently places thigh into full external rotation.

With a straight arm, use the heel of the hand, thumb, or as shown, to apply specific compression into the piriformis line, at the same time creating the precise stretch of internal rotation. This is achieved by pulling the ankle gently toward you. At end of the full rotation, release pressure. Repeat several times, changing the plane of the stretch. (Photos by Tracy Armstrong)

minimus, I find that chronic low back pain seems to melt away." As an instructor, you always wish that students will achieve greater levels of success than you do. Anita has combined advanced STR techniques with her botanical medicinal training from France to consistently relieve scoliosis problems.

Jeff Muiderman from Eugene, Oregon has been re-inventing the wheel using these stretch techniques and came up with the following scenario. First he would palpate and get a sense of the spasm found in Quadratus Lumborum. Then he would do the single piriformis STR stretch as described, and lo and behold, there was a QL release. Then doing the STR release for the minimus, there was a further release of the QL, before he actually did the STR release for the quadratus lumborum. He now has a reputation in Eugene for single treatment successes in the relief of chronic low back pain.

This triple combination release (piriformis-minimus/medius-quadratus lumborum) will affect about 90% of all chronic low back pain that you are liable to come across, and you can do it all in about 30 minutes. You take away the fear of surgery and debilitation by correct information, do something very quickly to prove the point, and then stand back. The "physician within" will then actually do the healing. You are an instructor only, they do the actual healing.

You can forget the concept of strengthening the erectors and abs, anterior and posterior pelvic tilts, and all the other structural reasons for chronic pain, on and on, ad nauseum. These are all World War II concepts, fine for the time, but 50 years later we need to get with the program. The diagnostic tools that observe disc and vertebrae abnormalities plunge us into a world of hopelessness and self-fulfilling pain. The world of quantum physics has given us a new mandate! We can disregard the old hard science of the thirties and come up to speed with the new science of the next millennium, that has a profound regard for the accelerated healing of the body by the innate intelligence of the human spirit. ■

Stuart Taws is a Sports Rehabilitation Therapist from England. Through the fall of 1998, Stuart will be conducting three-day Soft Tissue Release Workshops. For information, please write: British Sports Therapy, 7779 Forsythia Court, Pleasanton, California 94588. Telephone 510/462-5087. A series of training videos are also available.

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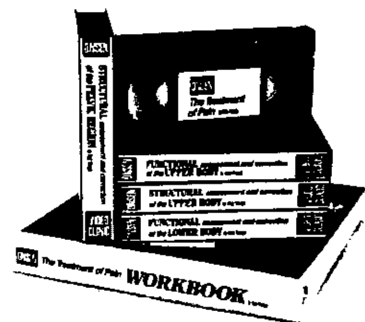

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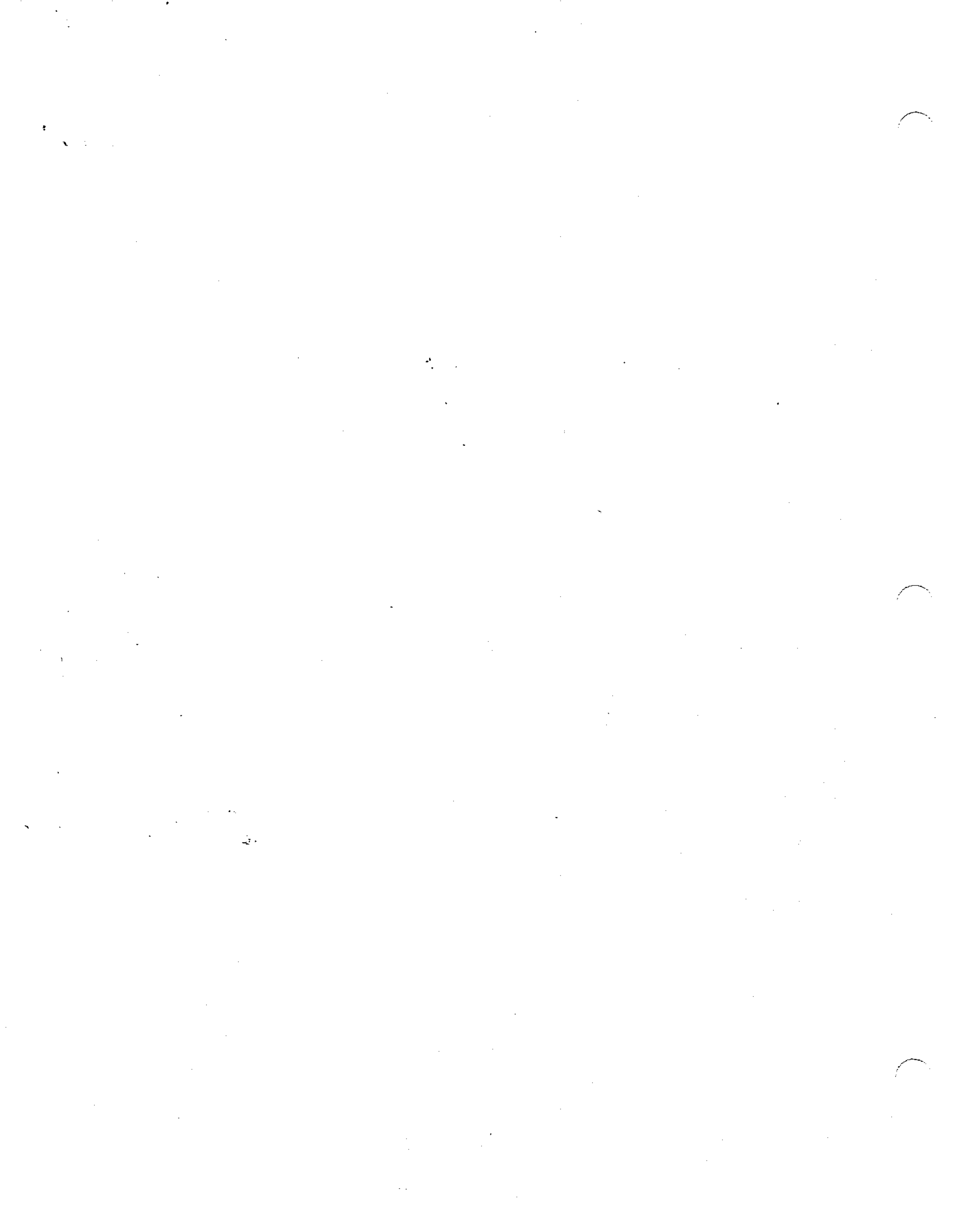

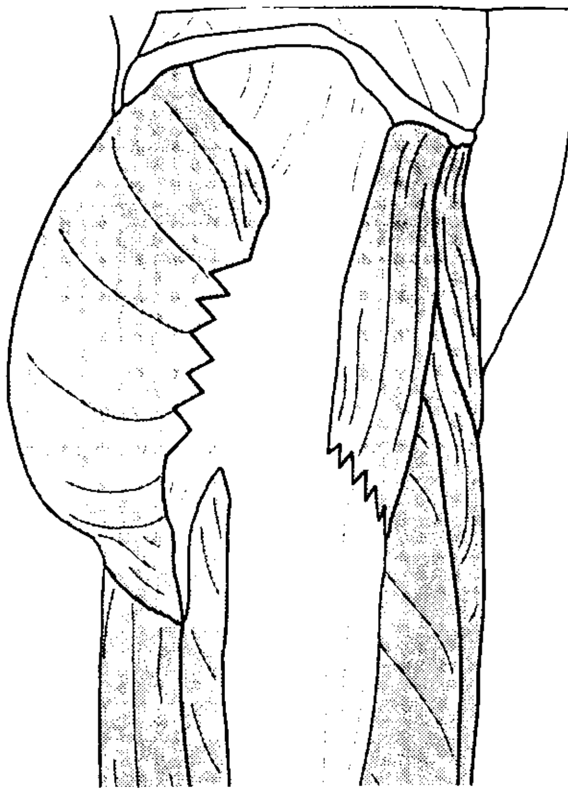

Hip Pain:

It's a Pain in the Butt!

by Rich Phaigh

Posterior hip pain is usually a fairly complex problem which, in most cases, is not treated as such. So many different types of tissue in the lumbar spine and pelvis refer pain into the buttock that a comprehensive form of evaluation is usually necessary to treat the condition successfully. In this short discussion, we will attempt to identify several sites of pain production with several specific forms of evaluation which correlate directly to specific methods of treatment.

types of pain-producing tissue

The first area of discussion will be the types of tissue which are responsible for pain production within the posterior hip, and sites of either neurological or myofascial referral. Basically, pain-producing tissues can be divided into two categories: inert tissues and contractile tissues. For the purpose of functional evaluation, inert tissues include: bones, ligaments, cartilage (including discs), nerves, capsules, and bursa(e). Contractile tissues include muscles and tendons. Muscles and tendons compose what is referred to as the *contractile unit.* The musculotendinous junction and the teno-periosteal junction are subdivisions of the musculotendinous unit.

In nearly all cases, inert tissues will show positive signs during passive testing only, while contractile tissues will commonly be painful only on resisted (isometric) testing. Acute contractile tissue lesions will, however, reproduce symptoms in both passive and resisted testing.

types of stress

Postural distortion and functional imbalance place tremendous stress on both inert and contractile tissues. Postural distortion creates static stress and leads to functional imbalance. Functional imbalances create phasic stresses which lead to postural distortion. Both of these types of stress are responsible for considerable soft tissue pain. Let's examine these two types of stress one at a time.

Postural distortion leads to both compressive and tensile stress in soft tissues. In Figure 1, the tissues in a shortened state are compressed. These would include the lumbar discs, facet joints, and nerve roots on the side of the high ilium. Tissues of the lumbar spine on the side of the low ilium are under tensile stress. These tissues are being stretched too far. Clinical studies indicate that patients suffering from postural distortion have a nearly 50-50 split as to which side is symptomatic.

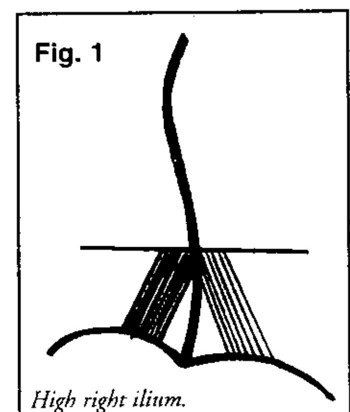

Fig. 1

High right ilium.

For most of us it is easy to understand the mechanism of pain production via compressive stress. In this process, soft tissues of the lumbar spine above the high ilium are in a compressed state. This might be present as a result of muscle contracture either

→

above the high ilium or below the low ilium. This is the type of soft tissue stress which most of us attempt to deal with on a daily basis.

It is the principle of tensile stress which is the most challenging for the massage therapist to master. Tissues under tensile stress are taut bands of skeletal tissue and therefore exhibit the vast majority of referred muscle, tendon, and ligament symptoms. If you have any misgivings about this statement, I welcome you to try the exercise in Figure 2.

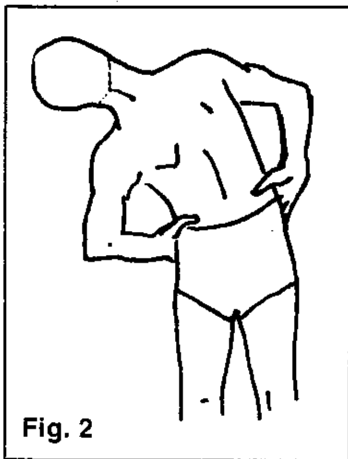
Fig. 2

Stand in an erect posture. Now palpate the lateral edges of your quadratus lumborum muscles with your thumbs. Concentrate first on your right side. Using a scale of 1 to 10, ten being the most severe, give a number to the amount of tension you feel in the right quadratus. Next, give a number to the level of sensitivity you perceive in this same tissue. Bend to the left as far as is comfortable and palpate again. Most of you will find that your left side bend has created increased tension and sensitivity on your right side. Those of you who have chronic low back pain from a high right ilium will experience relief from sensitivity, but still an increase in tension.

Try this exercise again to the opposite side and you will find that stretching any tissue creates taut bands of hypersensitive tissues. These bands will always feel tight on palpation. Most of us think we need to lengthen these bands to relieve soft tissue pain, like trigger points, but actually the exact opposite is true. We need to relieve the tensile stress on the area or we will never even begin to relax the taut band. No technique in the world, not even pain killing injections, will rid the patient of chronic pain in these types of tissues until they are placed in a less stressful environment.

Now that we understand the principles of compressive and tensile stress let's examine buttock pain from a neurological level.

pain of a nerve origin

The L1 nerve root is responsible for both posterior and anterior hip pain. Patients will often complain of a pain which "wraps around to the front of the hip." L2 and L3 refer pain only to the iliac crest, but the most profound part of their dematome is into the medial thigh and knee respectively. Sacral nerve roots 2, 3, and 4, especially S2, more commonly produce nerve pain deep into the buttock.

Lumbar and sacral referrals can usually be treated successfully with muscle energy technique, joint mobilization, and/or joint manipulation. For massage therapists, only muscle energy technique falls within our scope of practice (see Fig. 3).

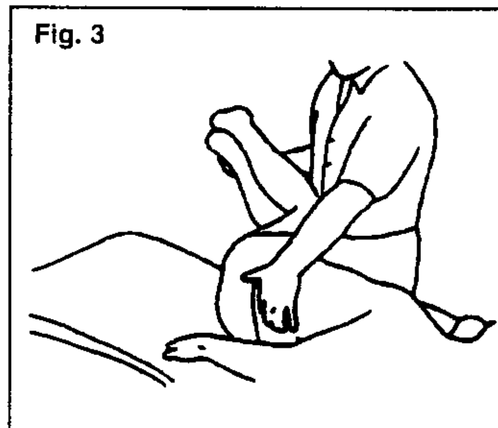
Fig. 3

Correcting an L5 rotation with Muscle Energy Technique.

Sciatica is a condition specific to the back of the thigh and leg and is, by definition, not an affliction which results in buttock pain.

Piriformis syndrome is a compression of the sciatic nerve. This compression occurs either between the piriformis and the gemellus superior (common) or between the two heads of the piriformis itself (rare). This condition, if present, can be evaluated via a positive sign during passive hip flexion prior to movement in the sacro-iliac joint, passive straight-legged medial rotation of the hip, or resisted lateral rotation of the hip from a moderate to extreme motion barrier. It can be safely stated that although some patients may suffer from referred pain emanating from trigger points in the piriformis itself, very few are afflicted with a true piriformis syndrome.

As we enter into the discussion of referred pain into the buttock from soft tissue sources, let us quickly review the effect of tensile and compressive stresses on inert and contractile tissues from postural distortion. In our earlier example (Fig. 1), the quadratus lumborum on the left side was under compressive stress while the right side suffered from tensile stress. If the left quadratus was the source of referred

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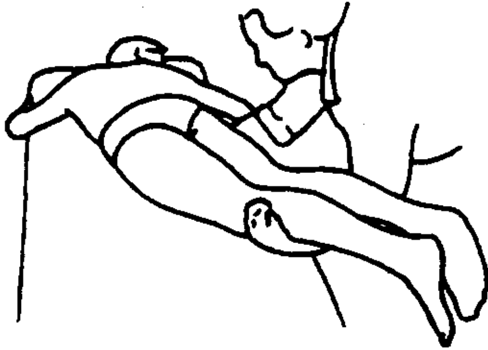

A left QL stretch.

pain our focus as therapists would need to center on lengthening this musculature with whatever techniques we possess (Fig. 4). If the site of the referral were the right quadratus, our focus would still be on lengthening the left side. This example simply suggests that tissues in a shortened position need to be lengthened, whether they are symptomatic or not.

types of soft tissue lesions

The location of posterior buttock pain is commonly a clue as to where to look for the site of soft tissue lesions. These lesions generally fall into two categories, trigger points which refer pain, and soft tissue lesions of a different nature which are more local in their distribution of pain or other autonomic phenomena.

Janet Travell defines a trigger point as "a focus of hyperirritability in a tissue that, when compressed, is locally tender and, if sufficiently hypersensitive, gives rise to referred pain and tenderness, and sometimes to referred autonomic phenomena and distortion of proprioception." James Cyriax refers to soft tissue "lesions" throughout his wonderful texts, but fails to adequately define the term. Tabor's Medical Dictionary defines a lesion as "a circumscribed area of pathologically altered tissue."

trigger points

Learning trigger point patterns is difficult without the help of trigger point charts to use in the workplace. There →

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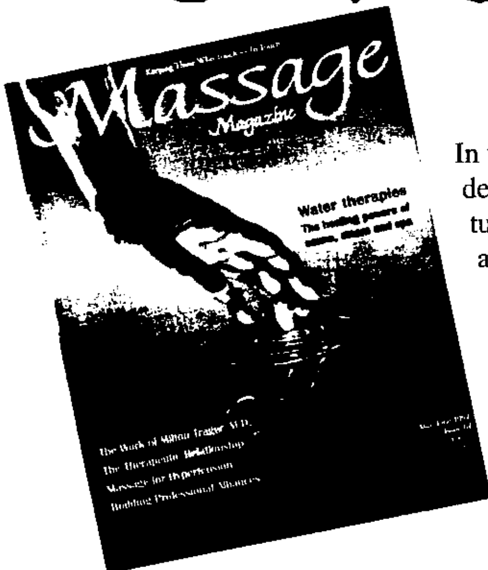

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are over 200 trigger point referral patterns that I would refer to as *common*. In the case of referred pain into the buttock, I like to focus on the location of the focal point of the pain, and to extrapolate from there.

referred pain to the sacrum

Trigger points that refer primarily to the sacrum and to its lateral borders are the posterior portion of the gluteus minimus, the origin of the gluteus medius, the deep head of the quadratus lumborum, and the piriformis. In addition, there is a strange and, in my opinion, uncommon referral from the distal gastrocnemius to the posterior sacro-iliac joint.

referred pain to the iliac crest

This area is more specific with regards to true trigger point pain. These referrals are primarily from the origin of the gluteus medius, distal insertions of the rectus abdominus, and the superficial head of the quadratus lumborum.

deep buttock pain

This type of pain is generally described as an aching deep into the joint itself. Referral to these deep areas usually comes from the anterior or posterior fibers of the gluteus minimus, the deep head of the quadratus lumborum and/or the piriformis.

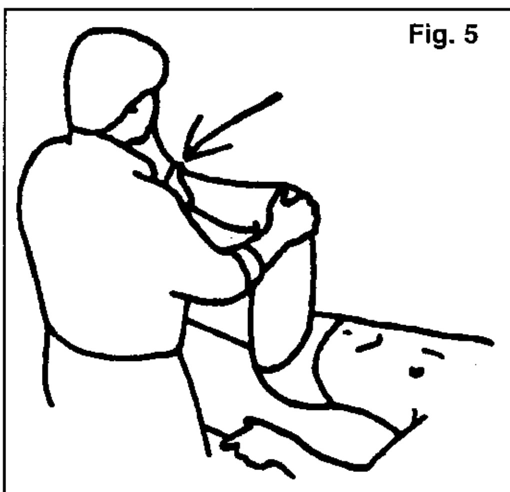
pain to the ischial tuberosity

The two most commonly treated trigger point patterns for pain referred to the ischial tuberosity are the posterior fibers of the gluteus minimus and the deep head of the quadratus lumborum. Two commonly overlooked syndromes, although nearly as common, are the ilio-costalis lumborum and the S1 multifidus muscles. In the case of the iliocostalis lumborum, palpation for the trigger should be centered on the 12th rib. In the case of the S1 multifidus muscles, it could be argued that the true site of origin is in the posterior sacro-iliac ligaments as opposed to the multifidus musculature. The treatment for these two problems is entirely different from one another.

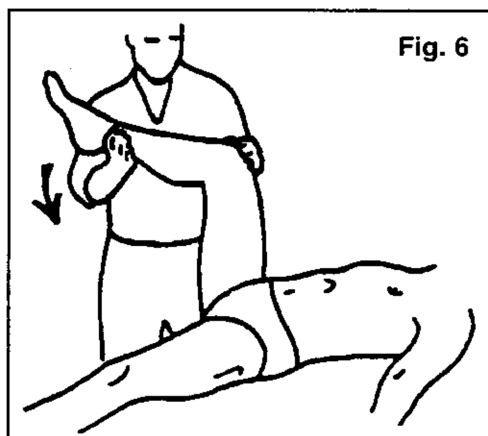
The S1 multifidus muscle is a primary component in L5 rotations found in forward bending. This problem should be treated with Muscle Energy Technique (MET) first, followed by lengthening movements from end to end. If the site of the painful lesion is the posterior sacro-iliac ligaments, transverse friction massage to the tender point is the advised method of treatment.

contractile lesions

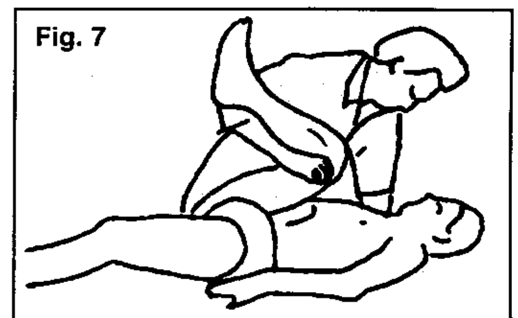
These common lesions in musculotendinous units will generally elicit pain on resisted testing (see Figures 5 and 6). Resisted medial and lateral rotation, as well as resisted adduction and abduction, are the most commonly painful lesions in the buttock and hip. A notable exception to the pain on resistance rule for muscle and tendon lesions is the reproduction of anterior hip pain, caused by a thickened lesion of the lowest fibers of the iliopsoas, from passive hip flexion (Figure 7). In all of these cases, the therapist



Resisted medial rotation.



Resisted lateral rotation.



Passive hip flexion.

should communicate with the patient during the testing procedure and look to the exact site of symptom duplication.

utilizing MET

Muscle energy technique (MET) is the single most profound method of treatment for soft tissue pain that I have ever come across. It accurately evaluates all of the bony landmarks, joint positions, and joint functions of the spine and pelvis. It treats imbalances in the neuro-musculoskeletal mechanism more effectively, and more thoroughly, than anything else that falls with the massage therapist's scope of practice.

MET relieves both compressive and tensile stress to all of the tissues of the low back and pelvis previously mentioned in this article. MET is a relatively simple technique which is easy for most practitioners to put into practice as soon as they learn it. It can, however, be difficult to perfect without a considerable commitment of time and effort.

Early on in this article we discussed the stresses involved in functional leg length imbalances. The correction for this condition is a simple matter. For a patient suffering from a high right ilium, the treatment position entails the high ilium being stretched downward and the low ilium being shifted in a superior direction.

In this same manner, anterior and posterior tilting of the ilium, rotation and tilting of the sacrum, misalignment of the symphysis pubis, and individual or group side-bending and rotation of the lumbar vertebrae can be restored to normal. Although this type of therapy does not eradicate every soft tissue lesion, it seems to be the most sensible place to start. ■

Rich Phaigh has been one of the nation's leaders in the field of Sports Massage for the past 20 years. Author of Athletic Massage *(Simon and Schuster) and the* Onsen Technique *video series of soft tissue evaluation and treatment, Rich is a popular international lecturer and teacher of a wide variety of neuromuscular modalities.*

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Anti-Stress

In the future, stress may come to be seen as the primary contributing cause of most disease. Research continues to link stress to more and more symptoms and diseases, both acute and chronic. Stress is inevitable in today's world and, of course, we need a certain amount to function. The key is to be able to manage our level of stress.

What is stress? It is our reaction to our external environment as well as our inner thoughts and feelings. Stress in essence is our body's natural response to dangers, the "fight or flight" mechanisms—the body's preparedness to do battle or flee from danger. This response involves a complex biochemical-hormonal process, which we will discuss shortly.

Stress in today's world is mainly a result of continuous high demands that are imposed on us by work, family, and lifestyle, or that we impose upon ourselves through our desire to accomplish. Mild stress acts as a useful motivation for activity and productivity. But when the stresses in our life are too extreme or too many, this may result in all kinds of problems. Some people consistently overreact to their day-to-day life. However, most of us might be overwhelmed only when we have an increased intensity or number of stresses, such as excessive demands all at once leading to a continuous feeling of not having enough time or energy to do what we feel we must do. Others respond stressfully to intense emotional experiences, personal changes, extreme weather, or overexposure to electronic stimuli, all of which can weaken us.

Stress can generate many symptoms and diseases, mediated by changes in immune function, hormonal response, and biochemical reactions, which then influence body functions in our digestive tract and our cardiovascular, neurological, or musculoskeletal systems. A wide variety of problems such as headache, backache, and infection, even heart disease or cancer in the long-term, may result.

Our brain and pituitary gland respond to stress by releasing adrenocorticotropic hormone (ACTH). This stimulates our adrenals to increase production of the hormones epinephrine, norepinephrine, and cortisol. Other hormones that affect metabolism and water balance may also be released. Epinephrine and norepinephrine, known as the adrenalines or catecholamines, are the main stimuli to the stress response. They stimulate the heart, increase blood pressure and heart rate, and constrict certain blood vessels to increase blood flow to the muscles and brain and to decrease it to the digestive tract and internal organs, preparing us for the "battle" with the "danger," wherever it is. Adrenaline also raises blood sugar, as it stimulates the liver to produce and release more glucose (and cholesterol) into the blood so our cells will have the energy we need. All of this results in an increased rate of metabolism. Stress experienced around the time of eating thus diverts the energy needed for efficient digestion.

During times of increased stress and greater demand, our body's nutrients are used more rapidly to meet the increased biochemical needs of metabolism, so we require increased amounts of many of these nutrients. The diet and nutrient plan presented here is specifically designed to reduce these negative biochemical effects of stress. There are also many other important aspects of handling this modern-day problem, primarily psychological and lifestyle approaches to stress management. Soon, there will be a medical specialty designed to deal solely with stress-induced diseases. In fact, most specialties now have some set of symptoms or a diagnosis in their field of expertise related to these psycho-emotional/stress-induced diseases. The problem is that most doctors are not trained to do more than diagnose them, and often these diagnoses, such as "irritable bowel" or "spastic colon," tension headaches, or neurogenic bladder disease, are made primarily by excluding the "real diseases." Often, only tranquilizers, psychotherapy, or biofeedback are available in most circles of medicine, and this approach may be limited. There is a lot more that each of us can do to better manage our stress.

Who will benefit from this *Anti-Stress* program? It is mainly for those who are routinely subjected to high demands, particularly mental demands, and who suffer from "intellectual performance anxiety." People in this group are mostly office workers, people who must sit and be productive for eight to ten hours a day with little physical outlet, such as the executive or office worker, although they also might be salespeople, flight attendants, mechanics, nurses, or journalists. The *Anti-Stress* program is also suitable for people undergoing short-term periods of increased stress because of personal changes or other events that increase energy demands, such as divorce or marriage, death of a loved one, relocation, job change, or travel.

Many of the conditions discussed in this chapter are related in some way to stress—for example, athletes experience extra physical stress and executives experience more mental stress; stress is also a factor in the aging process. Stress can occur at all levels of our being. There are physical, emotional, mental, and spiritual stress factors involved in almost all diseases. Particular medical conditions that have a high stress component include asthma and allergies, cardiovascular and gastrointestinal diseases, arthritis, and cancer. Surgery, viral conditions, and environmental chemical exposure may be short-term problems with high stress components. Thus, aspects of this program may apply to many of the other programs. Check other discussions as they may tie into your particular concerns.

TYPES OF STRESS

- **Physical stress**—exercise, hard labor, birth
- **Chemical stress**—environmental pollution such as exposure to pesticides and cleaning solvents, and the personal use of chemicals, such as drugs, alcohol, caffeine, and nicotine
- **Mental stress**—high responsibility, long hours, perfectionism, anxiety, and worry
- **Emotional stress**—anger, fear, frustration, sadness, betrayal, bereavement
- **Nutritional stress**—vitamin and mineral deficiencies, protein or fat excesses or deficiencies, food allergies
- **Traumatic stress**—infection, injury, burns, surgery, extreme temperatures
- **Psycho-spiritual stress**—relationship, financial or career pressures; issues of life goals, spiritual alignment, and general state of happiness

COMMON STRESS FACTORS

- **Attitude toward self**
- **Personal financial state**
- **Moving**
- **Traffic tickets**
- **Tests in school**
- **Meeting someone new**
- **Raising children**
- **Demands at the office**
- **Job and career challenges**
- **Promotion, job loss**
- **Emotional challenges**—personal relationships, fear, anger, loneliness
- **Family changes**—marriage, divorce, separation, a new baby
- **Physical challenges**—weather changes, extreme climates, athletic events
- **Health challenges**—illness, injury, surgery, chemical exposures
- **Life changes**—adolescence, aging, pregnancy, menopause

Please realize, though, that stress is not the situations or incidents themselves; rather, real stress comes from the way we react to them. For stress to arise and negatively influence our health, we must experience something as a danger. When we do, anxiety is generated, which we often experience as fear or a feeling of threat to our survival. If we view stress positively, we see it as simply a survival response. But if we cannot handle the stress, we may experience the symptoms and diseases of stress. Learning to adapt our attitude and find suitable outlets for our stress is a very important long-range plan.

As stated earlier, the normal biochemical response to a sense of danger is stimulation of the adrenal glands to release increased levels of hormones, particularly the catecholamines—epinephrine (adrenaline) and norepinephrine. The catecholamines are cardiovascular stimulants that increase heart rate, constrict blood vessels, stimulate the brain, and affect every other body system to prepare it for "fight" or "flight"—that is, handle the danger or hit the road. The problem comes in when there is really no physical danger but our body reacts as if there were. Then, if greater physical demands and activity do not provide an outlet for the increased adrenal activity, it may be turned inward and play havoc with our physiology and organs, as well as with our emotions and our mind.

Though all parts of our body are affected by stress, certain areas seem to be more sensitive than others. In my estimation, the digestive tract is the most easily influenced, followed by the neurological and circulatory systems and the muscles which accumulate some of the tensions as well as toxins from metabolism. The psychological outlook and welfare of the individual are also strongly affected by acute and chronic stress.

How the damage comes about involves the mechanisms of constant adrenal stimulation along with free-radical production (see *Anti-Aging* program for a full discussion) and immune suppression. Stress produces irritating molecules that generate immunological changes, damage cells, and inflame organ and blood vessel linings. Stress responses also "eat up" more important nutrients which can lead to deficiencies and allow the other stress response changes to damage the tissues even more. Stress has been shown to decrease protective antibodies and reduce the important T lymphocytes that function in the cellular immune system. Chronic stress is clearly a culprit in the generation of aging and degenerative diseases.

In addition to the increased demands on the adrenal cortex, certain mechanisms affect the stomach and pancreas and thus our digestion. Stress initially increases stomach hydrochloric acid production, leading to indigestion, heartburn, gastritis, and ulcer problems. With increased acid levels, however, the pancreas is stimulated to release alkaline enzymes to help balance the acidity. With chronic stress, this can lead to hypochlorhydria (low stomach acid) and reduced function of the pancreas. This may result in poor digestion and assimilation of nutrients and thus vitamin and mineral deficiencies as well as the development of food allergies due to improper breakdown of the bulk foodstuffs and the subsequent absorption of larger molecules, which may be immunogenic.

There is also a weakening of the adrenal response with chronic stress, whether the stress is from regular sugar intake (adrenaline helps rebalance blood sugar) or from other physical or emotional demands. When the adrenals do not respond, we may have a more difficult time coping with the stress, and when this inability to cope sets in deeply, we may feel like giving up. We might experience depression, hopelessness, or even death, which can result from the serious diseases that arise with a severely weakened immune system. That is why it is so important to avoid the vicious cycle of

trying to meet high demands by pushing ourselves with poor nourishment, poor sleep, and lack of fun. A whole field of medicine, called *psychoneuroimmunology*, is arising to deal with our new knowledge about the relationship among stress, immunity and brain functions, and disease, examining such problems as AIDS, cancer, and chronic viral conditions. Though we have learned a lot about stress and its influence on disease in recent years, there is still a great deal more to learn regarding the physical mechanisms involved in immune interaction. This, I believe, is going to be the dominant medical field of the future.

STRESS-RELATED SYMPTOMS AND DISEASES

Fatigue	Indigestion	Infections
Irritability	Diarrhea	Eczema
Headaches	Constipation	Psoriasis
Muscle tension	Peptic ulcer	Allergies
Neck and back pains	Irritable bowel	Asthma
Atherosclerosis	Loss of appetite	Nutritional deficiencies
High blood pressure	Anorexia nervosa	Premenstrual symptoms
Diabetes	Weight changes	Sexual problems
Arthritis	Insomnia	Psychological problems
Cancer	Depression	

For people with elevated stress levels, I suggest a variety of stress-reducing activities to minimize the dangers of this underlying cause of disease.

VARIOUS THERAPIES FOR STRESS

- **Have more fun.** Do things that you enjoy and that help you to relax.
- **Express your feelings.** Emotions need regular venting, and unexpressed emotions are the building blocks of stress, pain, and illness.
- **Get good sleep.** Poor sleep or sleep habits do not let your body really rest, discharge tensions, and recharge.
- **Learn relaxation exercises.** These can help a great deal in reducing stress through letting go of mental stresses and experiencing moments of inner peace. This quiet, "nothing happening" space is where, I believe, the healing process begins.
- **Exercise.** Regular physical exercise is one of the best ways to clear your tensions and feel good, with more energy and a better attitude toward life.
- **Develop good relationships.** It is important to have friends in whom you can confide and find support. Those who love and accept you and will advise but not judge you are your true friends. It is also very meaningful to be a true friend to another.

- **Experience love and satisfying sex.** A primary relationship that is loving, sensual, and sexual can also be a major stress reducer. Having an understanding, accepting, and warm being (most often human) to receive your hardworking body and mind can be the best therapy available. However, if you do not have this in your life, there are many other therapies that are helpful. Often, an intense relationship can also be a stressor. It is important to find a balance in all you do, in each endeavor and in your life as a whole.
- **Change perceptions and attitudes.** When ideas or views are not serving you, it is wise to examine and adapt them. It is important to learn to respond to life's situations and not react. This is a true response-ability! Hanging onto frustrations, holding grudges, and accepting the victim-blame game are not in your best health interests. It serves you to look at the big picture and step out of the little struggles. Ask why you might need to experience these challenges and try to view them as opportunities for growth and learning. Applying more spiritual principles to life is very useful and often helps solve many of the conflicts involved in finding greater peace of mind and heart. Find and experience self-love, self-respect, and self-worth.

There are many positive things to do with regard to diet and nutrition, as well as many things to avoid. This program is designed to counteract and reduce the negative biochemical and physiological effects of stress and to minimize the specific stressing agents, such as the wide variety of drugs, both street and prescription. Caffeine, nicotine, and alcohol are all irritating drugs. Many over-the-counter and prescription drugs may also cause physiological problems and irritate us physically or mentally.

A **diet** of high-nutrient foods is essential for people under stress, because stress increases cellular activity which leads to increased nutrient usage. The resulting depletions may aggravate the damaging effects of stress. Also, less food may be consumed during times of stress, as the digestive tract may be a little upset; and the higher nutrient foods make up for lower consumption. However, some people who are stressed tend to push themselves and not take good care of themselves, avoiding meals, especially wholesome ones, and snacking on quick-energy or fast foods. They may be martyrs who feel that they must serve the cause and there is no time for such things as eating properly, or they may just be too busy and forget to eat. These people are usually not overweight; on the contrary, they need to be reminded to eat. This unrelenting push without feeding the stomach (and every cell) can lead to acid irritation of the digestive organs and ulcers. Then the cycle of antacids starts and further poor digestion and assimilation is the final outcome.

Probably the best type of diet for the fast-track people with intellectual performance anxiety is three to five small but wholesome meals a day, like the *Warrior's Diet* discussed in Chapter 9, *Diets*. Lots of water is important to keep us well hydrated and to help counteract stress by circulating nutrients. Avoiding stress around meals is very important. Try to rest and relax before and after eating, even if just for a minute or two

of placing your body in a receptive state for the nourishment coming in—rather like clearing the computer of its active program so that it can receive new information. If there is time to take 10–15 minutes before and after meals, that is even better, especially after large meals. Listening to relaxing music also helps.

A detoxification-type diet may be useful at times of intense stress, and it is often a natural response to these increased demands. Drinking lots of liquids, such as water and juices, and reducing heavier meals that may not be handled well can help us lighten up when life gets "too heavy." A response of overeating and food abuse can only make matters worse. Juices, soups, and salads, for example, can nourish us well without creating great demands on our body and digestion, which may not be working well at the time. Our energy level and productivity may rise with lighter eating as well. A lighter, cleansing diet may help us through times of short-term stress. Some food intake may enable our body to assimilate the supplements that can also be of value. A good supplement plan is imperative to our *Anti-Stress* program. Stress depletes so many of our body's nutrients that it is difficult to obtain the levels we need from food alone unless we spend eight hours a day shopping, preparing food, and feeding ourselves—and that is not too realistic.

Nutrients that are commonly depleted by stress include the antioxidant vitamins A, E, and C, the B vitamins, and the minerals zinc, selenium, calcium, magnesium, iron, potassium, sulfur, and molybdenum. Because of increased metabolism and use of energy, our stressed body utilizes more carbohydrates, proteins, and fats, especially the fatty acids. Unrelenting stress, however, is not the basis for a healthy weight-loss program.

The B vitamins and vitamin C are the main constituents of many antistress formulas. They are all significantly depleted by stress and the stress-related problems may be compounded by deficiencies resulting from poor nutrition prior to the time of increased stress. All of the B vitamins are important here. Pantothenic acid, or vitamin B_5, may well be the most important antistress nutrient of the B complex. Along with folic acid and vitamin C, it is necessary for proper function of the adrenal glands. Niacin, enough to generate the niacin flush, may be useful in counteracting some of the biochemical effects of stress. Vitamins B_1, B_2, B_6, biotin, and PABA are also helpful. I recommend taking higher than the RDA of all of the B vitamins, spread out in two or three portions, all taken before dark, since they can be stimulating; it is wise to let the mind and body relax as it gets toward bedtime. I suggest more minerals in the evening, as they tend to help in relaxation. However, if evening work is important or there are evening meetings, a good B complex supplement can be taken after dinner. The B vitamins may even have a relaxing effect on some people, and they could be used by them in the evenings to calm the nerves. A regular B vitamin, with 25–50 mg. each of most of the Bs, for example, will be used and eliminated by the body within a few hours. Such tablets or capsules can be taken several times daily. Time-release B vitamins, which do not have to be taken so often, are also commonly used. Many people do better with hypoallergenic or yeast- and wheat-free B vitamins. Although our body will

utilize some of the B vitamins taken at any time, most vitamin and mineral supplements are best assimilated after a meal.

Vitamin C supplementation is also very important for stress. Vitamin C, or ascorbic acid, may indeed be the single most essential antistress nutrient. It offers cellular protection, immune support, and adrenal support to produce more cortisone and epinephrine. Vitamin C is also an important antioxidant that helps protect against fat peroxidation, including restoring vitamin E after it is oxidized. Vitamin C is very rapidly utilized and minimally stored in the body. Therefore, regular usage, even four to six times daily, is ideal. A dosage of 1–2 grams per day is recommended, although as much as 8–10 grams may be used for severe problems related to stress. One or two of the vitamin C dosages taken each day should contain the bioflavonoid C complex, including rutin and hesperidin.

In addition to extra B vitamins and C, I suggest an antioxidant program such as described for the *Anti-Aging* program. Vitamin A and beta-carotene, vitamin E and selenium, and the amino acid L-cysteine are all part of this. As with vitamin C, these antioxidants sacrifice themselves (through oxidation) to balance out the free radicals.

Minerals are also important, with potassium, calcium, and magnesium heading the antistress list. Potassium is essential for most crucial physiologic activities. Calcium is vital to nerve transmission and regular heartbeat as well as immune function. It aids both relaxation and muscle tone. Magnesium is a tranquilizing mineral that helps balance the nervous system and supports heart function. An Epsom salt (magnesium sulfate) bath (with 1 cup) can be very relaxing. In general, a dosage of 600–1,000 mg. of calcium and 400–800 mg. of magnesium daily, in addition to diet, is recommended, with most of it being taken in the evening before bed.

Calcium and magnesium can also be used to balance the stomach acid. For acute or early stress with hyperacidity, these alkaline minerals taken before meals can be a helpful antacid. With chronic stress, when stomach acid is more often low, taking them before bed is better. Pancreatic function is often low as well with chronic stress, and additional pancreatic enzymes after meals may be helpful.

Minerals that are helpful for their immune and enzyme support, such as *superoxide dismutase*, include zinc, copper, manganese, and selenium. Chromium may be useful in allaying sugar cravings, while potassium is important to prevent heart irregularities and muscle cramps and to balance the hypertensive effects of sodium when salt is used in excess. Like vitamin C and the Bs, minerals are best taken in several portions for optimum absorption and utilization. Taking the important ones such as calcium, magnesium, iron, or zinc by themselves will reduce competitive absorption between them and produce higher levels of each in the blood.

Supplemental amino acids may allow better protein utilization and energy balance, especially when digestion is poor. The powdered, L- form amino acids are easily utilized by the body, much more easily than steak, though the meat has other nutrition (and possibly other toxins). The antioxidant amino acid, L-cysteine, promotes liver function

and detoxification. L-glutamine is helpful for proper brain function, especially with stress. Methionine may also be protective against stress through its support of fatty acid metabolism and other functions. L-tyrosine and L-phenylalanine may help reduce stress-induced high blood pressure, while L-tryptophan can be used for relaxation and sleep.

SLEEP-AID NUTRIENT COCKTAIL

Vitamin C, 500–1000 mg. (helps mineral absorption)*
Calcium, 500–750 mg.
Magnesium, 350–500 mg.
Potassium, 300–500 mg.
L-Tryptophan, 500–2,000 mg. (if available)
Relaxing herbs, such as valerian, chamomile, vervain, catnip, hops, or linden flowers

Begin with just the C, calcium, and magnesium. If that doesn't work, add 500 mg. of L-tryptophan, increasing the dosage if necessary by 500 mg. every three days, up to 2,000 mg. If you still have no relief, try an herbal sleep-inducing formula, beginning with one or two capsules and building up if needed. Celestial Seasonings' Sleepytime tea has helped many people. Drinking a warm cup of it or another nighttime relaxant tea is a helpful addition to a calming-down routine. Some people also enjoy a warm cup of whole milk before bed for its tranquilizing effect, if the digestion will handle it.

*A mineralized ascorbic acid powder with calcium, magnesium, and potassium can be used in a drink.

Herbs may be useful in the *Anti-Stress* program as well. Licorice root, and its active extract DGL, have a soothing and anti-inflammatory effect, and may be useful for stress. Valerian root, by itself or in combination with other herbs, has a tranquilizing effect and can be used before sleep or as a muscle relaxant, either as a tea or in a capsule. Catnip leaf can tame that wild or ferocious feeling and is a safe herb to improve the recharging quality of our catnaps. Ginseng root, as a tea or in capsules, is often thought of as a stimulant but is commonly used as an antistress herb. It strengthens deeper energies and the ability to handle life, and it is definitely better in the long run than coffee. White ginsengs, such as northern or white Siberian, tend to be safer for the blood pressure (too much red ginseng can elevate it). Gotu kola leaf is a good herb for mental stress. Like ginseng, it is very popular in the Eastern cultures. Two formulas that I have used for patients are made by Professional Botanicals: RLX ("relax"), which contains skullcap, passion flower, celery seed, musk root, lupulin, and hops, and RST ("rest") or Sleepeaze, which contains passion flower, valerian root, black cohosh root, German chamomile flowers, lupulin, and lemon balm.

Some practitioners use adrenal glandular tablets to support the extra adrenal demands during stress. Many people respond well to this treatment if they feel comfortable taking beef adrenals. I personally do not. Adrenal cortical extract (ACE) has been

a popular injection for a number of years for stimulating energy and treating a variety of problems, such as allergies, hypoglycemia, and fatigue. This appears to be less commonly used and harder to obtain, likely because of medical politics. It was not particularly unsafe; its effectiveness and safety were not well enough established to satisfy the FDA.

Some of the freeze-dried, blue-green algae products have also been useful because of their mild detoxifying and energizing effects. They also seem to reduce some mental stress. I personally like how I feel when I take chlorella or spirulina. They also provide protein and all the essential amino acids.

The following table shows my recommended Anti-Stress Nutrient Program. The amounts listed are the total day's intake (in addition to the diet), which I recommend splitting into three portions. Where ranges are shown, these are to accommodate individual needs and ability to handle higher amounts of these nutrients.

ANTI-STRESS NUTRIENT PROGRAM

Nutrient	Amount
Water	2–3 qt.
Vitamin A	7,500–15,000 IUs
Beta-carotene	10,000–25,000 IUs
Vitamin D	400 IUs
Vitamin E	400–1,000 IUs
Vitamin K	200–400 mcg.
Thiamine (B_1)	75–150 mg.
Riboflavin (B_2)	50–100 mg.
Niacin (B_3)	50–150 mg.
Niacinamide (B_3)	25–100 mg.
Pantothenic acid (B_5)	500–1,000 mg.
Pyridoxine (B_6)	50–100 mg.
Pyridoxal-5-phosphate	25–75 mg.
Cobalamin (B_{12})	50–250 mcg.
Folic acid	500–1,000 mcg.
Biotin	150–500 mcg.
PABA	50–100 mg.
Choline	500–1,000 mg.
Inositol	500–1,000 mg.
Vitamin C	4–8 g.
Bioflavonoids	250–500 mg.

Nutrient	Amount
Calcium	600–1,000 mg.
Chromium	200–400 mcg.
Copper	2–3 mg.
Iodine	150–200 mcg.
Iron	10–20 mg.
Magnesium	350–600 mg.
Manganese	5–10 mg.
Molybdenum	300–800 mg.
Potassium	300–500 mg.
Selenium	200–400 mcg.
Zinc	30–60 mg.
L-amino acids	1,000–1,500 mg.
L-cysteine	250–500 mg. with vitamin C
Optional:	
Hydrochloric acid with meals for chronic stress	5–10 grains
Pancreatic enzymes (after meals)	1–2 tablets
Adrenal glandular	50–100 mg.
Chlorella	1–2 packets or 6–12 tablets daily
Licorice root	2–4 capsules

Haas, Staying Healthy with Nutrition. Celestial Arts. Berkeley, CA '92

B Complex Vitamins

I wish to give a brief overview of the whole B vitamin group before dealing with each specifically. They are all water soluble and are not stored very well in the body. Thus, they are needed daily to support their many functions. Deficiencies of one or more of the B vitamins may occur fairly easily, especially during times of fasting or weight-loss diets or with diets that include substantial amounts of refined and processed food, sugar, or alcohol.

As a group they are named the B complex vitamins because they are commonly found together in foods and have similar coenzyme functions, often needing each other to perform best. Certain of the B vitamins can also be made in the body by inhabitant microorganisms, primarily in our large intestine. Bacteria, yeasts, fungi, and molds are all capable of producing B vitamins.

These vitamins are fairly easily digested from food or supplements and then absorbed into the blood, mainly from the small intestine. When the amount of Bs taken exceeds the body's needs, the excess is easily excreted in the urine, giving it a dark yellow color. Excesses of certain B vitamins, such as thiamine (B_1), are also eliminated in our perspiration. Since there are many deficiencies and no known toxicities of the B vitamins, taking modest excesses is really of no concern and may be helpful to many people. However, taking huge quantities is probably not needed under most conditions.

Sources: The B vitamins are found in many foods, and they often occur together. Actually, in nature, there is no B vitamin found in isolation. Heating, cooking, acid, and alkali affect each vitamin differently, so check the sections on individual Bs for this information.

The richest natural source containing the largest number of B vitamins is brewer's yeast, or nutritional yeast. Yeast is a common source used to make B vitamin supplements as well. However, this is not necessarily an ideal food for many people, since sensitivities to yeast may cause digestive tract problems or allergy. Different yeasts may also vary in their concentrations of specific B vitamins.

The germ and bran of cereal grains are good sources of these vitamins, as are some beans, peas, and nuts. Milk and many leafy green vegetables may also supply small amounts of B vitamins. Liver is an excellent source of the B complex vitamins. Other meats, such as beef, are fairly low, except for B_{12}, which is found mainly in animal foods. Check the discussion of each individual B vitamin for its best sources. And remember, the B vitamins are produced by human intestinal bacteria, which seem to work best with the milk sugar and fats in our diet, though most foods can provide a source for this biodynamic B vitamin production in the colon. Antibiotics such as sulfa drugs and tetracyclines, which kill the intestinal bacterial flora, also lower our potential to produce B vitamins. Replacing the lactobacillus intestinal bacteria after taking antibiotics is important in maintaining the health and microbial ecosystem in the colon.

Functions: The B vitamins are the catalytic spark plugs of our body; they function as coenzymes to catalyze many biochemical reactions. B vitamins help provide energy by acting with enzymes to convert carbohydrates to glucose and also are important in fat and protein/amino acid metabolism.

The B complex vitamins are very important for the normal functioning of the nervous system and are often helpful in bringing relaxation or energy to individuals who are stressed or fatigued. The health of the skin, hair, eyes, and liver is influenced by the B vitamins, as is that of the mucosal linings, especially in and around the mouth. The general muscle tone of the gastrointestinal tract is also enhanced with proper levels of B vitamins, allowing the bowels to function most efficiently.

Uses: The functions of the B vitamins are so interrelated that it is suggested they be taken

combined in B complex food supplements. They are usually part of any multiple vitamin and are often taken in increased amounts for problems of stress, fatigue, anxiety and nervousness, insomnia, and hyperactivity. B vitamins are also used for many kinds of skin problems, especially dry or itchy dermatitis rashes, or cracks at the corners of the mouth. Some cases of vitiligo may be helped by B complex supplements, including higher amounts of PABA. Premenstrual and menopausal problems may be helped with additional B complex vitamins. Treatment of alcoholism and withdrawal from alcohol may be aided by taking large amounts of the B vitamins.

A wide range of various B vitamin deficiency symptoms can be treated with supplemental Bs. The natural food extract supplements are often preferred over the synthetic B complex because they seem to work more harmoniously and are more easily tolerated; in addition, it is likely that there are other enzymes, cofactors, and possibly even undiscovered B vitamins within the natural supplements.

Deficiency and toxicity: There are basically no real toxicity problems with any of the B vitamins, even in large amounts, since the body readily eliminates the excesses. There may be, of course, some subtle problems from taking high-dose individual B vitamins for too long. One such problem with taking large amounts of a single B vitamin is that this may cause a depletion of other Bs. Therefore, it is best to take a complete B complex supplement whenever taking any individual B vitamin regularly in higher amounts.

At least thirteen B vitamins are found in our food. Some may be lacking in many Americans' diets because of the consumption of refined flour products, sugar, coffee, and alcohol, which can deplete B vitamins. Deficiency symptoms include fatigue, irritability, nervousness, depression, insomnia, loss of appetite, sore (burning) mouth or tongue, and cracks at the corners of the mouth. Some deficiencies may also reduce immune functions or estrogen metabolism; other potential problems are anemia, especially from vitamin B_{12} or folic acid deficiency, constipation, neuritis, skin problems, acne, hair loss, early graying of the hair, increased serum cholesterol, and weakness of the legs, to name a few.

Requirements: The daily amount required for each of the B vitamins varies, and the RDA is not very high for any of them. (For specific values, see the separate discussions of the various Bs.) The overall recommended minimums may be too low, and most people who take B vitamins take much higher amounts than the RDA. Since the body does not store much of the B complex vitamins and many commonly used, diet-related substances such as sugar, coffee, and alcohol deplete B vitamins in the body, these B vitamins should be taken daily. B vitamins are needed for growth, so increased amounts are also suggested for children and for pregnant or breast-feeding women. Stress, infections, and high-carbohydrate diets also may cause greater requirements of B vitamin supplements.

Vitamin B_1 (Thiamine or thiamin), the first B vitamin by Earl Mindell in *Vitamin Bible* (Warner Books, 1979) because of the support it gives to the nervous system and mental attitude. Its odor and flavor are similar to those of yeast. Thiamine can be destroyed by the cooking process, especially by boiling or moist heat, but less by dry heat, such as baking.

Like most other B vitamins, thiamine is needed in regular supply, though after its absorption from the upper and lower small intestine, some B_1 is stored in the liver, heart, and kidneys. Most excess thiamine is eliminated in the urine; some seems to be excreted in the sweat as well.

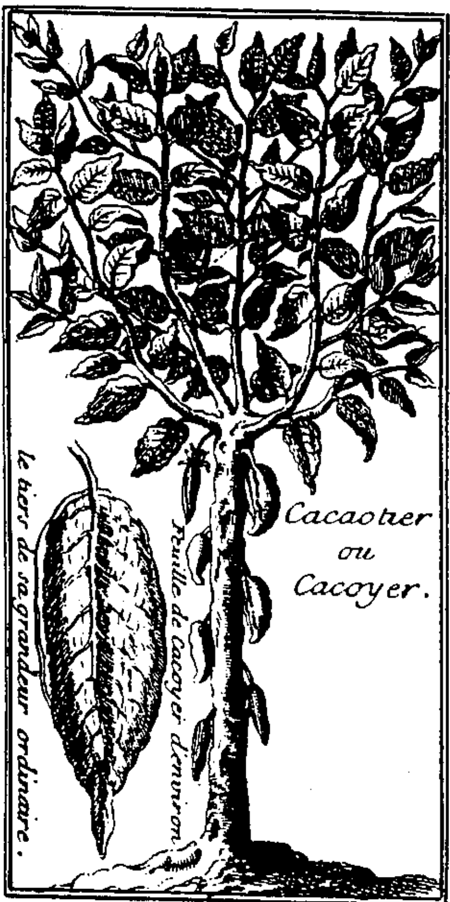
Sources: Since thiamine is lost in cooking and is depleted by use of sugar, coffee, tannin from black teas, nicotine, and alcohol, it is necessary to insure that intake of thiamine is

Sophie D. Coe and Michael D. Coe

The True History of Chocolate

with 97 illustrations, 13 in color

Thames and Hudson



Cacao tree in a somewhat schematic early 18th-century engraving from a travel book by the Dominican priest Jean-Baptiste Labat.

CHAPTER ONE

The Tree of the Food of the Gods

This history begins with a tree, a spindly understory tree, content to grow in the shade of buttress-rooted giants. How the seeds of this tree acquired immense importance socially, religiously, medically, economically, and of course gastronomically, on both sides of the Atlantic will be the substance of the story. In the New World that gave it birth, this seed was so valuable as a foodstuff, as currency, and as a religious symbol that the literature about it is unrivalled in quantity and diversity by writings about any other American plant which made the journey to the Old World.

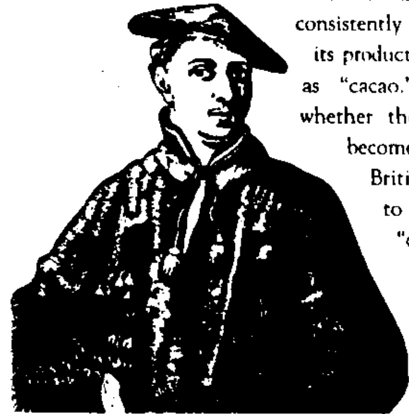
Our story opens in Mexico and Central America, thousands of years before the Spanish Conquest. The narrative is based on European sources, especially for the later European use of the seed; but the less well-known yet equally extensive documentation from the New World should provide a counterbalance.

The European invaders had to name the plants, all new to them, that they had "discovered," and then struggle to fit them into schemes of classification and into the health theory of the time, all laid down by long-dead classical authors who had been totally unaware of the New World's existence. In their turn, the native peoples of the new lands had to cope with the renaming and re-interpretation of their familiar staples, acquaintances of millennial standing, which were being forced on them by the Europeans.

The face-off between the two worlds is nicely illustrated by the scientific name of our tree: *Theobroma cacao*, given to it in 1753 by

Carl von Linné, the 18th-century Swedish scientist whose cognomen is usually written in its Latinized form as Linnaeus. The binomial system by which we now classify all living things was invented by him, to replace the clumsy descriptive Latin sentences used by his predecessors. The first part of this particular binomial, the name of the genus to which cacao (the "chocolate tree") belongs, is from the Greek and means "food of the gods." It is not clear exactly whose gods Linnaeus had in mind, although he himself is known to have been fond of chocolate. The New World name *cacao*—which, as we shall see, provides a clue for the unravelling of chocolate's earliest history—he found barbaric, and thus put it in second place as the specific name.

The binomial that Linnaeus bestowed on our tree, expressive as it is of the complexities of the encounter between the Old World and the New, has not been changed in the two and a half centuries since it was first imposed; but formal, scientific binomials are rarely used in everyday discourse. It has become a convention in American English, although one that is not consistently observed, that the plant and all its products before processing are referred to as "cacao." After processing, the seeds, whether they are in liquid or solid form, become "chocolate." "Cocoa," which in British English is often used to refer to what Americans call "cacao" and "chocolate," in American English refers only to the defatted powder invented by the Dutchman Coenraad Van Houten in 1828, and it will be so used in this book. But just to confuse matters, the New York Commodities Market prefers to call the unprocessed seeds "cocoa"!



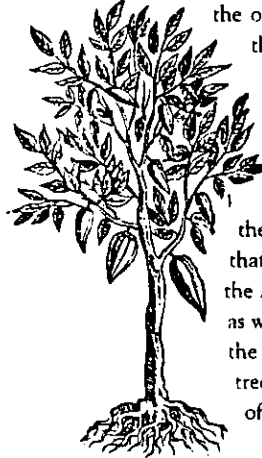
The great Swedish naturalist Linnaeus (1707–78) gave the scientific name Theobroma cacao *to the chocolate tree.*

Simple, reduplicated syllables are frequent among common names for plants, and have led the unwary to find cacao where it did not and does not exist. We must be careful not to confuse *Theobroma cacao* with the coconut palm, *Cocos nucifera*, and its products; these often go under the name "coco" in tropical America. If we are successful in avoiding this obstacle, there is another—also a New World plant and also sometimes used to produce a drink—to stumble over. This is the coca bush, *Erythroxylum coca*, the leaves of which were chewed by the Incas of Peru and their predecessors. Many a reader has come across the word "coca" in accounts of Peru, and has been deceived by it into enrolling the Incas into the ranks of pre-Columbian chocolate drinkers. Today a refreshing tea made from the leaves is administered to tourists suffering from altitude sickness in the Andean highlands; but an infinitely greater quantity of the coca leaf goes to the illicit industry that provides cocaine for the international market. Even this does not exhaust the list of soundalikes. A starchy root eaten in the Caribbean is colloquially called "coco"; scientifically, it is one of the species of the genus *Colocasia*. There are other plants with similar common names, such as the "coco-bean" (a variety of the common bean, *Phaseolus vulgaris*), but enough has been said to make clear that a reference to "cocoa," or something that sounds vaguely similar, is not necessarily proof of the presence of *Theobroma cacao*.

For a tree that bears seeds of such importance, cacao is singularly difficult to grow.[1] With a very few exceptions, it refuses to bear fruit outside a band of 20 degrees north and 20 degrees south of the Equator. Nor is it happy within this band of the tropics if the altitude is so high as to result in temperatures that fall below 60°F or 16°C. If the climate is one with a pronounced dry season, irrigation is a necessity, for cacao demands year-round moisture; if it does not get it, it sheds its otherwise evergreen leaves in a protest that is described as looking like autumn in New England. Poor growing conditions make it even more susceptible than it

normally is to the multitude of diseases which attack it, including pod rots, wilts, and fungus-produced, extraneous growths called "witches' brooms." Squirrels, monkeys, and rats steal the pods to enjoy the pleasant-tasting white pulp which envelops the seeds that they contain, but they avoid the bitter-tasting seeds themselves (although they may disseminate them).

When these seeds are planted in soil that suits their requirements, they sprout within a few days; the young trees will bear fruit by their third or fourth year. However, most propagation in today's cacao plantations is carried out by means of cuttings or the transplantation of carefully raised seedlings. The maximum length of time that a seed can retain its viability, its capacity to sprout, is three months—and that assumes the use of the most modern technology available. Exposure to low temperature or low humidity promptly kills the seed. These details of the inner workings of the seed have a direct bearing on theories of the origin and pre-Columbian migration of the cacao plant, and should be enough to convince anyone that protracted journeys in the distant past were out of the question.



Cacao tree, from the 16th-century herbal of Francisco Hernández, royal physician to Philip II of Spain.

Sixteenth-century European writers, eager to make this tree accessible to their Old World readers (an eagerness that was doubled by the fact that among the Aztecs cacao beans were used as money as well as foodstuffs), said that it was about the size of a heart cherry tree or an orange tree, with leaves that were similar to those of the latter, but a bit broader and longer.

The manner of the tree's flowering, however, was not at all familiar. Unlike European fruit trees, it did not flower from spurs

along the branches, or from the branch tips. The cacao tree, in a fashion favored by other tropical fruit trees, flowers from small cushions on its trunk and on the larger branches, a pattern technically known as "cauliflory." It is amusing to see European illustrators vainly trying to cope with this alien (to them) way of flowering: those who never saw the actual tree usually moved the cacao pods out to the smaller branches, obviously thinking that the native watercolorists whose work they were engraving had been mistaken in their observations.

Cauliflory is clearly a response to the ecological niche in which the cacao plant flourishes: the damp, shaded understory. The small, five-petalled flowers are pollinated exclusively by midges, which thrive in this environment. Ever since cacao was first domesticated, growers have maintained this shade by interplanting taller trees of other species in their plantations, in the belief that the young cacao trees need protection from the sun. Yet these same growers are puzzled by the fact that even in (or especially in) the most modern plantations, among the many hundreds of flowers produced by a single cacao tree annually, only 1 to 3 percent actually bear fruit. This is biological inefficiency taken to an extreme. Experiments and observation carried out in Costa Rica by the American entomologist Allen Young[2] have shown wherein the real problem lies. Under the somewhat aseptic regimen prevalent in large-scale plantations, midges do poorly. In the usually well-tended groves, the litter and mess natural to the rainforest floor—leaf trash, dead animals, and rotten cacao pods—are absent. Yet this produces the perfect, moist, untidy environment which is the ideal breeding ground for the pollinating midges. Unbeknownst to the commercial planters, the trees which they have planted to shade the cacao are not there to protect *T. cacao* from the sun, but to maintain midge populations, if only poorly. Pre-Columbian peoples probably had a higher rate of return, since they harvested cacao in modest, garden-style plantings near forest streams, not in huge, neatly-manicured plantations.

A cacao tree in Comalcalco, Tabasco, Mexico. The pods grow directly from the trunk.

Once pollinated, each flower results in a large pod containing 30 to 40 almond-shaped seeds or "beans" surrounded by sweet, juicy pulp. The plant itself has no mechanism by which the pods can open and the seeds disperse; this must be done by humans in stands of domesticated cacao or by monkeys in stands of wild or feral cacao. The monkeys cannot be seeking the beans, which are made bitter by alkaloids, but the delicious pulp, which is probably what attracted humans to *T. cacao* in the first place.

The pods take some four to five months to reach full size, and then another month to ripen completely. Even though flowers are being fertilized and pods are ripening throughout the year, there are usually two major harvests, as the pods will keep on the trunk of the tree for several weeks, and as harvested pods for another week. However, modern techniques now allow for continuous harvests. Harvesting must be done with care, so as not to damage the cushions, which continually produce flowers, and therefore fruit.

Cacao pods cut open to reveal the deliciously sweet pulp which surrounds the seeds. Top and right are fermented and dried seeds.

Once the pods are opened, and the beans and their surrounding pulp extracted, there are four principal steps which must be taken to produce the cacao "nibs" (kernels) which are to be ground into chocolate.[3] These are: (1) fermentation, (2) drying, (3) roasting (or toasting), and (4) winnowing. No matter what the level of technology, this sequence has been in force for at least three millennia, and still is followed in the modern world.

The length of the fermentation undergone by seeds and pulp varies somewhat: originally, beans of the *criollo* variety were given one to three days, and *forastero* beans three to five, but nowadays they both seem to get five to six days. During the first day, all sorts of chemical and biological processes are taking place; the adhering pulp becomes liquid, and drains away as the temperature rises steadily. But most importantly, the seeds briefly germinate, soon to be killed by high temperatures and increased acidity; this has to take place, as ungerminated beans do not give a chocolate flavor to the finished product. By the third day, the mass of beans, which

[illegible] must be turned from time to time, stays between 45°C (113°F) and 50°C (122°F). It must remain at this higher temperature for several days after germination, for again if it does not, the "chocolate" will not taste like chocolate. Among other things, the fermentation process lowers the astringency of the beans, which is probably what made them unattractive to marauding animals.

Fermentation completed, the beans are dried, traditionally on mats or trays left in the sun; this takes one to two weeks, depending on the weather. During the drying process, the beans lose more than half their weight, although the enzymatic action initiated by the fermentation goes on. Roasting, which lasts from 70 to 115 minutes, involves temperatures of 99°–104°C (210°–219°F) for chocolate and 116°–121°C (240°–250°F) for cocoa powder,

Workers on a cacao plantation extracting the pulp-surrounded seeds from the pods in preparation for fermentation.

and is absolutely necessary for the development of flavor and aroma; through this step, due to chemical changes and further loss of moisture, the nib becomes a richer brown in color, more friable, and even less astringent.

The final step is winnowing, in which the thin and useless shell is peeled off or otherwise removed. The resulting nibs can then be ground into something we would recognize as the subject of this book; this substance is known in the trade as "cacao liquor."

Cacao, like any other long-cultivated plant, has many varieties, and their distribution, as well as that of the wild plant (if it still exists), affords us insights into the origin of the plant, its domestication, and its subsequent relationship with human beings.

In his 1964 revision of the genus *Theobroma*, the botanist José Cuatrecasas[4] defines 22 species, grouped into six sections. He suggests that the genus (but not specifically *Theobroma cacao*) evolved on the eastern slopes of the South American Andes, long before human beings ventured into the New World from Siberia. Only two of the 22 are of any interest to us: *T. cacao* and *T. bicolor*. The other 20 grow in the Amazon basin; along the Pacific coast from Ecuador north to Colombia, Panama, Costa Rica, Nicaragua, El Salvador, Guatemala, and Mexico; and on the northern, that is to say Caribbean, coast of South America.

The less well-known cultivated species, *Theobroma bicolor*, while not a source of cacao, is grown as a kitchen garden crop from southern Mexico south to tropical Bolivia and Brazil. In Mexico, it produces something called *pataxte*, used either as a drink on its own, or to dilute the more expensive cacao. Cuatrecasas never saw a specimen that he considered wild, and makes no guesses as to its place of origin.

The problem of how to identify a tree as "wild" rather than as a feral "escape" is crucial here, and is ultimately a matter of the botanist's good judgment. Cultivated or domesticated trees usually

bear larger crops of larger fruit, if that is what they are being cultivated for. But a domesticated tree can outlast any house, especially one in the tropics, and that tree, or its descendants, growing under difficult conditions, can produce fewer and poorer fruit and in consequence pose a riddle for the investigator, who must guess at the history of the plant, and base his or her hypothesis on this guess.

The identification of the place of origin of the other, far more important, cultivated species of *Theobroma*, *T. cacao*, is obscured by this question of whether or not "wild" plants of the species have been found in Mesoamerica (the high culture area that in pre-Conquest times included the southern part of Mexico, Belize, Guatemala, and portions of El Salvador and Honduras). Those who do *not* accept the existence of wild *T. cacao* in Mesoamerica claim that it was either domesticated in South America and then taken to Mesoamerica, or first taken in wild form to Mesoamerica and then domesticated. Both these hypotheses seem equally implausible, given the brief span of the seed's capacity to germinate, and the fragility of seedlings. Parenthetically, when *T. cacao* was disseminated throughout the Caribbean and south to Ecuador by the Spaniards, it was carried in the form of cuttings and possibly seedlings in relatively fast, sail-driven ships. The fact that no pre-Columbian inhabitant of South America used *T. cacao* for anything beyond manufacturing a wine from the white pulp surrounding the seeds, and using that same pulp as a nibble, would seem a convincing argument against a South American origin and subsequent transportation to Mesoamerica.

Those who *do* accept the existence of wild Mesoamerican *T. cacao* argue that it was domesticated right there where it was later to be so extensively grown, used, and appreciated. Both Cuatrecasas and a more recent investigator, the Mexican botanist Arturo Gómez-Pompa, assure us that they have found wild *T. cacao* populations in the Lacandón rainforest of the state of Chiapas, in southeastern Mexico, and in the neighboring

Usumacinta River drainage which divides Mexico and Guatemala. Not only do they consider these populations genuinely wild (and not feral), but they also find them highly variable, which is usually taken as a diagnostic sign of an area where domestication might have taken place.

Cuatrecasas suggests an early, wide distribution of wild *Theobroma cacao* on the American continent, ranging from the Mesoamerican focus already described to the other area where today widely scattered specimens of *T. cacao* are to be found, the northern and western portions of the Amazon basin. At some time in the past, the trees in the intermediate area died out (remember that the cacao tree is subject to a host of diseases); and by the time that human beings became interested in the tree, the two isolated populations were on their way to evolving into two different species. The Mesoamerican trees were distinguished by long, pointed, warty, soft, and deeply ridged pods which contained seeds with white cotyledons; while the South American ones had hard, round, melon-like pods, and the seeds had purplish cotyledons. These two varieties are known as the *criollo* and *forastero* varieties respectively. They retain their capacity to interbreed and give fertile hybrids, which they will not do with any other species of *Theobroma*.[5]

19th-century engraving showing the warty ridges of a cacao pod.

To jump ahead of our story for a moment, *criollo* and *forastero*, and their hybrids, provide the raw materials for the modern chocolate industry. *Criollo* is produced by a tree that

is exceedingly finicky, produces fewer pods with fewer seeds in each pod, and is more susceptible to more diseases. Then why does anyone grow it? It is grown because this, the cacao that may have been the prerogative of the rulers and warriors of ancient Mesoamerica, and that then went on to seduce the elite of 17th- and 18th-century Europe, possesses flavor and aroma that are absent from the seeds of the hardier and more productive *forastero* (which does not grow in Mesoamerica, anyway). Needless to say, for economic reasons modern cacao planters and processors prefer *forastero*, which today provides more than 80 percent of the world's cacao crop.

Hybridizers are now making an effort to combine the desirable vigor of the *forastero* plant with the superior quality of the *criollo* bean. The first such hybrids were produced in the 18th century on the island of Trinidad when a "blast," explained by some as a hurricane and by others (more convincingly) as a plant disease, killed many of the *criollo* trees that had been planted there. They were replaced by *forastero* trees grown from South American seed, and cross-pollination between the surviving *criollo* trees gave rise to a new hybrid strain, the *trinitario*. Contemporary breeders are laboring to improve these early efforts, but it remains to be seen how much commercial advantage they are willing to sacrifice for superior flavor.

A Chemical Kaleidoscope

What does the cacao bean contain? Over half the weight of the cured, dried nib (as the shelled and degermed bean is called) is made up of fat, although the exact proportion fluctuates according to the variety of cacao and the growing conditions. The fat that is obtained from the nibs by means of the mechanical process invented by Van Houten in the last century is called "cacao butter" or "cocoa butter"; the cacao solids that are left are "cocoa."

Cacao butter is a valuable commodity because, in addition to its role in the production of high-grade chocolate, it has many uses in cosmetics and pharmaceuticals. It possesses the useful qualities of melting at very slightly below the temperature of the human body, and of going rancid very slowly.

The culinary destination of this cacao butter depends on the good, or not so good, intentions of the manufacturer. If the goal is the making of fine chocolate, it will be added to other superior-grade chocolate being processed, to further enhance its deliciousness; sometimes double the amount is added in the interests of smoothness (but true connoisseurs are more concerned with the percentage of cacao solids). If the intentions are not so benevolent, what up-scale *chocolatiers* refer to as "junk chocolate" will be manufactured, with only 15 percent of the product consisting of cacao solids (really fine chocolate has up to 70 percent), the remainder being sugar, milk solids, and cheaper solid vegetable fat; the valuable cacao butter is taken out and sold elsewhere. Cookbooks of the 18th and 19th century are always warning us about the adulteration of chocolate, with everything from brick dust to red lead being added to replace the cacao solids, and the cacao butter being substituted by cheaper oil of sweet almonds, lard, or marrow. Let us hope that at any rate brick dust and red lead no longer lurk in our chocolate.

So-called "white chocolate" is made out of cacao butter only, but in the United States it must be called "white confectionery coating," since it contains no cacao solids and therefore does not fit the legal requirement for "chocolate." It has the disadvantages of a relatively short shelf-life and a tendency to pick up foreign flavors.

Besides fat, each cacao bean contains less than 10 percent by weight of protein and starch.

It is the remaining portion of the bean, which contains hundreds of identified compounds, that provokes the most varied response to chocolate, so much so that at times one would not

occurring in only 19 species, most of them in the Sterculiaceae and Rubiaceae families. It is found, along with caffeine, in the kola nut of Africa, which bestowed its name, as well as its alkaloids, on one particular soft drink, and then, by extension, to a whole class of them. Eight species of the genus *Theobroma* contain theobromine, as do: *Camellia sinensis* (which gives us tea); six species of the genus *Coffea* (including the one that yields coffee); and *Ilex paraguariensis*, the source of *yerba maté*, another New World addition to the alkaloid drink inventory, a South American tea which should be drunk from a silver-mounted gourd through a silver strainer-straw.

What exactly does theobromine do to one? Like all alkaloids, it is a stimulant to the central nervous system, albeit a mild one. Its specific talent is to dilate the blood vessels, and in the past the medical profession has used it for that purpose. It is also a diuretic, that is, it stimulates the flow of urine. But as a whole it is much less pharmacologically active than caffeine, and pharmacists have dismissed it from their armory.

Before we go into the details about caffeine, we should consider the fact that the studies showing the toxic effects of caffeine are made with the pure compound, a substance most of us will never see. While scientifically this makes sense, as they occur in chocolate, tea, and coffee the alkaloids are subject to so many variables that it would be impossible to isolate their effects. If the drink in question is coffee, the actual amount of caffeine fluctuates according to the individual green coffee bean, the method of roasting, the fashion of preparation, and the personal idiosyncracies of the consumer as to strength, cup size, and frequency of ingestion. Not only does the caffeine's strength vary according to all these factors, but so do the concentrations of all the hundreds of other substances, which may or may not affect the caffeine when they interact with it.

Defining all the variables in the natural product is only half the problem. The individual consumer is also a bundle of permu-

tating factors. Unless you are one of a pair of identical (monozygotic) twins, you are genetically unique. Nobody, past or future, will be genetically identical to you, and this uniqueness extends to the way caffeine and other alkaloids affect you. On top of this individual range of tolerance, there is the factor of an individual's culture: if your particular culture thinks a nice cup of cocoa will comfort you and calm you down, it might just have such an outcome, which it might not have on someone who was brought up to believe chocolate to be a stimulant. Those who are used to thinking of it as a stimulant or soporific tend to get accustomed to the desired effect, and develop greater or lesser degrees of tolerance. The statements of the health authorities, which terrify us about yet another item of everyday use, deserve to be considered with all this information in mind.

In its pure form, the effects of caffeine are said to be caused by stimulation of the central nervous and cardiovascular systems, and include nervousness, anxiety, insomnia, and even worse conditions ranging from confusion to heart attacks. On the other hand, caffeine is also credited with lessening fatigue, enhancing the intellectual faculties, stimulating gastric secretions (which is why it is contra-indicated for ulcer patients), and promoting urination.

Although there are no firm scientific data on the subject available for theobromine, caffeine is definitely addictive, if by that adjective we mean a substance the denial of which will produce withdrawal symptoms. In this case the symptom is severe headache.[6] In fact, on a scale of addictiveness recently drawn up by the U.S. National Institutes of Health, on which heroin stands at the high end and marijuana at the low, caffeine is about in the middle. But before we stand awestruck at the powerful workings of this substance, we should examine how much of it there is in the average cup of cocoa. The answer is, not much. If a cup of percolated or dripped coffee contains from 50 to 175 milligrams of caffeine, and a cup of brewed tea of the same size from 25 to 100 milligrams, then a cozy cup of cocoa provides somewhere between

know that two authors are writing about the same subject. When they announce that "chocolate contains thus and so," we often have no idea whether they are measuring the contents of raw cacao beans, a processed bean or one particular variety, a low-grade candy bar, or a piece of premium couverture (chocolate confections with a high content of cacao butter in the coating). In fact, the literature about the actual composition of cacao reminds us of nothing so much as the tale of the blind men describing the elephant.

Psychologists tend to dismiss the possibility that any one of the myriad chemical compounds that constitute chocolate, or any combination of them, could have a physical effect on the consumer. Instead, they point to learned factors, how for many of us, sweets in general and chocolate in particular have been used as rewards from earliest childhood: "Eat your vegetables, dear, there's chocolate cake for dessert." Women have the added inducement of being the usual recipients of chocolate as gifts—"sweets to the sweet." The psychologists, however, have to admit that a natural preference for sweetness is not acquired but built in: even newborns suck faster on sweetened liquids. The essays usually close with a paragraph bemoaning the paucity of our knowledge of all the compounds in question and the way that they might affect human beings, in other words an escape clause in case something to the contrary turns up.

The views of the medical profession on chocolate vary wildly. Some doctors claim it to be an anti-depressant, interacting with female hormones in a way that produces incredible premenstrual cravings for chocolate. Others can find no such effect. The most extensive medical study of chocolate is by a French doctor, Hervé Robert, who published a book in 1990 called *Les vertus thérapeutiques du chocolat*. He disproves, to his own satisfaction, any possibility that chocolate could cause such unpleasant ailments as migraine, acne, obesity, and tooth decay. Quite the reverse: he finds that the caffeine, theobromine, serotonin, and phenyl-

ethylamine that chocolate contains make it a tonic, and an anti-depressive and anti-stress agent, enhancing pleasurable activities, including making love. Serotonin is a mood-lifting hormone produced naturally by the brain; phenylethylamine is similar to other mood-changing brain chemicals. Future research may show whether there is any truth in the claims that chocolate has an aphrodisiac effect. Its reputation as an aphrodisiac goes back as far as the European conquest of Mexico, but the reader should stop to consider if there has ever been a consumable substance that has not had this reputation at some time in some place.

Two of the substances mentioned by Dr. Robert, comprising 1 to 2 percent by weight of the cacao, are known to have physiological effects on humans, although perhaps not precisely the ones he mentions. These are the alkaloids (or, more technically, methylxanthines) caffeine and theobromine. What are alkaloids? They are plant products, complex organic compounds that occur in perhaps 10 percent of the world's plants, although exactly what evolutionary benefits the plants get from them is not clear. Alkaloids form salts when treated with acids, and they have physiological consequences on the animals that ingest them. Human animals pursue at least some of them with a passion. This book could be read as illustrating one such pursuit—one that began with the New World domestication of cacao, its promotion to a position near the center of the Aztec state ideology, and then, when the Aztec state was demolished by the Spanish conquerors, continued with the conquest of Spain and other European countries by cacao. It may come as news to many that chocolate, tea, and coffee only became widely available to the European public by the middle of the 17th century, and that chocolate was the first drink to introduce Europe to the pleasures of alkaloid consumption.

The two alkaloids that chocolate brought to the Old World sippers, therefore, were theobromine, and the more familiar caffeine. Theobromine is sparsely distributed in the plant world,

25 milligrams of caffeine and none at all. Typically for investigations of this nature, nowhere is it stated what sort of cocoa it is. A commercial packet of cocoa-mix with massive quantities of milk powder and sugar, and the barest minimum of chocolate, gives measurements remote from a "grown-up" chocolate—the kind one might be offered at a *cioccolateria* on the Piazza Navona in Rome, for example. The best that we can do with all these pharmacological data, or what passes for them, is to keep them in mind when we read of pre-Columbian chocolate, the chemistry of which we know even less of, if that is possible; and especially should we remember them when we read of the supposed effects of chocolate on its first European drinkers.

These explorations of the contents of chocolate are best summed up with phrases involving the word "unknown." A better way to trace the importance and influence of cacao—source of the world's first stimulating drink—is to go back and follow its history among the very people who discovered and domesticated it, long before Europeans began debating the healthfulness of alkaloid-containing hot drinks, and seeking their biblical and Classical precedents.

CHAPTER TWO

The Birth of Cacao; Olmec-Maya Genesis

Many writers of popular works on chocolate indulge in fantasy when treating cacao's New World origins, but the facts as revealed by modern archaeology and ethnohistory are far more interesting than these flights of imagination. Most authors, however, know that the first European encounter with cacao took place when Columbus, on his fourth and final voyage, came across a great Maya trading canoe with cacao beans amongst its cargo (in fact, a very high-priced, modern chocolate product has been named from Guanaja, the place where this happened). There is also a general awareness that chocolate was in use among the Aztecs of Mexico, both as drink and as currency. But instead of delving into the richly detailed, original sources on the Aztecs and their remarkable culture, many writers have substituted speculation for research, in the mistaken belief that not very much is known of these distant people of Mexico beyond their predilection for the extraction of human hearts.

We now realize that the Spanish invaders derived their earliest real knowledge of cacao, and the very word "cacao," not from the Aztecs but from the Maya of the Yucatán Peninsula and neighboring Central America. Even further, exciting research carried out in the past decade has shown that these same Maya, a thousand years before the Spaniards landed on their shores, were writing this same word on magnificent pottery vessels used in the preparation of chocolate for their rulers and nobility. Indeed, it is this selfsame word "cacao" (relegated to second place in his binomial system by Linnaeus) that provides the clue leading us back

MEDICINAL MUSHROOMS

An Exploration of Tradition, Healing & Culture

by Christopher Hobbs

Foreword by Harriet Beinfield

Adaptogens and Immune Stimulants

Now that we have explored some of the ways in which modern science views medicinal fungi, I would like to explain a bit about how modern herbalists and natural health practitioners classify and use fungi. Fungi are, by and large, used as adaptogens and immune stimulants. An adaptogen is any substance that meets three criteria, as defined by the Russian doctor and researcher, I.I. Brekhman, who, with his teacher, N.V. Lazarev, first defined the category of natural plant-derived "biological response modifiers." These are as follows:

- It should cause no harm and place no additional stress on the body;
- It should help the body adapt to the many and varied environmental and psychological stresses; and
- It must have a nonspecific action on the body, supporting all the major systems, such as the nervous system, hormonal system, and immune system, as well as regulating functions (such as the blood sugar); if they are too high, an adaptogen will lower it; if too high, reduce it.

Through various scientific studies, it is known that the pharmacological effects of many adaptogenic herbs are complex—they apparently support adrenal function (Farnsworth, 1985), and they are especially noted for their ability to build endurance and reduce fatigue.

Adaptogens also stimulate the immune system indirectly, building the body's resistance to non-specific stresses such as novel chemicals in the environment, noise, pathogens, overwork, and emotional factors, among others. Immune stimulants, on the other hand, stimulate the immune system directly, boosting its resistance to specific stresses such as pathogens, like viruses and bacteria.

If you have any doubt that people today need adaptogens and immune stimulants, perhaps even as regular dietary supplements, just take a look around. The modern environment is full of many new biological challenges created by the industrial and electronic revolutions. This is especially true given that most of these new challenges have popped up during the last hundred years, which is quite sudden in terms of the time it takes for the human body to evolve defense mechanisms.

One sign that our bodies are not yet fully adapted to these new changes and challenges is the recent proliferation of immune-based disorders such as AIDS, *Candida* infections, Chronic Fatigue Syndrome, and cancer. All of these continue to elude the standard methods of modern scientific medicine, despite massive efforts to stop them. For example, the American Cancer Association has spent billions of dollars over the last 20 years in search of a cure for the many forms of cancer—but to no avail. One out of three Americans is now expected to contract cancer at some point in their lives. After seeing the cancer rates rise in spite of all the money poured into cancer research, the American Cancer Association recently announced that there may not be any hope of finding such a cure and that perhaps prevention is the only answer.

Fortunately, TCM has been interested in preventive medicine for thousands of years, and modern western medicine is also taking a closer look. Looking at traditional medicine as a model, I have identified three separate classes of immune-active herbs or herbal programs—adaptogens, surface immune stimulants, and immune tonics. Each of these has a different application and works in a different way.

ADAPTOGENS

Adaptogens boost immunity mainly by supporting and balancing the endocrine (or hormonal) system. More specifically, laboratory tests have shown that they can support adrenal function, help the cells of the body utilize oxygen more efficiently, and increase the efficiency of cellular respiration. Scientists are now discovering that the nervous, hormonal, and immune systems are all interconnected and strongly affect each other (Locke and Hornig-Rohan, 1983). It is well-known, for instance, that excess cortisol (a hormone released from the adrenals in response to stress) can depress the immune system. And even more interesting, exciting new work suggests that attitudes and moods really *can* cause biochemical changes in the body that either enhance or depress the immune response. Thus, it is entirely plausible that adaptogens which stabilize the hormonal balance in the body can consequently enhance the functioning of the immune system.

Another way in which a number of adaptogens (such as eleuthero, reishi, and *Panax ginseng*) might work is through the element germanium, which is reported to increase the uptake and utilization of oxygen in body tissues, while at the same time protecting against damage from free radicals generated by this extra oxygen. Free radicals are highly reactive molecules (such as —OH radicals) that have at least one unpaired electron. Because they like to "grab" electrons from nearby molecules to complete a pair (paired electrons are always more stable than single ones), they tend to react with important substances in the body, such as DNA, and are thus capable of causing widespread damage. Since more free radicals are produced during periods of increased immune-system activity (as during infections or stress), it is especially important to add adaptogens and antioxidant supplements to the diet at these times The most effective and tested nutrient antioxidants to add to an herbal regime are vitamin E and vitamin C.

It is highly significant, then, that some mushrooms and other adaptogenic herbs contain high amounts of germanium, which has been shown to have immunomodulating activity (Reynolds, 1993). For instance, in a recent analysis of 24 Chinese herbs, it was found that Reishi and *Panax ginseng* contained much higher levels of germanium than the others (Chiang and Wann, 1986). Many other medicinal mushrooms may contain large quantities of germanium, as well as polysaccharides and protein-bound polysaccharides, which have also been found to directly stimulate the immune system (Hung-Cheh & Mieng-hua, 1986). It is relevant that some reports indicate that it may not be wise to take purified germanium supplements due to possible kidney toxicity (Reynolds, 1993).

Immune Stimulants

Immune stimulants work mainly by increasing *macrophage* activity. Macrophages (macro=big, phage=eater) are a kind of white blood cell that "eats up" and destroys pathogens such as bacteria, yeast cells, virus-infected cells, etc.—a kind of garbage-disposal system. They reside in great numbers in the mucous membranes of the body—especially throughout the digestive, urinary, and respiratory tracts. They also play a role in the reticuloendothelial system, which is a system of immune cells (including macrophages) centered in the spleen, liver, and lymphoid tissues that engulf and store wastes and toxic chemicals, taking them out of action. Macrophages and other phagocytes (like neutrophils) are like the body's protective shield; they are our first line of defense. Stimulating this aspect of our immune system helps protect us against colds, flu, and infections of any kind, because these immune "effector" cells do not allow pathogens to even gain a foothold.

Like muscles and other organs, the surface immune system needs constant exercise to keep it fit and ready to do its job. It gets natural exercise as a result of foreign organisms which we regularly ingest and inhale, as well as from minor illnesses (such as colds), bee stings, and other environmental influences. Since this exercise keeps it ready and able to fight off more serious illnesses, such as cancer, the next time you get a cold, be grateful that your surface immune system is getting a good workout!

Currently, it is known that *Cordyceps* (Zhang et al, 1985), lentinan and LEM from shiitake (Ladanyi et al, 1993), and protein-bound polysaccharides from *Trametes versicolor* (PSK, PSP) (Yang et al, 1993; Nguyen & Stadtsbaeder, 1979) have shown an ability to stimulate macrophage activity and strengthen our immune system's fight against infection from bacteria and viruses.

Herbs and other natural remedies that activate the immune system include echinacea, eastern white cedar (*Thuja occidentalis* L.), wild indigo (*Baptisia tinctoria* (L.) R. Br. ex Ait. f.), osha (*Ligusticum porteri* J. M. Coulter & J. N. Rose), cold-water and hot-water baths/showers, and physical exercise. Note that echinacea is really an all-star in this class. See my book *Echinacea: The Immune Herb!* for more information.

Immune Tonics

Immune *tonics*, (spleen, kidney, or lung "chi" tonics as they are called in TCM) work by supporting the bone marrow reserve, from which macrophages, all other immune effector cells (such as T-cells), and red blood cells are made. Reishi is a good example of a medicinal mushroom which has been shown in laboratory tests to build up the bone marrow (Jia et al, 1993b; Guan & Cong, 1982), possibly acting a little like an "herbal bone-marrow transplant." Many fungi are deep immune tonics, such as reishi, *Cordyceps* spp., hoelen, and shiitake. Ginseng, too, is a spleen Qi tonic, which is one reason it is so prized in TCM.

An interesting case history that illustrates the difference between the surface and deep immune systems involves a group of young cancer patients who were given a surface immune stimulant combination containing *echinacea*, *thuja*, and *baptisia* during radiation therapy to help maintain their levels of white blood cells. In many of these children the depressed white blood cell count climbed quickly back to normal levels after taking the herbal formula for a week or ten days. However, some of the children did not respond. Upon investigating this lack of response, it was found that these children had such low bone marrow reserves that they no longer had the resources to create more white blood cells, even though this immune function was stimulated. After these children rested and ate an extra nourishing diet for a period of several weeks, a number of them were able to respond positively to the immune-stimulating herbal treatment (Chone and Manidakis, 1969).

The best way to take immune tonics is to eat them as part of one's regular diet, allowing them to provide the nutrients and vital substances the body needs to build superior immunity. This is a tradition in China and Japan, where food and medicine are not so artificially separated. If you would like to make an excellent immune tonic, try my recipe for "Wei Qi Soup." The body's immune vitality is called *wei Qi* in TCM. This soup is very strengthening and building. It contains large quantities of vitamins and minerals in a readily assimilable form, as well as substances (such as polysaccharides) that the body can use to rebuild a weakened immune system. This recipe also provides a great opportunity to try some of the mushrooms mentioned in this book. Try adding shiitake, turkey tail, common

poria (such as *Oxyporus corticola* (Fr.) Ryv.), *Cordyceps*, or any sweet-tasting polypores, such as *Fomitopsis pinicola*, available in your local area.

Wei Qi Soup

Directions: Fill a pot 2/3 full with purified or spring water, then add:

Astragalus membranaceus, 5-7 sticks

Ganoderma lucidum (i.e., reishi) 1 medium

(any other tonifying mushrooms), 2-3 small fruiting bodies

Slightly sprouted beans, 1/4-1/2 cup (aduki, black, etc.)

Bring water to boil, simmer for 20 minutes, then add:

Organic barley, 1/2-1 cup (choose amount depending on thickness desired)

Simmer another 20 minutes, then add favorite vegetables such as:

carrots & celery
beet tops (or chard, collards, mustard greens, etc.)
cabbage
potatoes (optional)

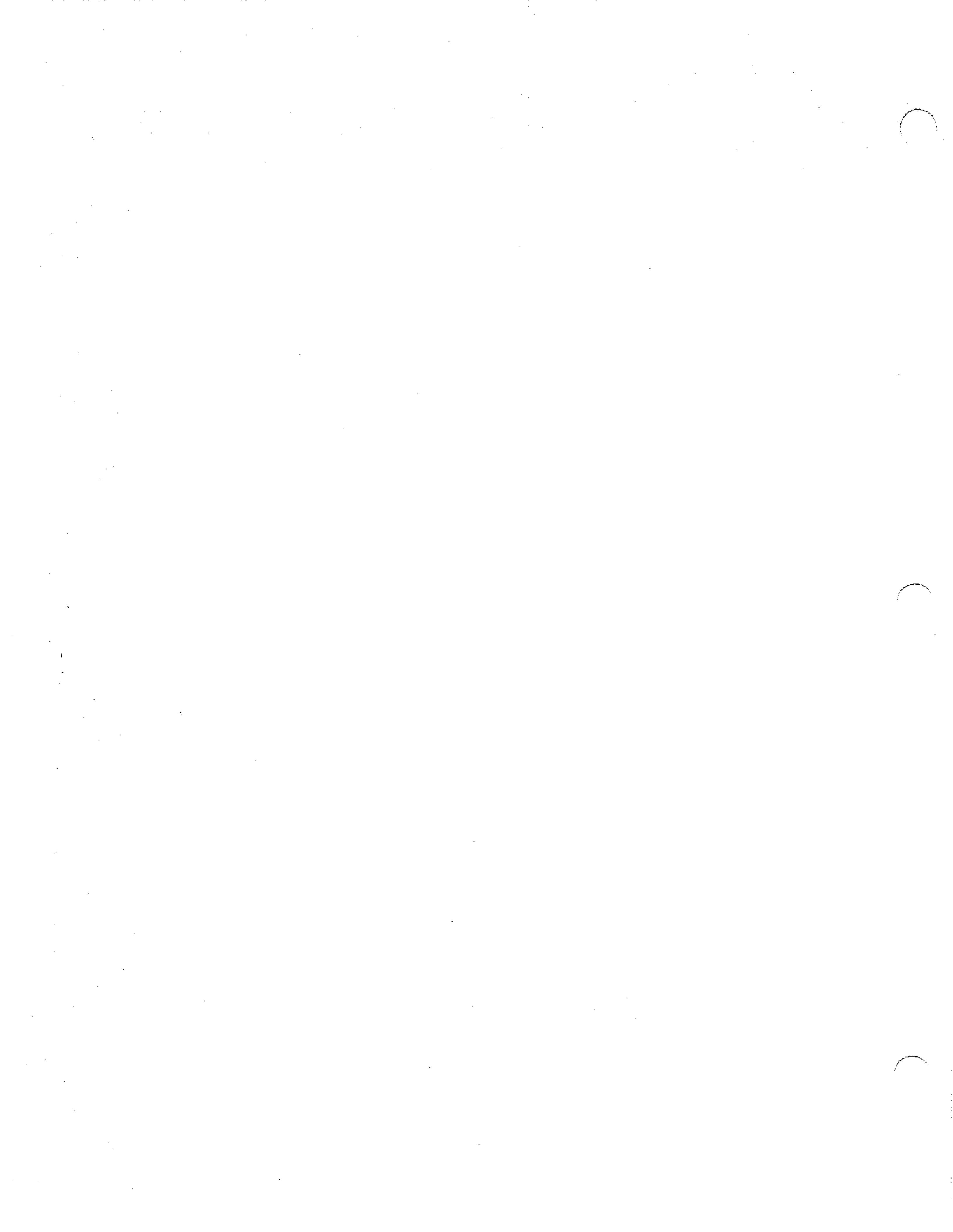
continued...

Wei Qi Soup

sea vegetables (nori, kelp, wakame, etc.)
gobo (i.e., burdock root)
nettles or other wild greens (when available)
garlic & onions

Simmer until the vegetables are tender, then add miso and spices such as ginger, celery, or fennel seed. Make enough for a few days and store it in the refrigerator.

Indications and Dosage: During illness, when solid food is not desirable, drink 3-4 cups of the warm broth (add less barley and more water to make broth). For degenerative immune conditions, eat 1-2 small bowls per day, and drink the broth as desired. For autoimmune diseases such as allergies, lupus, diabetes, and hepatitis accompanied by fatigue, weakness, or autoimmune conditions, eat the soup when desired, or drink the broth. This soup can be used upon occasion (1-2 times per week) for general tonification and may help to increase stamina.



Western society and incarnated as shadow. In *Freud and the Post-Freudians*, J.A.C. Brown says:

> Epithets such as "mummy's boy," "soppy," "milksop," or "crybaby," reveal antifeminist tendencies when contrasted with the idealization of toughness, aggressiveness, and hardness, which are regarded as praiseworthy. . . . This type of character formation is in part the result of a reaction against the early weaning habits of modern times—it is a revenge upon and repudiation of the weaning mother.[12]

In the early analytic period a tolerance for the feminine principle and for homosexuality was most rare. As Groddeck put it:

> One might think that an age that is proud of its civilization . . . must know that on the other side of the Aegean Sea, in Asia, open pederasty is the rule. . . . Obviously [the church] derives this prohibition from the Old Testament, the whole spirit of which was directed toward bringing all sexual activity into direct association with the begetting of children . . . in this matter an evil has long been made out of what is a hereditary right. . . .
>
> I was born at a time when people behaved as though . . . women had no sensuality in their nature. In the support it gave to this view one might say the last century was almost ridiculous, but unfortunately the results of this absurdity are serious.[13]

Today we are in a period in which the body is acknowledged both as a representation of the feminine and a point of contact with the unconscious. Several analysts have written about the emergence of the feminine in the objective psyche, such as Whitmont *(Return of the Goddess)*, Sylvia Brinton Perera *(Descent to the Goddess)* and Jean Shinoda Bolen *(Goddesses in Every Woman)*. This movement of coming to consciousness of feminine values accompanies a new attitude of acceptance and respect for the body. The "return of the goddess" is a phase of cultural development during which traditional masculine expressions of what is deemed right and good are being balanced by a flexibility and openness to the feminine voice operating in the world at large. Consequently we are seeing a concomitant movement, a greater awareness of the body in the field of psychotherapy; but among analysts, as in the larger collective, that movement still encounters some resistance.

Whitmont believes that in today's psychotherapeutic milieu the

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interpretive method alone is insufficient to bring about personality change:

> Whether this [is] because a revaluation of sexual mores and a new relation to spiritual meaning has to be dealt with first, or because the quality of our psychic awareness has since undergone a change, or, as I believe, because of both developments, our present psychological state increasingly calls for feeling and body awareness in addition to understanding. . . . The dominant attitude of this past cultural phase has been Apollonian and patriarchal; it has been a culture of abstraction, thought, and distance. It has tended to cut individuals off from their matrix; from instincts and affects; from nature, earth; from the body and the containing community.[14]

It is difficult to see how the next step will unfold, but we can hope for attitudes toward the body which go beyond our current conceptualizations.

In chapter three, I will explore some options that depth psychology holds open toward a more balanced integration of the body in analysis, but first let us look at some of the forces of attitudinal change in more detail.

Pioneers in Body Therapy

I consider the pioneers of body therapy to be Freud, Sandor Ferenczi, Alfred Adler, Groddeck, Wilhelm Reich and Jung. Naturally they were influenced by others: Nietzsche, Kretschmer, Krafft-Ebing, Schiller, the anthropologists, etc. I begin with these six psychotherapists because their primary concern regarding the body was distribution of energy (as seen especially in the drive theory). Over this subject they were found to come together, dissent and then separate.

Sigmund Freud

Freud's career exemplifies the movement in attitudes toward the body that occurred in the collective during the past century. He began as a physiologist examining the body at the most basic level, then moved to the study of neuropathy, concentrating on the nervous system.

At the time Freud began these studies the only orthodox therapies were those that treated the body as a machine. Electrotherapy was the treatment of choice in the textbooks of the day. Realizing the ineffectiveness of such an approach, Freud moved on to the field of psychotherapy using hypnosis, a methodology that manipulated the patient but which recognized the relevance of the psyche. His final position as psychoanalyst and his method of free association reflected an attitude of respectful observation of the whole person and the encouragement to disclosure.[15]

Only the most aware medical professionals of his day, such as Georg Groddeck, his contemporary and admirer, appreciated Freud's leadership in this movement from mechanistic therapy to depth analysis. Groddeck expressed his respect for Freud openly:

> In analyzing, I do no differently from what I did before, when I ordered hot baths, gave massage, and issued masterful commands, all of which I still do. . . . My treatment, insofar as it is different from what it used to be, consists of the attempt to make conscious the unconscious complexes of the "It." . . . That is certainly something new, but it originated not with me, but with Freud; all that I have done in the matter is to apply this method to organic disease.[16]

The resistance in society to what was being disclosed was formidable. Freud and his colleagues were discovering that morality and neurosis were related. In some way the energy of the mind-body unit was capable of being misdirected into bodily symptoms, in effect saying that a sick or disturbed body indicates a disturbed psyche that needs healing. This was not a popular message. Gerard Lauzun in his biography of Freud wrote:

> Not only Germany, where official science relegated Freud to ignominy and disgust, but the whole world, accused psychoanalysts of the most dangerous tolerance, of being obsessed with sex and of ruining society by turning everybody's eyes toward indecency and perversion.[17]

In addition to having his theories attacked for being arbitrary and artificial, Freud was associated with the "licentiousness of the Viennese," and the "carnality of the Jews,"[18] because of statements such as the following in 1908:

> The position sanctioned by every authority, that sexual abstinence is not harmful and not difficult to maintain, has also obtained a good deal of support from physicians. It may be said that the task of mastering such a mighty impulse as the sexual instinct is one which may well absorb all the energies of a human being. Mastery through sublimation, diverting the sexual energy away from its sexual goal to higher cultural aims, succeeds with a minority, and with them only intermittently; while the period of passionate youth is precisely that in which it is most difficult to achieve. Of the others, most become neurotic or come to grief.[19]

Freud's original view of the instinctual energy of the body was that there was one basic drive present at birth. It developed through several stages, focusing on various erogenous zones and culminating in genital sexuality. Corresponding to the physiological development, the child's attention and strongest perceptual orientation were drawn to the needs of the erogenous zone which predominated at each stage of development. The psyche paralleled the body in interest and goal orientation.

In the interest of formulating the most parsimonious and least complex explanation of libido, and in order to have the most scientifically clean and biologically provable theory, Freud strove to keep this viewpoint foremost and to find experiences of patients to exemplify it. In this effort he was supported by Reich and Groddeck but criticized by Adler and Jung, who both felt he exaggerated the importance of the libidinal drives. As time went on Freud came to modify his original dogmatic viewpoint, and in doing so moved closer to Adler and Jung. But it was too late and not enough to bridge their schisms. It alienated Reich, who persisted in the most narrow view of the nature of psychophysiological energetics.

The first modification Freud made in his original theory of libido was to acknowledge the differentiation of an aggressive (death) drive from the sexual (life) drive, necessitating the dual-instinct theory called Eros and Thanatos. The dreams of shell-shocked soldiers of World War One forced this new consideration of the insufficiency of the old meaning of libido. This came closer to Adler's emphasis on the primary power drive, though of course to Adler aggression meant life, not death. Reich disagreed with Freud,

seeing aggression as a healthy aspect of the sex drive and frustrated sexuality as the source of destructive uses of aggression.[20]

Later Freud focused more on the three components of the personality—id, ego and superego—which further changed the drive theory. In 1923, in "The Ego and the Id," he described the Id as a chaos, a caldron of seething emotions, being based in the somatic realm from which it has received the instinctive needs which find psychic expression in the Id.[21] (The term Id, taken from Nietzsche's *das Es* (the It), was first used by Groddeck, then adopted in the Latin spelling by Freud). The Id consisted of accumulated undifferentiated energy arising from the life and death instincts, about which Freud wrote:

> Only the work of analysis, by rendering them conscious, is capable of situating them in the past and depriving them of their energy-charges; it is just on this result that, in part, the therapeutic effect of analytical treatment depends.[22]

The ego came to be regarded as a reservoir of "narcissistic libido," energy cathected to one's self, which conceptualization made possible the distinction between transference neuroses, which were treatable by psychoanalysis, and narcissistic disorders (dementia praecox or schizophrenia, paranoias, melancholia) which were not. Freud now conceptualized the instinct of self-preservation, in addition to instincts of sex and death. In his 1922 paper on libido theory, Freud states:

> C.G. Jung attempted to resolve this obscurity along speculative lines by assuming that there was only a single primal libido which could be either sexualized or desexualized and which therefore coincided in its essence with mental energy in general. This innovation was methodologically disputable, caused a great deal of confusion, reduced the term "libido" to the level of a superfluous synonym and was still confronted in practice with the necessity for distinguishing between sexual and asexual libido. The difference between the sexual instincts and instincts with other aims was not to be got rid of by means of a new definition.[23]

Later in the same paper he says,

> It thus seemed on the face of it as though the slow process of psychoanalytic research was following in the steps of Jung's speculation about a primal libido, especially because the transformation of object-libido into narcissism necessarily carries along with it a certain degree of desexualization, or abandonment of the specifically sexual aims. Nevertheless, it has been borne in mind that the fact that the self-preservative instincts of the ego are recognized as libidinal does not necessarily prove that there are no other instincts operating in the ego.[24]

In seeing anxiety as a warning, originating in the ego, instead of a symptom of dammed-up sexual energy, Freud caused a greater rift with Reich.

The third personality part, the superego, was thought to come into being through a process of identification with the parental ego.

Freud described the ego as a "body ego," but his conceptualization of resistances was entirely in the realm of mental defense mechanisms, which have never been clearly translated into physiological terms.

Throughout the confusion and dissension among these theorists Freud appears to have arrived at, maintained and established a consistent technique of having patients lie on a couch, not seeing and not being touched by the analyst. Lauzun tells us:

> The patient lay down with his eyes shut and was told to concentrate on such and such a symptom and to try to detect its source. If the patient remained silent Freud added "a little suggestion" by pressing his hand on the patient's forehead and assuring him that the thought would come. He also asked questions and insisted on everything being brought out in words even if it was something unpleasant, irrelevant, or banal. During the treatment of Fraulein Elizabeth, the patient explained one day that these interruptions and interferences on the physician's part were a hindrance to her, breaking off the flow of memories. The method of free association was born of this demand. Freud realized that the physician should interfere as little as possible and refrain from evoking any awareness of outward reality, whether in the form of events or of people, while the patient was mentally roaming in search of his or her own crucial experiences.[25]

According to Freud himself, "The physician should be impenetrable to the patient, and like a mirror, reflect nothing but what is shown to him."[26]

Sandor Ferenczi

Ferenczi, one of Freud's most faithful disciples, was more experimental. While Freud disapproved of Ferenczi's innovations, there was never an open break between them as with Adler or Jung. Ferenczi's changes were significant since they sought to shorten the duration of analysis by depriving the analysand of any form of gratification. The patient was urged to avoid sex, to take as little time as possible for elimination, and not to eat or drink for pleasure. Denying the gratification of libido was thought to leave more energy available for abreaction during analysis.

When these precautions proved of doubtful benefit, Ferenczi tried the opposite tack. He took the role of a good parent, even to the point of freely admitting his own defects to the patient. He permissively encouraged the patient to dramatize his or her memories while the analyst entered the fantasy play. Freud especially disapproved of Ferenczi's kissing patients. Ferenczi was the first to emphasize the importance of countertransference and the interpersonal aspect of the analytic procedure. As such he laid the foundation for psychodrama.[27]

With Ferenczi's thought there arose a crucial issue concerning the nature of the healing process. Freud thought that the bringing to consciousness of the contents of the unconscious was the essential factor in the cure. However, William Goodheart has suggested that Freud used the concept of the transference to defend against the full realization of the interpersonal impact between himself and his patients.[28]

Ferenczi's insight was that the patient not only brought repressed material to consciousness, but reenacted his infantile experiences in a more permissive and tolerant parental atmosphere. This insight has gained a lot of acceptance today, although the importance of the therapist as parent—that is, the reliving of repressed material—varies in the view of different schools, and even among therapists of the same school.

For example, some analysts stress the consistency with which the therapist holds to the symbolic approach, seeing this as containing and ego-enhancing, the primary healing factor in the interaction.

Others see the containing in terms of emotional acceptance and consistency to be primary. Still others, such as behavior therapists, focus on the therapist-parent's capacity to recondition response while the patient reexperiences his or her dependency with the therapist. In so doing, they believe, they enable the patient to maintain a more open attitude toward learning than the patient can achieve alone.

Alfred Adler

Adler, originally attracted to Freud's biological approach, had a long-standing interest in the capacity of the body to compensate for organic damage. Adler believed that compensation occurred in the psychological as well as physiological spheres. His concept of organ inferiority was later replaced by the broader concept of social inferiority. His attention to physical defects and bodily expressions of character traits was an important contribution to the evolution of body therapy.

> The bodily postures and attitudes always indicate the manner in which an individual approaches his goal. A person who goes straight on shows courage, whereas an adult who is anxious and hesitant has a style of life that prohibits direct action and something of a detour appears in every action.[29]

He also commented on the meaning of sleep postures:

> When we see a person sleeping upon the back, stretched out like a soldier at attention, it is a sign that he wishes to appear as great as possible. If he lies curled up like a hedgehog. . . he is probably cowardly. A person who sleeps on his stomach betrays stubbornness and negativity.[30]

On posture, insomnia, enuresis, sexual dysfunction and other examples of "organ dialect," Adler noted:

> The refusal of normal functions may be an expression of defiance; pain, an expression of jealousy and desire; insomnia, of ambition; over-sensitivity, anxiety, and nervous organic disorders, of craving for power. . . . A mental tension affects both the central nervous system and the autonomic nervous system. Where there is tension

> there is action in the central nervous system . . . by means of the autonomic nervous system the tension is communicated to the whole body. . . . The body through the autonomic nervous system, the vagus nerve, and endocrine variations, is set into movement which can manifest itself in alterations of the blood circulation, of the secretions, the muscle tonus, and of almost all the organs. As temporary phenomena the changes are natural and only show themselves differently according to the style of life of the person concerned. If they persist, one speaks of functional organ neuroses. These, like the psychoneuroses, owe their origin to a style of life which, in the case of failure, shows an inclination to retreat from the problem at hand and to safeguard this retreat by clinging to the bodily and psychological shock symptoms which have arisen. This is the way the psychological process reflects itself in the body.[31]

Adler's detailed focus on expressive movement, his emphasis on the importance of social feeling and on the aggressive drive—which he defined as "fighting for satisfaction"—were important sources for the development of the holistic approach and psychosomatic medicine. As the dance therapist Liljan Espanek comments:

> His first close linking of the organic functioning to that of the mind and emotion, and its interdependence, is the first premise for successfully using the body approach to influence the two other systems as is done in dance therapy. . . . The work with the body in movement demonstrates constantly this original life energy, the animal aggression drives, as an original biological force, which, when absent, leaves the human being passive, lifeless and disinterested in living.[32]

Adler, Groddeck and Reich all specified body language and interpreted disease psychologically, but their notions of the origin of the initial tension were quite different. For Adler, specific tensions were derived from heredity, history and the final goals of the individual, and especially the will to power. For Groddeck and Reich, tension was always a result of frustrated sexual energy.

Georg Groddeck

Groddeck intuited the psychoanalytic method and met Freud after conceiving of the It *(das Es)*, which expresses itself through the fate of the individual.

> I came by chance upon the idea that in addition to the unconscious of the thinking brain, there is an analogous unconscious of other organs, cells, tissues, etc.; and that through the intimate connections of these separate unconscious units with the organism as a whole, a beneficial influence may be directed upon the individual units by means of the analysis of the brain unconscious.[33]

Groddeck, as physician and director of a sanitarium, was a pioneer in the fields of psychosomatic medicine and psychoanalysis. As pointed out above, he saw illness as a form of communication. Some examples of his style are:

> In attacking the tooth, the It is saying, in the gentle but persistent voice of the unconscious, "Do not chew; be cautious, spit out what you would like to eat. . . ." For the unconscious, a tooth is a child.
>
> Bleeding of every kind . . . has a close connection with imagined births.
>
> People who hate their mothers create no children for themselves, and that is so far true that we may postulate of a childless marriage, without further inquiry, that one of the two partners is a mother-hater.[34]

As far as I can tell, Groddeck limited his technique, like Freud, to verbal interpretation of his patients' symbolic language.

Wilhelm Reich

Reich deviated from the Freudian stance in making direct contact with patients, like Ferenczi, but on a much deeper level. Like Adler, Reich focused attention on body tensions as expressions of habitual emotional states, but carried his observations much further than Adler:

> The difference between my technique and Adler's characterological attempts was that it consisted in character-analysis through analysis of the sexual behavior. Adler, however, had said: "Analysis not of the libido, but of the character." My conception of the character armor has nothing in common with Adler's formulations of individual character traits. Any such comparison of the sex-economic theory of structure with Adler's characterology would betray a fundamental misconception. Character traits such as "inferiority feel-

> ings" or "will to power" are only superficial manifestations of the armoring process in the biological sense, i.e., in the sense of vegetative inhibition of vital functioning. . . .
>
> Adler rejected the sexual etiology of the neuroses when he became aware of guilt feelings and aggression. He ended up as a finalistic philosopher and social moralist.
>
> Jung had generalized the concept of libido to such an extent as to make it completely lose its meaning of sexual energy. He ended up with the "collective unconscious" and, with that, in mysticism. . . .
>
> Ferenczi, that talented and outstanding person, was perfectly aware of the sad state of affairs in therapy. He looked for a solution in the somatic sphere and developed an "active technique" directed at the somatic tension states. But he did not know the stasis neurosis and failed to take the orgasm theory seriously.[35]

Like Freud, Adler and Jung, Reich (from his earliest work in orgasm theory) had been on the track of the basic biopsychological energy which becomes manifest in somatic, mental and emotional states. He described its damming-up as resulting in impotence and its "streaming" in the full surrender of orgasm. He traced the locations where libido was blocked, first in the character armor and then in the muscular armor.

Reich believed that the tensions of "character armor" must be attacked directly. By character armor he meant chronic physiological rigidities corresponding to emotional barriers against feeling excitement. He distinguished between his analytic interpretive work, which he called "character analysis," and direct body-contact work on the defensive musculature, which he called "vegetotherapeutic treatment of muscular attitudes" and "character analysis in the realm of biophysical functioning."[36]

His method was to have patients undress and lie on a couch. He began by observing the breathing patterns. Reich envisioned seven rings of muscular armoring which transversely cut across the body from front to back: 1) eye area; 2) mouth and jaw; 3) neck; 4) chest; 5) diaphragm; 6) central abdomen; and 7) pelvis. He systematically attacked each ring by various techiques of exercise and massage. He called this vegetative therapy because of the powerful impact on the patient's deepest core of being, at the level of vegetative functions such as breathing and digesting; this he distinguished from

peripheral sensory motor behavior, which can be more easily affected and changed.

From 1918 to 1933 Reich functioned in the mainstream of Viennese analysts. After 1933, he was preoccupied with researching bio-electrical energy sources, especially in terms of units of energy which he called "bions" and "orgone energy," which he believed could be accumulated out of the atmosphere to increase one's vitality. His work was not respected by the scientific community, although it is still defended by some.[37] Similar efforts to find the origins of life energy are underway in modern chemistry.[38] He has been viewed both as a charlatan and as a martyr for the causes of scientific and sexual freedom.

Reich wrote extensively about social conditions and the generally neurotic social structures and repressive attitudes toward natural functions, which he considered responsible for what he referred to as the "emotional plague."

His definition of healthy functioning is easily misunderstood because he seems to define the capacity for orgasm as the sole criterion for good psychic health. But then he extends the definition of a healthy orgastic response to include other less easily defined factors, such as the capacity to sustain an intimate relationship with a single partner. At the same time, he does say that it is unrealistic to expect healthy people to commit themselves to long-term sexual relationships to one person, as in marriage. Malcolm Brown, a neo-Reichian therapist, has written:

> It is not at all a question of the sheer quantity of libidinal energy charge and discharge generated, but the quality and degree of communion and fusion of one's subjectivity of being with the core being of the other that defines depth of orgastic satisfaction.[39]

At times Reich seems to say this, but at other times, to my mind, he does not.

Reich has been criticized for being too literal in his views on the importance of the orgasm. He is also criticized for the authoritarian and messianic flavor of his presentations. Reich imagined that the "emotional plague" accounted for people's negative reaction toward him, but it may have been his arrogance that was provocative.

Nic Waal, Reich's pupil who welcomed him to Norway during

the Nazi regime, wrote that psychoanalysts began to exclude Reich when his *Character Analysis* was published in 1933:

> Some did not understand the technique of working through the actual resistance pattern, the "here and now." Others . . . said this was not psychoanalysis at all, since it did not follow the technique of free association but selected the material actively. This difference of opinion between Reich and the rest could have been worked on, if not solved, through scientific and objective discussion. It did not have to go as far as exclusion. But Reich had already started on the road from character analysis to vegetotherapy. This was long before psychosomatic medicine on a psychodynamic basis had developed. It was a departure from psychoanalysis, in which treatment it was, in fact, a horrible offense even to touch the patient. It was to break all basic rules, and basic thinking on transference. It seemed to seduce the patient. The decent opponents thought that this was a break with Freud and basic rules. The indecent ones pointed out that Reich was a sexologist, and they viciously implied that he was devastating professional ethics.[40]

It is interesting that Reich was accused by the Freudians of the same crime that Freud was accused of by the conservative physicians. However, body therapy as it exists today owes a great debt to Reich's fearlessness. Though he remains controversial, the increasing prominence of body therapies continues to gather momentum in support of his techniques. His followers seem to fall into two major groups, the neo-Reichians, who continue his style, and the bioenergeticists, who follow Reich's pupil, Alexander Lowen, whom I will discuss later.[41]

Carl Jung

Each of the pioneers described here stood out against the forces of collectivization; they exemplified Jung's concept of individuation, the becoming of what one is meant to be even if it necessitates breaking with established expectations and opinions.

Although Jung initially accepted Freud's theory of sexuality as central to the cause of emotional illness, by 1912 he had many misgivings, resulting in his well-known break with Freud. Jung

demonstrated boldness in his outspoken acknowledgment of the power of the unconscious to balance ego attitudes. His deviation from the materialism of the psychoanalytic movement led to his being labeled as a mystic by his colleagues.

For Jung, libido was conceptualized as psychic energy, a life-force only partially sexual. He placed less importance on the conflict in neurosis between instincts and the restrictive demands of society, and more on the conflict between intrapsychic functions and complexes. He saw regression as not necessarily pathological, but as a way of discovering creative solutions through contact with the collective unconscious. Only if the regression persisted into infantile behavior, with no creative resources emerging, could it be called pathological.

Jung's technique was much less rigid than Freud's. He is said to have been innovative, unpredictable and flexible in treatment. He is reported to have treated an insomniac by singing a lullaby. Whitmont and Yoram Kaufman write:

> In Jung's consulting room people danced, sang, acted, mimed, played musical instruments, painted, modeled with clay, the procedures seemingly limited only by Jung's inventiveness and ingenuity.
>
> To Jung, one of the most important aspects of the therapeutic process was the encounter, during the analytic hours, with the numinosum, that is, the religious, not in the sense of traditional organized religion, associated with churches, temples, and synagogues, but with one's inner religion, one's own sense of the divine within oneself.[42]

Jung did not make a point of focusing on the body and has written very little about bodily expression. Yet his psychology has furnished a container in which his followers have been able to develop many facets and directions, including body therapy and dance movement. Whitmont and Kaufman have described how group therapy and family therapy flourished in Jung's approach:[43]

> [In family therapy] Jungian principles, the understanding of the dynamics of shadow, animus, and anima projection, of communication difficulties based upon the differences of psychological types, can serve as vital therapeutic tools.[44]

They also state that in the 1920s Jungians were doing breathing therapy and what would later be called sensitivity training.[45]

Some of the factors in Jung's approach that have made it so adaptable are these:

1. The concept of psychic energy occurring on a continuous basis from dense to light, comparable to the light-energy continuum from infrared to ultraviolet. For wholeness, the therapist must be concerned with all phenomena, from the dense end which corresponds to the most primordial, instinctual level of biology, to the least dense areas of pure spirit.[46]

2. The concept of typology determining a person's preferences for visual, auditory or kinesthetic experience. (Arnold Mindell includes proprioception as a fourth category; see below, page 101.) Jung's statement that in active imagination some found it easier to dance out contents from the unconscious, rather than image them visually or auditorially, opened the door for body therapy.[47]

3. The technique of active imagination. The value of making direct contact with the unconscious contents, and the anthropomorphizing of those contents to render them manageable to the conscious ego, as Jung recommended, was adapted by gestalt therapy (Perls) and psychosynthesis (Assagioli), Bernstein and others. Penny Bernstein states in her text on dance movement theory:

> Carl Jung's development of the techniques of "active imagination" affording the patient a vehicle for expressing unconscious material also paved the way for movement therapy. Jung believed that it is vital for the individual to contact and understand the symbolic information from the unconscious. Once personal material is stripped from the complexes, their archetypal core provides a means for individualization and the experience of Selfhood. He utilized dreams and artistic processes as direct avenues into understanding what was "meant to be" for the person. For this purpose, Jung had used dance either as direct expression or through the "dancing out of one's dreams."[48]

4. The concept of the contrasexual functions, anima and animus.[49] By pointing out that each person contains biological and psychic aspects of the opposite sex, both inherited and acquired,

which one may recognize and integrate, Jung created a vast area for exploration. This area lends itself to a number of body techniques and leads quite naturally into them. For example, an anima or animus figure as personification of the archetype is remarkably easier to contact and dramatize than the abstract notion of one's instinctual energies.

5. The concept of the psyche's search for balance, especially in the typology of personality. The necessity for including the feeling and sensation functions into one's lifestyle implies the essential role of body awareness. Bernstein notes that Jung's psychological typology "seems to clarify this phenomenon. . . . Different orientations seem to suit the utilization of different theoretical approaches [in dance therapy]."[50]

6. The concept of the transcendent function, which Jung saw as a manifestation of the energy that springs from the tension of opposites, appearing spontaneously in dreams and visions.[51] Joan Chodorow writes:

> Jung describes the ego as a complex datum which is constituted primarily of a general awareness of the body. With sufficient attention to the body experience, it is possible to simultaneously express the unconscious through movement while maintaining an equally strong ego position through ongoing awareness of the body's reality.
>
> Although the impulse to move may spring from a source in the unconscious, the body, which allows the impulse to manifest itself, remains firmly rooted in the fact of its own existence. The actual act of moving creates proprioceptive and kinesthetic feedback which serves to confront the unconscious with the body ego's reality. . . . Since the body has the capacity to simultaneously manifest both conscious and unconscious, it may be our most potent tool toward the transcendent function.[52]

7. Jung's openness to consider Eastern thought and symbolism, for instance mandala formations, Yin and Yang energies, and the concept of Kundalini and the chakras. This latter aspect of Hinduism finally was perceived by the collective body of psychotherapists to be of importance in the late 1960s.

8. His attention to the physiological concomitants of complexes. The Word Association Test, with its record of the effects of emotion

on pulse rate, breathing and electrical conductivity of the skin, was the key to Jung's understanding of how mind and body functioned as a unit. Arnold Mindell says:

> Biofeedback researchers today credit him with the discovery of what they call "skin talk." Although Jung's work is not noted for physical research, he hypothesized that there was a chemical toxin behind schizophrenia, theorized about the mind-body relationship, interpreted dreams physiologically, and studied the significance of Kundalini yoga.[53]

9. The concept of synchronicity as an alternative to causal connectedness to explain mind-body functions. Mindell discusses this in his book, *Dreambody*:

> Though Jung used synchronicity and the concept of the psychoid unconscious mainly in conjunction with parapsychological phenomena, modern Jungians such as Ziegler, Bach, Meier, Scott, Redfearn, and Lockhart have applied the concept of synchronicity to the relationship between spontaneously appearing symbols and organic disorders.[54]

10. And finally, Jung's insistence on the integration of body and spirit, a concept that actually recapitulates the first concept named, psychic energy. Nathan Schwartz-Salant has underlined it thus:

> *Only when* the spirit exists as a reality, when psychic reality is a phrase with *objective meaning*—stemming from a transformation of the psyche such that a felt center exists—then and only then does a descent into the body lead to transformation, and to the experience of the somatic unconscious. Any other kind of descent, such as through body exercises, leads only to temporary changes which must always be repeated, for the lack of the spirit to—as the alchemists would say—"kill and transform the bodies" [Paracelsus] leads not to transformation, and surely not to the reality Jung knew as the somatic unconscious.
>
> Thus Jung's psychology is not anti-body but rather a proper guide to body. And any way that does not recognize the autonomy of the spirit and the existence of the archetypal realm can only lead to a very concrete view of body, which misses the mystery of the fundamental identity of body and psyche.[55]

These ten points are some of the influences of Jung on body

therapy. His followers continue to explore new ways for his theories to express themselves. It is due, I believe, to the fundamental healthiness of his personality and his connection with his own archetypal sources, that his psychology continues to grow and develop—to individuate. Whitmont is an important spokesman for the nonverbal techniques as they reflect Jung's position:

> The verbal dimension by itself is decidedly not enough. The primitives intuited this and instituted rituals to enhance psychic phenomena. Analytical psychotherapy is also attempting to cope with this problem. To that effect various non-verbal techniques are being incorporated into traditional practice; groups and movement, sensitivity training, and rituals are being employed so that psychic facts can be experienced more deeply and hitherto locked doors may be thrust open.[56]

Therapists of Later Influence

In addition to the above analysts and their followers, three other therapists had some influence on body therapy by focusing strongly on whole-body reactions to the therapeutic situation, keeping the physiological response in the foreground.

Franz Alexander, a Chicago analyst and author of *Psychosomatic Medicine*, combined physiological and psychological perspectives. A Freudian, he disagreed with orthodox theory on the nature of sexuality and granted greater importance to cultural influences. Alexander categorized people into those who face emergency by sympathetic nervous system reaction and those who face emergency by parasympathetic reaction. The former are prone to high blood pressure, diabetes, rheumatoid arthritis, goiter and headaches; the latter are prone to ulcers, diarrhea, colitis and constipation. He pointed out that coronary disease was an occupational hazard for physicians, lawyers and executives, and that certain personalities are accident prone.[57]

Jacob Moreno, the father of psychodrama, first used it as a therapy with self-help groups of Spittelburg prostitutes, and later with Viennese children. For years he held group theater at Carnegie Hall, opening the stage to anyone who wanted to work in that way.

He founded psychodrama at St. Elizabeth's Hospital (where dance therapy also began) as a way of assisting one in enacting important life situations and roles in order to know and express oneself more clearly. He attempted to resolve infantile fixations by uncovering their origins in role play, as we have seen that Ferenczi and Jung also did.

Fritz Perls, analyzed by Reich during 1931–32, was hostile toward the "dangers of the couch." Perls felt that most psychotherapy, and particularly psychoanalysis, was too intellectual, ignoring the physical sensations of the individual. One of his sayings was that we must "lose our heads to come to our senses." In order to facilitate that, he used his own bodily reactions to feed information back to the patient about how the patient affected others. He focused on the patient's posture, small movements, expressions, and other noticeable physiological reactions to bring the person into the present, the "here and now," and out of talking in an insulated way about the past or future.

Although he never gave credit to Jung, Perls used active imagination to illuminate patients' conflicts, especially in large groups in which he placed the primary patient "on the hot seat" while directing them in conversation with inner figures. He popularized psychotherapy at Esalen (1964–69) and influenced many other therapists, including Moshe Feldenkrais and Ida Rolf (see the next section). His methods focused on getting the person into direct contact with his or her immediate phenomenological field of awareness, especially by attending to the kinesthetic and sense impressions occurring from moment to moment.

Although he did not become a Reichian, his work shows Reich's influence in its emphasis on connecting appropriate feelings with thoughts, focusing on psychosomatic language, and the therapeutic use of impasse or "breakdown" of defenses.[58]

The Contributions of Dance Movement

During World War Two and its aftermath, the need arose for pragmatic ways of treating large numbers of psychically disturbed people. Long-term methods like analysis retreated to the back-

ground and the "brief" therapies became more popular. While followers of the men mentioned in the previous section adapted their theories to short-term work and to groups, they were joined by those influenced by dance movement.

I will first discuss the influences from dance movement and then examine contemporary leaders in body therapy with the understanding that there is substantial overlap, especially among the analytically oriented movement therapists. Gerda Alexander (see below) has said that at dance conferences one could recognize the pupils of each teacher while everyone was still in the lobby, for each teacher had a unique style which the students imitated.[59]

Isadora Duncan was a pioneer in modern dance who broke out of the stylized molds that contained professional dancers until the twentieth century. Although an American, she found more enthusiastic audiences in Europe for her emotional style and performance in costumes based on Greek classical art. She was illustrative of a growing interest in dance and movement that was quite strong in the twenties. She opened the way for dance as a form of expressiveness, combining emotional impressionism and movement in a way that was spontaneously in the movement, not routinized.

Another kind of influence came from *Frederick Matthias Alexander*, an Australian actor who learned by long intensive self-study with mirrors that the position of his head and neck had an important effect on the quality of his voice and the flow of his movements. He taught and developed his methods of postural correction over many years in England and America. He noted that by teaching children to sit or stand for prolonged periods before they are physiologically ready, we teach faulty posture and inefficient mobilization. He corrected these faults by retraining, by guiding students toward greater awareness, aliveness and sensuousness, and away from anxiety-provoking attitudes.

One of Alexander's concepts concerned lengthening the spine, concentrating on "long openness of spinal centrality," and breathing up and down that openness; another was to free the neck of tension and keep the head forward and up. In the interests of propriety, Alexander did not touch students below the shoulder, but his current

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9

Chronic Fatigue and Adrenal Function

Have you ever been extremely tired and then all of a sudden felt a burst of energy? More than likely the sudden burst was due to the release of adrenaline from your adrenal glands, a pair of glands that lie on top of each kidney. If you have ever been suddenly frightened, you know how it feels to have adrenaline surge through your body. Adrenaline is there to give the body that extra energy boost to escape from danger.

In the less extreme case, adrenaline and other adrenal hormones regulate many body functions, including energy levels. When adrenal function is impaired, fatigue will result. There is now considerable evidence that many people with CFS have impaired adrenal function. Learning to deal with stress and supporting the adrenal glands are essential to the successful treatment of CFS in most cases. In order to have high energy levels, the adrenal glands must be working properly.

Stress and the Adrenals

Some basic control mechanisms in the body are geared toward counteracting the everyday stresses of life. However, if stress is extreme, unusual, or long-lasting, these control mechanisms can be quite harmful. Stress triggers a number of biological changes known collectively as the "general adaptation syndrome." The three phases of the general adaptation syndrome are alarm, resistance, and finally exhaustion.[1] These phases are controlled and regulated by the adrenal glands.

Alarm Reaction

The body's initial response to stress is the alarm reaction or "flight or fight" response. It is triggered by reactions in the brain which ultimately cause the adrenals to secrete adrenaline and other stress-related hormones. The fight or flight response is designed to counteract danger by mobilizing the body's resources for immediate physical activity. Your heart rate and force of contraction of the heart increases to provide blood to areas necessary for response to the stressful situation. Blood is shunted away from the skin and internal organs, except the heart and lungs, and the amount of blood supplying needed oxygen and glucose to the muscles and brain is increased. Your rate of breathing increases to supply necessary oxygen to the heart, brain, and exercising muscle. Sweat production increases to eliminate toxic compounds produced by the body and to lower body temperature. Production of digestive secretions is severely reduced, since digestive activity is not critical for counteracting stress. And blood sugar levels are increased dramatically as the liver dumps stored glucose into the bloodstream.

Resistance Reaction

While the fight or flight response is usually short-lived, the resistance reaction allows the body to continue fighting a

stressor long after the effects of the
have worn off. Corticosteroids secret
are largely responsible for the resist
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Exhaustion

Exhaustion may manifest by a total c
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Another cause of exhaustion is we
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systems, especially the heart, blood
immune system.

Healthy Adrenal Function

An abnormal adrenal response, eithe
hormone release, significantly alters a

stressor long after the effects of the fight or flight response have worn off. Corticosteroids secreted by the adrenal cortex are largely responsible for the resistance reaction. For example, the glucocorticoids stimulate the conversion of protein to energy so that the body has a large supply of energy long after glucose stores are depleted and the mineralocorticoids retain sodium to maintain an elevated blood pressure.

As well as providing the necessary energy and circulatory changes required to deal effectively with stress, the resistance reaction provides those changes required for meeting emotional crisis, performing strenuous tasks, and fighting infection. However, while the effects of adrenal cortex hormones are quite necessary when the body is faced with danger, prolongation of the resistance reaction or continued stress increases the risk of significant disease and results in the final stage of the general adaptation syndrome—exhaustion.

Exhaustion

Exhaustion may manifest by a total collapse of body function or a collapse of specific organs. Two major causes of exhaustion are loss of potassium ions and depletion of adrenal glucocorticoid hormones like cortisone.[1] When the cells of the body lose potassium they function less effectively and eventually die. When adrenal glucocorticoid stores become depleted hypoglycemia results, and cells of the body do not receive enough glucose or other nutrients.

Another cause of exhaustion is weakening of the organs. Prolonged stress places a tremendous load on many organ systems, especially the heart, blood vessels, adrenals, and immune system.

Healthy Adrenal Function

An abnormal adrenal response, either deficient or excessive hormone release, significantly alters an individual's response

to stress. Healthy adrenal function is a key to dealing with stress. Often the adrenals become "exhausted" as a result of constant demands placed upon them. An individual with adrenal exhaustion will suffer from chronic fatigue and may complain of feeling "stressed out." They will typically have a reduced resistance to allergies and infection.

Atrophy or shrinking of the adrenal glands is a common side effect of continual stress and cortisone administration. Due to the importance of the adrenal glands, optimum health is dependent on optimum adrenal function.

Supporting the Adrenal Glands

One of the best ways to support the adrenal glands is by dealing with stress effectively by using techniques designed to reduce stress. Exercise and relaxation techniques such as meditation, prayer, biofeedback, and self-hypnosis are vital components of a stress-management program. While exercise is itself a physical stressor, it is a beneficial way to incorporate the fight or flight response as part of a daily routine. Regular exercise leads to an increased ability to cope with stress and reduces the risk of stress-related diseases.

Relaxation techniques seek to counteract the results of stress by inducing its opposite reaction—relaxation. Although an individual may relax by simply sleeping, watching television, or reading a book, relaxation techniques are designed specifically to produce the "relaxation response."[2] The physiological effects of the relaxation response are opposite to those seen with stress. The relaxation response is designed for repair, maintenance, and restoration of the body.

To achieve the relaxation response you can practice meditation, prayer, progressive relaxation, self-hypnosis, or biofeedback. The best relaxation technique for you is a totally individual choice. The important thing is that you set aside at

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Progressive relaxation is a popul
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Progressive relaxation, deep b
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Nourishing the Adrenal Glands

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least 5 to 10 minutes each day for relaxation. These sessions will also help remind you to breathe throughout the day in a relaxed effective manner.

Progressive relaxation is a popular technique based on a very simple procedure—comparing tension against relaxation. Maybe you are not aware of the sensation of relaxation. In progressive relaxation you will learn how it feels to relax by comparing relaxation to muscle tension.

You will first be asked to contract the muscle forcefully for 1 to 2 seconds then give way to a feeling of relaxation. Do this progressively through all the muscles of your body, and eventually a deep state of relaxation will result. Begin by contracting the muscles of the face and neck; hold the contraction for at least 1 to 2 seconds then relax the muscles. Next contract the upper arms and chest then relax, followed by the lower arms and hands. Repeat the process progressively down the body, contract then relax the abdomen, the buttocks, the thighs, the calves, and the feet. Repeat two or three times. This technique is often used in the treatment of anxiety and insomnia.

Progressive relaxation, deep breathing exercises, or some other stress reduction technique are important components of a healthy lifestyle. For your health and well-being, set aside at least 5 to 10 minutes each day just to relax.

Nourishing the Adrenal Glands

During periods of stress, to restore proper adrenal function, it is very useful to nourish the adrenal glands with the aid of various nutrients and herbal substances.

Foremost in the restoration or maintenance of proper adrenal function is to ensure adequate potassium levels within the body, by consuming foods rich in potassium and avoiding foods high in sodium. Most Americans have a potassium-to-sodium (K:Na) ratio of less than 1:2. This means most people ingest twice as much sodium as potassium.

Researchers recommend a dietary potassium-to-sodium ratio of greater than 5:1 to maintain health. This ratio is ten times higher than the average intake. However, even this may not be optimal. A natural diet rich in fruits and vegetables can produce a K:Na ratio greater than 50:1, as most fruits and vegetables have a K:Na ratio of at least 100:1. For example, here are the average K:Na ratios for several common fresh fruits and vegetables:

Carrots	75:1
Potatoes	110:1
Apples	90:1
Bananas	440:1
Oranges	260:1

To support the adrenals, daily intake of potassium should be at least 3 to 5 grams. Table 9.1 lists some foods having a high content of potassium.

Useful Nutrients

Vitamin C, vitamin B6, zinc, magnesium, and pantothenic acid are necessary nutrients for the manufacture of hormones by the adrenal glands. Supplementation of all of these nutrients at higher than RDA levels in the form of a high-potency multiple vitamin-mineral formula may be appropriate during periods of high stress or in individuals needing adrenal support.

Particularly important for optimum adrenal function is pantothenic acid. Pantothenic acid deficiency results in adrenal atrophy, which is characterized by fatigue, headache, sleep disturbance, nausea, and abdominal discomfort.[3] Pantothenic acid is found in whole grains, legumes, cauliflower, broccoli, salmon, liver, sweet potatoes, and tomatoes. It is a

Table 9.1 Potassium Content of Selec

Milligrams (mg) per 100 grams edible portior	
Dulse	8,060
Kelp	5,273
Sunflower seeds	920
Wheat germ	827
Almonds	773
Raisins	763
Parsley	727
Brazil nuts	715
Peanuts	674
Dates	648
Figs, dried	640
Avocados	604
Pecans	603
Yams	600
Swiss chard	550
Soybeans, cooked	540
Garlic	529
Spinach	470
English walnuts	450
Millet	430
Beans, cooked	416
Mushrooms	414
Potato with skin	407
Broccoli	382
Kale	378
Bananas	370
Meats	370
Winter squash	369
Chicken	366
Carrots	341
Celery	341
Radishes	322

SOURCE: "Nutritive Value of American Foods
Agriculture Handbook No. 456

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Table 9.1 Potassium Content of Selected Foods

Milligrams (mg) per 100 grams edible portion (100 grams = 3.5 ounces)

Food	mg	Food	mg
Dulse	8,060	Cauliflower	295
Kelp	5,273	Watercress	282
Sunflower seeds	920	Asparagus	278
Wheat germ	827	Red cabbage	268
Almonds	773	Lettuce	264
Raisins	763	Cantaloupe	251
Parsley	727	Lentils, cooked	249
Brazil nuts	715	Tomato	244
Peanuts	674	Sweet potatoes	243
Dates	648	Papayas	234
Figs, dried	640	Eggplant	214
Avocados	604	Green peppers	213
Pecans	603	Beets	208
Yams	600	Peaches	202
Swiss chard	550	Summer squash	202
Soybeans, cooked	540	Oranges	200
Garlic	529	Raspberries	199
Spinach	470	Cherries	191
English walnuts	450	Strawberries	164
Millet	430	Grapefruit juice	162
Beans, cooked	416	Cucumbers	160
Mushrooms	414	Grapes	158
Potato with skin	407	Onions	157
Broccoli	382	Pineapple	146
Kale	378	Milk, whole	144
Bananas	370	Lemon juice	141
Meats	370	Pears	130
Winter squash	369	Eggs	129
Chicken	366	Apples	110
Carrots	341	Watermelon	100
Celery	341	Brown rice, cooked	70
Radishes	322		

SOURCE: "Nutritive Value of American Foods in Common Units," *U.S.D.A. Agriculture Handbook No. 456*

good idea to take at least an additional 100 milligrams of pantothenic acid daily.

Adrenal Extracts

Oral adrenal extracts made from beef have been used in medicine since 1931.[4] Adrenal extracts may be made from the whole adrenal or just from the adrenal cortex. Whole adrenal extracts (usually in combination with essential nutrients for the adrenal glands) are most often used in cases of low adrenal function presenting as chronic fatigue, inability to cope with stress, and reduced resistance. Because extracts made from the adrenal cortex contain small amounts of corticosteroids, they are typically used as a "natural" cortisone in severe cases of allergy and inflammation (asthma, eczema, psoriasis, rheumatoid arthritis, etc.).

The dosage of adrenal extract will depend upon the quality and potency of the product. The best measure of an effective dose for either preparation may be the level of stimulation you experience. If a high-quality preparation is used, at higher dosages (for example, twice the label recommendation) you will notice a general stimulatory effect, including irritability, restlessness, and insomnia. I would suggest starting at one-third the recommended dosage on the label and slowly increasing your dosage every two days until you notice the stimulatory effect. Once you notice this, simply reduce your dosage to a level just below the level that will produce stimulation. As your adrenal glands rebuild, you will keep reducing the dosage until there comes a time when you do not require additional support.

Plant-Based Medicines

There are numerous herbs which support adrenal function. Most notable is ginseng. Both Siberian and Panax ginseng exert beneficial effects on adrenal function. Both of these herbs are discussed in Chapter 11.

Chapter Summary

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Chapter Summary

The adrenal glands control many body functions and play a critical role in the resistance to stress and fatique. If an individual has experienced a great deal of stress or has taken corticosteroids for a long period of time, the adrenal glands will shrink and not perform properly, causing them to experience chronic fatigue. In fact, low adrenal function is one of the hallmark features of CFS. We can support our adrenal glands by learning how to deal effectively with stress through the regular practice of relaxation techniques and exercise. In addition, the adrenal glands can be supported by eating a high-potassium diet along with taking nutritional supplements, adrenal extracts, and plant-based medicines such as ginseng.

As defined by the famous Russian pharmacologist I. I. Brekhman in 1958, an adaptogen is a substance that: (1) must be innocuous and cause minimal disorders in the physiological functions of an organism; (2) must have a nonspecific action (it should increase the resistance to adverse influences by a wide range of physical, chemical, and biochemical factors); and (3) usually has a normalizing action irrespective of the direction of the pathologic state.[1,4]

Siberian Ginseng's Adaptogenic Activities

Siberian ginseng possesses a significant ability to increase nonspecific body resistance to stress, fatigue, and disease. It does this via a number of different mechanisms, but the key one may be inhibition of the fight or flight reaction (see Chapter 9). This antistress effect is thought to prevent much of the suppression of the immune system caused by stress.

Clinical Studies with Siberian Ginseng

Siberian ginseng root extract has been administered to more than 2,100 human subjects who were under stress, but otherwise healthy, in clinical trials for the purpose of evaluating its adaptogenic effects.[1] These studies indicated that Siberian ginseng: (1) increased the ability of humans to withstand many adverse physical conditions (heat, noise, motion, workload increase, exercise, and decompression); (2) increased mental alertness, work output, and energy levels; and (3) improved the quality of exertion under stressful conditions and athletic performance.

Siberian ginseng has also been administered to more than 2,200 human subjects in clinical trials for the purpose of evaluating its adaptogenic effect in disease states.[1] A variety of illnesses were included in these studies including angina, hypertension, hypotension, acute pyleonephritis, various types of neuroses, acute craniocerebral trauma, rheumatic heart disease, chronic bronchitis, and cancer.

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Siberian Ginseng and Well-Being

Siberian ginseng appears to make people feel better. Not only stressed people feel better, Siberian ginseng has also consistently demonstrated an ability to increase the sense of general well-being in people experiencing a variety of psychological disturbances, including depression, insomnia, hypochondriasis, and various neuroses.

A possible explanation of this positive effect is improved balance among the various brain compounds like serotonin, dopamine, norepinephrine, and epinephrine. Siberian ginseng extract administered to rats has been shown to increase biogenic amine content in the brain, adrenals, and urine.[1] As individuals with CFS have been shown to have altered levels of these brain chemicals, it is likely that if Siberian ginseng does improve mood and energy levels in CFS it is via its ability to increase and improve the chemistry of the brain.

Siberian Ginseng and Immune Function

Siberian ginseng has been shown to exert a number of beneficial effects on immune function that may be useful in the treatment of CFS. In one double-blind study, 36 healthy subjects received either 10 milliliters of a Siberian ginseng fluid extract or a placebo daily for four weeks.[2] The group receiving the Siberian ginseng demonstrated significant improvements in a variety of immune system parameters. Most notable were a significant increase in T-helper cells and an increase in natural killer cell activity. Both of these effects could be put to good use in the treatment of CFS.

Dosage and Safety of Siberian Ginseng

Siberian ginseng is available in many different forms and strengths. Dosage depends upon which form you use. Here are the recommended dosages for the different commercially available forms. This dosage can be taken one to three times

daily for periods up to 60 consecutive days, after which there is usually a two- to three-week interval between courses.

Dried root	2 to 4 grams
Tincture (1:5)	10 to 20 milliliters
Fluid extract (1:1)	2.0 to 4.0 milliliters
Solid (dry, powdered) extract (20:1 or standardized to contain greater than 1% eleutheroside E)	100 to 200 milligrams

Safety studies, as well as human clinical studies, demonstrate that Siberian ginseng extracts are very well tolerated and side effects are extremely uncommon. At higher dosages (a daily dose of six times the amounts listed above), however, side effects can include insomnia, irritability, melancholy, and anxiety. In individuals with rheumatic heart disease, pericardial pain, headaches, palpitations, and elevations in blood pressure have been reported.[1] Therefore, dosage should be monitored with caution in these individuals.

Panax Ginseng

Perhaps the most famous medicinal plant of China, Panax ginseng (Korean or Chinese ginseng) has been generally used as a tonic (alone or in combination with other herbs) for its revitalizing and energy-enhancing properties.

The active ingredients of Panax ginseng are compounds known as ginsenosides. The level and the ratio of ginsenosides determine the quality of ginseng. The type of ginsenosides are different in Panax ginseng and American ginseng (*Panax quinquefolius*). These differences are quite important yet subtle. Siberian ginseng contains no ginsenosides.

Research on Panax Ginseng

Since the 1950s, a great amount
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Research on Panax Ginseng

Since the 1950s, a great amount of research has been conducted worldwide to determine whether the healing properties attributed to Panax ginseng belong in the realm of legend or fact. Unfortunately, inconsistent results (due mostly to different procedures in the preparation of extracts, use of nonofficial parts of the plant, use of adulterants, and lack of quality control in the ginseng used) have made determination of Panax ginseng's true properties difficult. Nonetheless, enough good research exists to indicate that Panax ginseng produces results consistent with its near-legendary status, especially when high-quality extracts, standardized for active constituents, are used.[3,4]

Foremost among Panax ginseng's effects are its adaptogenic activities. According to tradition and scientific evidence, Panax ginseng possesses the necessary balancing, tonic, and antistress action to be termed an adaptogen. In fact, Panax ginseng is generally regarded as the most potent adaptogen.

The beneficial applications of Panax ginseng, like Siberian ginseng, are quite broad because of these adaptogenic qualities. Panax ginseng is especially effective in severely fatigued, debilitated, and feeble individuals. Like Siberian ginseng, human clinical studies with Panax ginseng have also shown it to increase feelings of energy; increase mental and physical performance; prevent the negative effects of stress and enhance the body's response to stress; offset some of the negative effects of cortisone; enhance liver function; and protect against radiation damage.[3,4]

One of the best studies demonstrating positive benefits involved the evaluation of the effect of Panax ginseng on nurses who had switched from day to night duty.[5] The nurses rated themselves for competence, mood, and general well-being, and were given a test for mental and physical performance along with blood cell counts and blood chemistry

evaluations. The nurses who were administered Panax ginseng demonstrated better mental and physical performance and higher energy levels when compared with those receiving placebos. This study also highlights the fact that both men and women can benefit from Panax ginseng, contradicting the popular misconception that Panax ginseng is for "men only."

Panax Ginseng and Immune Function

Panax ginseng has been shown to enhance many immune functions including natural killer cell activity, interferon production, and macrophage activity. In one clinical study, three groups of 20 healthy volunteers were treated with capsules containing either 100 milligrams of aqueous extract of Panax ginseng (gp.A), 100 milligrams of lactose (gp.B), or 100 milligrams of a standardized extract (4% ginsenoside content) of Panax ginseng (gp.C).[6] All the volunteers took one capsule every 12 hours for eight weeks. Blood samples were withdrawn before beginning the treatment and again at weeks four and eight. A number of immune parameters were examined: the ability of neutrophils to move toward chemical toxins, the ability of neutrophils to engulf and destroy particulate matter (phagocytosis index, PHI, total lymphocytes (T3), T-helper (T4) subset, suppressor cells (T8) subset, and natural killer (NK) cells. Improvements noted by the subjects included improved neutrophil function, and increased PHI, total lymphocytes, T-helper cells, T4/T8 subsets, and NK cell activity. Although most of these effects were evident at four weeks, consistently greater effects were noted after eight weeks, implying that the beneficial effects of Panax ginseng on the immune system are cumulative.

Panax ginseng has an important effect on the so-called reticuloendothelial system. This part of the immune system is primarily composed of the macrophages of the liver (Kupffer cells), the spleen, and lymph nodes, and plays a

major role in filtering the blood ar
matter including viruses, bacteria, (
and immune complexes. Another fu
is to send strong messages to lympl
destroy viruses, other microorgani
Panax ginseng administered to mice
ed increase in the number and activi

Choosing a Panax Ginseng Prod

Many types and grades of ginseng a
available, depending on the source, a
used, and the methods of preparation
roots are the most valued, while sr
plants are considered the lowest grac
purposes, the majority of ginseng in
place is derived from the lowest gi
excipients, blended with adult ts,
senosides.

High-quality ginseng extracts a
The best preparations are those from
between four and six years of age or
standardized for ginsenoside conter
optimum pharmacological effect. The
ized not only for total ginsenoside co
ratio of ginsenoside $R_{b1}:R_{g1}$ (2:1 is cor

Dosage and Safety of Panax Gins

The use of standardized Panax ginse
ommended to ensure sufficient ginser
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should contain a ginsenoside conte
ligrams. For example, for a standa

major role in filtering the blood and removing particulate matter including viruses, bacteria, dead cells, cancer cells, and immune complexes. Another function of macrophages is to send strong messages to lymphocytes to seek out and destroy viruses, other microorganisms, and cancer cells. Panax ginseng administered to mice has resulted in a marked increase in the number and activities of macrophages.[3]

Choosing a Panax Ginseng Product

Many types and grades of ginseng and ginseng extracts are available, depending on the source, age, and parts of the root used, and the methods of preparation. Old, wild, well-formed roots are the most valued, while small roots of cultivated plants are considered the lowest grade. For largely economic purposes, the majority of ginseng in the American marketplace is derived from the lowest grade root, diluted with excipients, blended with adulterants, or totally devoid of ginsenosides.

High-quality ginseng extracts are available, however. The best preparations are those from the main root of plants between four and six years of age or extracts that have been standardized for ginsenoside content and ratio to ensure optimum pharmacological effect. The extracts are standardized not only for total ginsenoside content, but also for the ratio of ginsenoside R_{b1}:R_{g1} (2:1 is considered ideal).

Dosage and Safety of Panax Ginseng

The use of standardized Panax ginseng preparations is recommended to ensure sufficient ginsenoside content, consistent benefits, and reduced risk of side effects. The typical dose (taken one to three times daily) for general tonic effects should contain a ginsenoside content of at least 15 milligrams. For example, for a standardized Panax ginseng

extract containing a 7% saponin content calculated as ginsenoside R_{g1}, the standard dose would be 200 milligrams.

As each individual's response to ginseng is unique, it is best to begin at lower doses and increase gradually. Again, the Russian approach for long-term administration is to use ginseng cyclically for a period of 15 to 20 days followed by a two-week interval without any ginseng. Care must be taken to observe possible ginseng toxicity.

Studies performed on standardized extracts of Panax ginseng have demonstrated the absence of side effects and toxicity.[3,4] Nonetheless, even when using standardized ginseng extracts, too much ginseng may cause a number of side effects including anxiety, irritability, nervousness, insomnia, hypertension, breast pain, and menstrual changes. If any of these side effects appear, the dosage should be reduced or the product discontinued.

St. John's Wort

St. John's wort (*Hypericum perforatum*) is a shrubby perennial plant native to many parts of the world including Europe and the United States. St. John's wort can be very useful in treating chronic fatigue—primarily by acting to improve the mood and relieve depression.

Recently, a tremendous amount of excitement was generated about St. John's wort after researchers demonstrated in a preliminary study that the St. John's wort components, hypericin and pseudohypericin, inhibit a variety of retroviruses including the retrovirus associated with AIDS (the human immuno-deficiency virus or HIV).[7] Although more research is needed to determine if St. John's wort is an appropriate recommendation in AIDS patients (based on its antiviral activity), it has been reported to improve the mood in AIDS patients. In one study, 65 out of 112 patients taking St. John's wort reported improved outlook, more energy, less

fatigue, and feeling better.[8] Similar
in patients with CFS.

Researchers have discovered
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the mood. These effects have bee
studies. A standardized extract of
hypericin) led to significant impro
anxiety, depression, and feelings of
its effectiveness in relieving depres
be greater than that produced by
depression, including amitriptyline
(Trofinil). While these drugs are as
side effects (most often drowsiness,
and impaired urination), St. John's w
ated with any significant side effects.
mood, the extract has been shown
quality; it was effective in relie
somnia.

The dosage of St. John's wort ext
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times daily. Standardized extracts
forms.

Shiitake Mushrooms

Many Americans consider mushroo
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Shiitake mushroom (*Lentinus edod*
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to the development of several mu
approved as anticancer drugs by the

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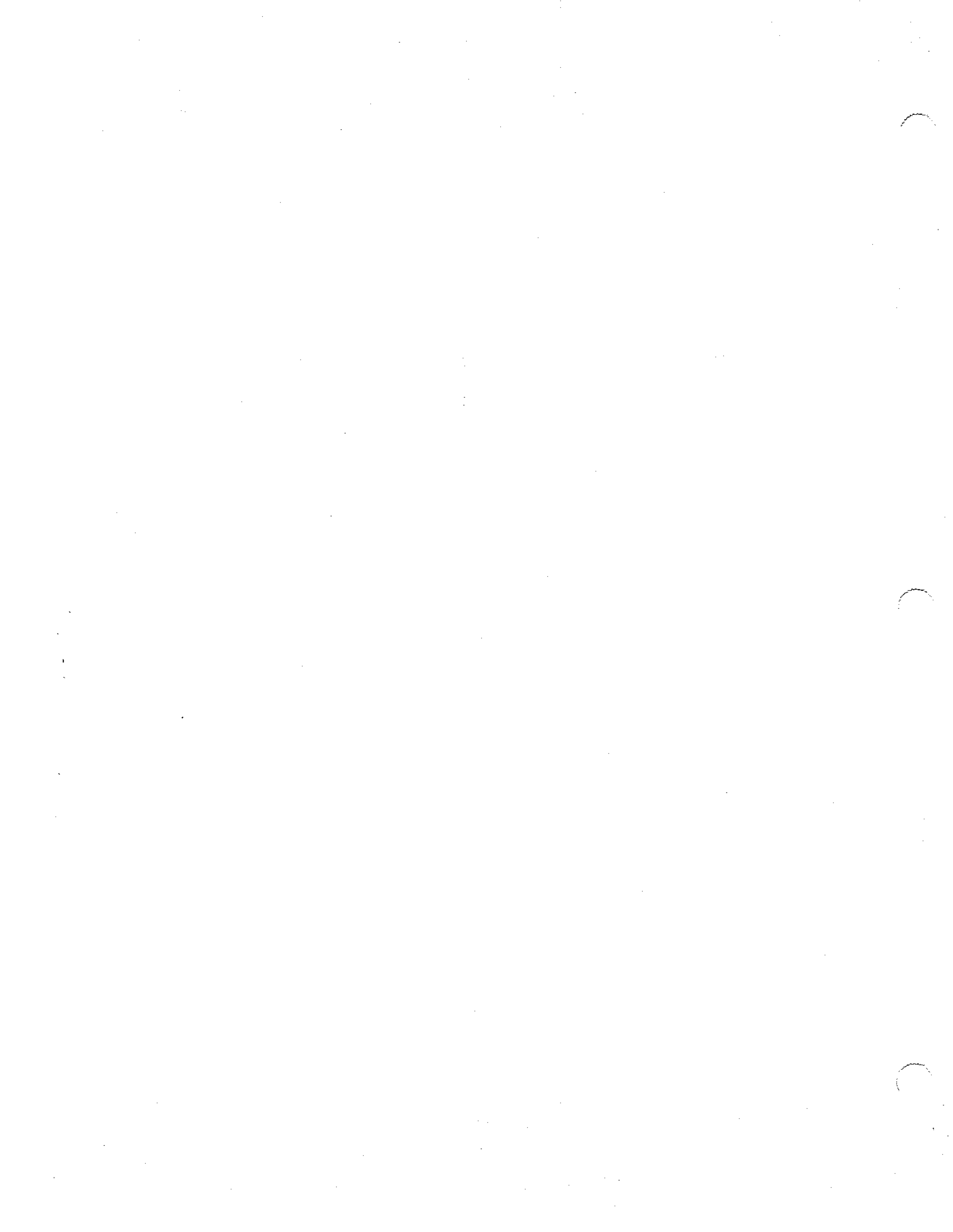
Researchers have discovered that components in St. John's wort alter brain chemistry in a way which improves the mood. These effects have been confirmed in clinical studies. A standardized extract of Stl John's wort (0.125% hypericin) led to significant improvement in symptoms of anxiety, depression, and feelings of worthlessness.[9] In fact, its effectiveness in relieving depression has been shown to be greater than that produced by standard drugs used in depression, including amitriptyline (Elavil) and imiprimine (Trofinil). While these drugs are associated with significant side effects (most often drowsiness, dry mouth, constipation, and impaired urination), St. John's wort extract is not associated with any significant side effects. In addition to improving mood, the extract has been shown to greatly improve sleep quality; it was effective in relieving both insomnia and hypersomnia.

The dosage of St. John's wort extract used in most studies has been 300 milligrams (0.125% hypericin content) three times daily. Standardized extracts are preferable to other forms.

Shiitake Mushrooms

Many Americans consider mushrooms as simply non-nutritious garnish for salads or steaks, but in Asia mushrooms have been revered as potent medicines for thousands of years. During the past twenty years, mushrooms like the Shiitake mushroom (*Lentinus edodes*), have been extensively studied in Japan for their anticancer and immune-enhancing effects, largely as a result of anecdotal reports of their medicinal effects. This scientific investigation has led to the development of several mushroom extracts being approved as anticancer drugs by the Japanese government.



The Spirits Say They Aren't Crazy: Trance and Healing in Cultural Context

LISA MERTZ

Experiences of trance are cultural experiences. How altered states of consciousness (ASCs) are differentiated from "unaltered" states, and how such states are achieved—whether by ingestion of psychotropic plants, by trance dancing, spirit songs, or some other way—varies across cultures (see Bourguignon 1968; Crapanzano and Garrison 1977; Peters and Price-Williams 1983; Shaara and Strathern 1992; Winkelman 1986).

Culturally specific and socially sanctioned practices for altering consciousness are found throughout the world. In Erika Bourguignon's (1968, 1973) germinal distribution study, she reported that, from a sample of 488 societies, 437 (90 percent) have at least one institutionalized, culturally patterned form of altering states of consciousness. Spirit possession is associated with ASCs in 251 (52 percent) of these societies. Supernatural explanations for ASCs, whether possession or nonpossession, are found in both tribal cultures and in the subcultures of complex industrial societies.

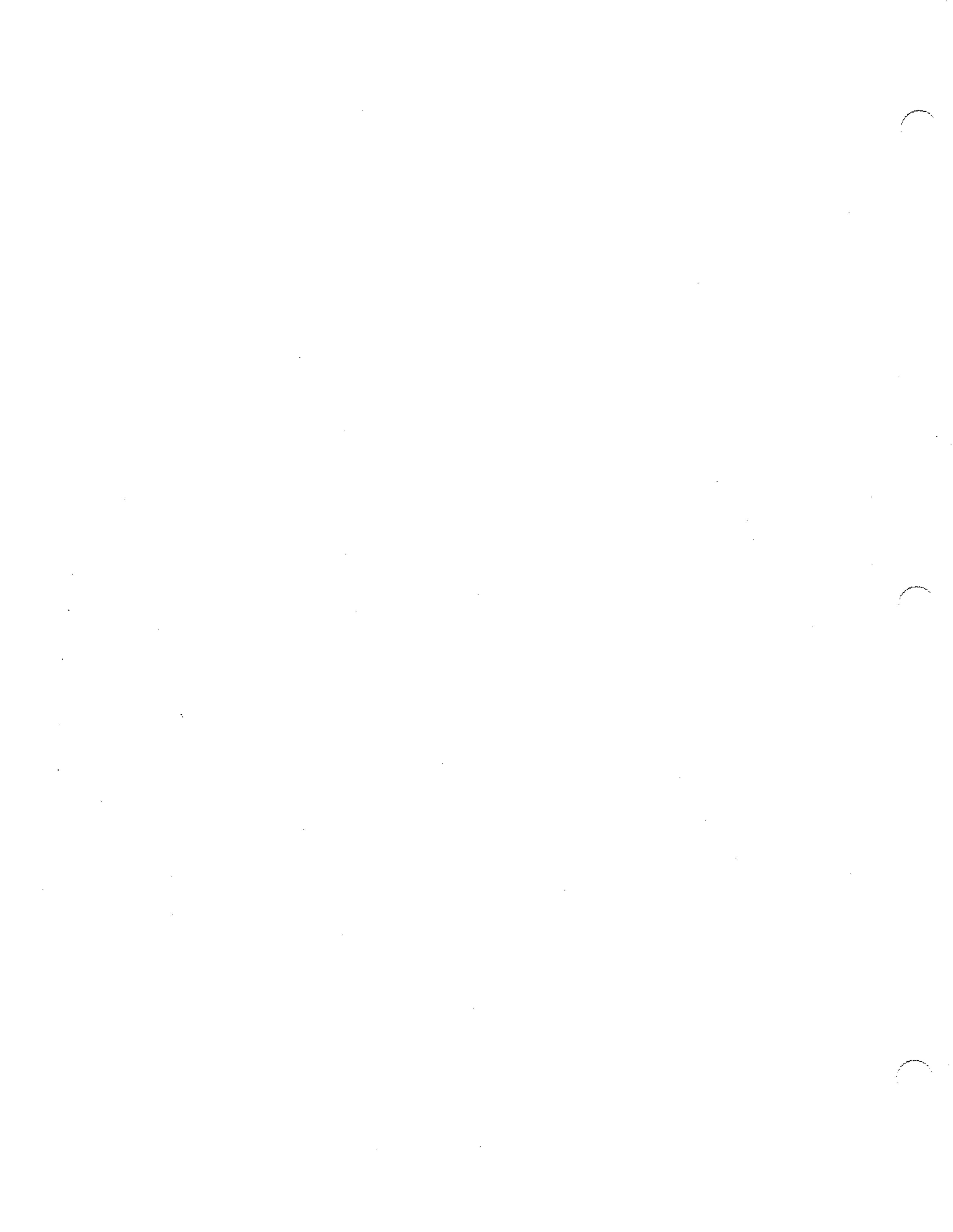
In their review of the literature, Shaara and Strathern (1992, 145) found that there is little agreement among anthropologists on the definitional issues surrounding cross-cultural ASCs and trance experiences because the primary concerns of such studies often focus on the relationships between ritual symbolism and social structure or on the medical efficacy of healing practices.

To begin to understand the scope of ASC phenomena, many anthropologists agree that the European-American mind, accustomed as we are to psychobiological interpretations, needs to resist reducing supernatural or spiritual experiences to the psychological realm (Crapanzano and Garrison 1977). Vivian Garrison, in her study of a New England Spiritist (Crapanzano and Garrison 1977), asserts that "the terms in Spiritism as in psychodynamic theory take their meaning from the total complex of concepts that make up one or the other of these two systems of thought. No terms from either system can, therefore, be directly equated with terms from the other" (32).

Vincent Crapanzano (Crapanzano and Garrison 1977, 7) also advocates avoiding the imposition of a foreign interpretation upon observed phenomena with his definition of spirit possession as "any altered state of consciousness *indigenously interpreted* in terms of the influence of an alien spirit" (emphasis mine). Many psychological interpretations that remove such experiences from cultural context distort and consequently often impoverish them by rendering them less dramatic and more clinical than experience suggests (Boddy 1988). Janice Boddy (1988) discusses trance experiences as curative not in themselves but within the overall context of rites that are culturally therapeutic in a holistic sense. Kleinman (1980, 364) calls for attention to experience as "a major aspect of healing."

Dialogics, a perspective whose origins lie with the Russian literary scholar Mikhail Bakhtin, is a useful frame for research that takes experience into consideration. Dialogics, in anthropology, studies interactions within a culture while taking into consideration the interactions between the anthropologist's culture and that of the consultants (see Turner 1986, 17). Researchers are representative of their respective cultures, and their interpretations of what they observe are, of course, filtered through that lens. For Tedlock (1983, 323), "anthropological dialogue creates a world, or understanding of the *difference between* two worlds, that exists between persons who are indeterminably far apart, in all sorts of different ways when they started out on their conversation."

Edith Turner (1986) describes an experience of spirit affliction and healing among the African Ndembu



of Zambia—the tooth of a dead hunter has invaded the patient's body. She quotes Singleton, an Ndembu healer.

> At first I didn't know it was true, but one day the *ihamba* tooth came to me. I was very surprised. If *ihamba* comes into you, you can't even eat your daily mush. It just gives you pains. You will think it's just pains, but the way it hurts you is a sign. You will hear something biting. If it comes through the arm, leg, ear, or eye, you will see it moving through the veins of your body. I am telling the truth: you can't even eat your daily mush.

Turner goes on to say,

> The highly sense-oriented nature of this experience—pains, hearing the tooth, seeing it, the parts of the body, daily mush, and the hard relentless tooth itself—emphasize physicality. The cure for this is equally existential—to be washed and dosed with a psychedelic infusion of leaves for many hours, with cupping horns sucking out one's blood, and the drums and harmonized song-shouts of one's close kin appealing at length to the spirits. (P. 15)

Turner highlights the physicality of *ihamba*, that is, Singleton's experience of it. The cure is affirming. The patient's community is wholly involved. Edith Turner is well acquainted by now with the Ndembu culture: she allows herself the role of participant in the rite as a member of the community.

In his paper on symbolic healing, Moerman (1979), on the other hand—studying the medical efficacy of healing practices—contrasts the conventional biomedical model with that of the traditional Navajo healer. He emphasizes his confusion about the decidedly unmedical way in which the healer administers medicines.

> One notes with approval the intelligent study, the deliberate consideration, with which the Navajo healer gathers thirty or forty herbal medicines, many of them "rational," "effective" drugs. Despair follows when the infusion is fed to and washed over the patient *and* a half-dozen singers and friends who are participating in the healing event! What kind of effectiveness is this? (P. 60)

Each culture has its own way of framing illness and healing, its way of delineating who must be included in the healing process. The Ndembu, the Kashaya Pomo, and the Malaysian Temiars (whom I will discuss further on) involve their communities. Family members, friends, even visiting anthropologists are there to support the ceremony. "In the Ihamba ritual," Edith Turner says, "in which the afflicting tooth is taken out at the end, the public's involvement is not one of assistance but is central to the cure; the climax belongs to all" (Turner 1986, 22).

A Kashaya Pomo Example of Community Healing

Between 1987 and 1991, I did fieldwork in Northern California with the Kashaya Pomo tribe (see Mertz 1991). Many of the Kashaya people live on a forty-acre reservation a hundred miles north of San Francisco, on a ridgetop about four miles inland from the Pacific. My consultant, Lorin Smith, is a tribal healer and spiritual leader, who is called a *yomta* in Kashaya.

One night in the winter of 1993, Lorin Smith's cousin, Robert Smith, had a heart attack in the parking lot of the Marin Civic Center. He had parked his car and was walking toward the building to join his wife to see a Native American dance program. Paramedics rushed him, close to death, to the closest hospital, where he was put in a room in the intensive care unit where visitors are restricted to only two or three at a time for ten minutes or so.

One night there was a nurse on duty, a man, who knew some Kashaya people and respected their ways. That night, he allowed thirty of Robert Smith's family members to come into his room in the ICU. Three or four Indian doctors and some *weya*[1] dancers and singers were in the room. At the head of the bed hung dream handkerchiefs that had been embroidered with French knots in colorful designs that convey healing power. The *weya* singers softly sang spirit songs for doctoring, while the family members and friends who encircled the room gracefully waved their arms from side to side as they quietly swayed in the *weya* dance to support the work of the doctors. At one moment, the patient nodded, his head swollen from the effects of his heart attack. His eyelids flickered as he acknowledged the presence of his loved ones. The ceremony continued as the group joined together in the lobby of the ICU to share the sandwiches and sodas they had brought in a big red and white cooler.

The next night, the nurse on duty upheld the rules of the intensive care unit with an attitude of condescension mixed with a degree of amusement at the idea of traditional healing in a modern ICU. Just as the image of a traditional tribal trance dancing ceremony among the chrome and glass and lead crystal displays of a contemporary intensive care unit seems to shake up the European-American mind, so could a modern psychobiological interpretation of spiritual healing rattle the tribal soul.

A Healer's Description of His Own Trance State

Lorin Smith does his healing work in what I would call a trance state. The way I see it, he uses songs and prayers to turn his attention away from his physical surroundings in order to experience the spirits who guide him and speak or sing through him. He had never really tried to figure it out before, but in response to my asking him about it, he described the process this way (Mertz 1991):

> My hands shake.
> The *weya* enters through head. That's the way I got my *weya* first time.
>
> Everything changes.
> You're more alert to anything that's around you.
> There's no back part of your body when that happens. Kinda like you got eyes all the way around.
> This *weya* will tell you, behind you, what's there
> —what danger lies back there, you know.
> You're never blind to anything. You see what's around you all the time.
> It's kind of like you got eyes all the way around you.
>
> Hearing gets even better
> You hear voices that tell you what to to do, and hear songs.
> When you look at your patient—it's like the voices are tellin' you

things, and your eyes become like x-ray.

It's really something!
You don't feel your body. You just feel like you're all brain.
Your whole body feels like it turns into a brain—a spirit brain.
(P. 138)

In this process, Mr. Smith's senses become enhanced. He experiences x-ray vision, and he has said that he can see the blood circulating through the patient's body. He uses his *weya*—or energy medicine—to disengage blockages in the blood's flow and to remove malevolent spiritual influences from the patient's body. He describes doctoring a victim of spiritual "poisoning" (Smith and Mertz 1990):

I worked with an Indian man from Alaska one time.
This man was sick for fourteen years.
He had a relative in Petaluma he came to visit, and some people came after me, and I went down to see him.

He was tellin' me a story that he'd been to a lot of doctors, and they said that he was goin' crazy.
There was nothin' they could do for him.

He had his own business in Alaska so so he could afford any kind of doctor.
But when I got down there, when he seen me, he started to cry.
He said soon as he seen me, he knew I could help him.

His problem wasn't anything that was like cancer
—it was things of years ago—a lot of people don't understand it.
It's cursin' things, or black magic placed in his body.

He couldn't do anything.
He'd go to town to do his shoppin' and when he got there, he didn't know why he wanted to come there in the first place
—that's how bad he was.
Nothing made sense to him.
Like, eating and sleeping—all that didn't make sense to him any more.
He asked, why do I have to do all those things?
He didn't know why he had to sleep or why he had to eat, he was that bad.

Anyway he went to a lot of doctors and all they told him was that he was goin' crazy,
but he knew he wasn't goin' crazy.

He didn't know who put the curse on him, but he knew there was something wrong because the white doctors couldn't figure out what was wrong with him.
. . . he lived that long and suffered that long before he came to see me.
It probably took me two visits to make him well,
I used bay leaves on him.
Why this black magic was placed inside his body was because of jealousy
—I mean, he was a rich man.
And this man who was working for him was so jealous that he had everything and the one workin' for him didn't.
When I gave him the description of the man I seen that did this to him, he said, "I do have a man that works for me exactly like you're describin'."
But he said this man was so nice to him all the time
—he never knew this man would ever use a curse on him.
(P. 12)

Mr. Smith lives in a world of shifting boundaries where malevolence can permeate the self and a powerful herb can extract such a debilitating intrusion. This story exemplifies a kind of *sociocentric* healing.

The Sociocentric Self

While the European-American view of the self is generally an individuated or egocentric self, the self as it is conceived and experienced in many tribal cultures is a sociocentric self (Scheper-Hughes and Lock 1987; Roseman 1990). Sociocentric is a useful interpretation of how the people experience themselves, how the self is constructed in a culture of this kind. The sociocentric is interactive, extending beyond the boundaries of the individual. In a tribal society, the boundaries of the self are constantly under negotiation because the sociocentric self is experienced as permeable, subject to the intrusion of malevolent intentions, as in the case of the "black magic" that Mr. Smith removed from his Alaskan patient—a man whose malady was simply interpreted by medical practitioners as a mental illness or "crazy." The permeability of the sociocentric self extends even to the instrusion of malevolent material objects.

In the old days, a Kashaya healer sucked such a poisonous object out of her patient's skin. Essie Parrish (d. 1979) was a "sucking doctor."[2] A woman I interviewed remembered a time when she was a child that she was allowed to see Mrs. Parrish doctoring one of her relatives in the Roundhouse, where children usually were not allowed to go. Mrs. Parrish "worked herself up," my consultant said, with prayers, spirit songs, and trance dancing. She would tell her singers which songs to use, and they would play their clapper rattles while they sang together with her and she danced with her dance sticks and the support of her dancers. From this patient, my consultant told me, Mrs. Parrish removed a thing that looked like a miniature skeleton made of skin. It pulsated as if it had a heartbeat as it sat in the palm of her hand; she held it out for everyone to see before she did away with it.

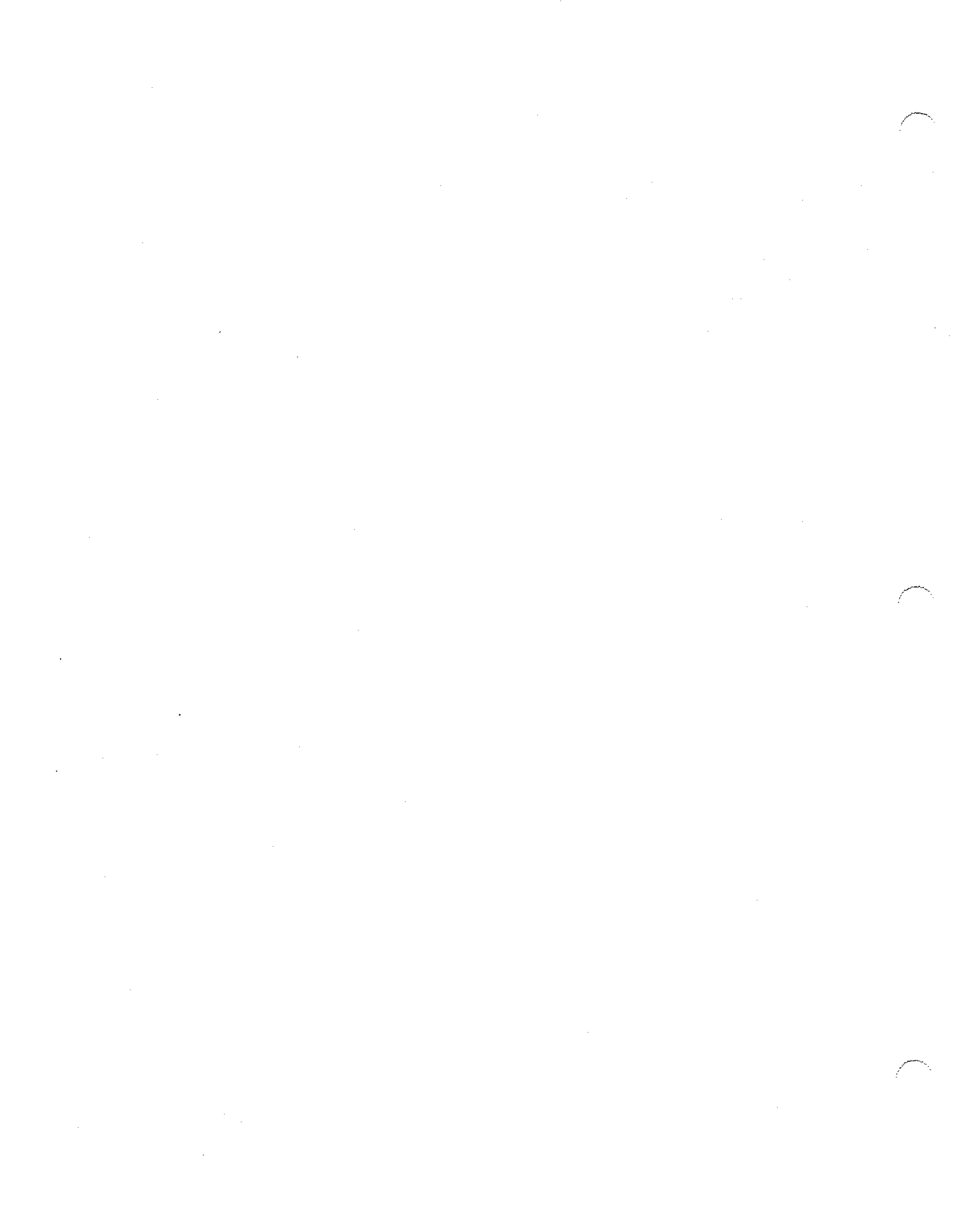
Mrs. Parrish (Oswalt 1964) said,

When I sit there alongside a person, I call on Our Father. That's my power—the one I call Our Father. Then it descends, my power comes down into me. And when that sick man is lying there, I usually see it [the power]. These things seem unbelievable, but I, myself, I know, because it is in me. I know what I see. *My* power is like that. You may doubt it if you don't want to believe; you don't have to believe but it is my work.

Way inside of the sick person lying there, there is something. It is just like seeing through something—if you put a tissue over something, you could see through it. That is just the way I see it inside. I see what happens there and can feel it with my hand—my middle finger is the one with the power. . . .

There is a doctoring power in my throat. Here, somewhere in the throat, the power sits. When the doctoring power first came down into me, I already had some kind of growth there for about four years. It had affected me like diphtheria. I had almost died from its constricting [the throat] from the beginning, but I knew all along that it was becoming that [power]. . . .

The disease that I suck out works like a magnet inside too [as when using hand



power]. On the place here where I said the power entered my throat, the disease acts as fast as electricity—it acts in a flash, like a magnet. . . . It's like being in what the white people call a "trance." While the disease is coming to me, I'm in a trance. It always speaks to me saying, "This is the way it is. It is such and such a kind of disease. This is why."

(Pp. 227-229)

Allen James (1974) gives this description of Kashaya doctoring, stressing the importance of the individual's place in the community.

> Whenever any serious illness invaded the family, an Indian doctor was notified. At his arrival he doesn't ask where it started, or any questions concerning the patient's background, because he will find out all about it in a few minutes. He sits for a while and finally starts to sing the opening song of his doctoring procedure. After this is completed, he has undergone a change. He is now able to look clear through the sick person's body as if it was transparent. He is able to see what part the sickness has lodged itself, whether it's minor or major. . . .
>
> If your attitude is in any doubt, he will caution you to have faith in his songs. He tells you why you have become ill. Sometimes it is due to your failure in keeping the laws of health. Perhaps due to your rebellion against Mother Nature, or your misconduct in the sight of your fellow men. Or someone had become envious of you for unknown reasons. There is always someone in a tribe who possesses some very powerful songs, who could easily exercise secret combination to make you sick. So the Indian doctor through his spiritual investigation finds out the full details concerning an ailment. (P. 138)

The spirits guide the doctor in working with both the patient and the patient's immediate family within the community. The experience of the relationship with the spirits is primary. As Marina Roseman (1990) points out in her work on the Malaysian Temiars, the sociocentric self is also a *cosmologically holistic* self.

> . . . to treat illness, the community participates in singing and trance-dancing ceremonies, working together to bring spirits through mediums into the human realm. In order to diagnose and heal, then, Temiars create not only a sociocentric whole through community participation, but indeed a cosmological whole with spirits in attendance as well. (P. 231)

Trance Dancing Ceremonies

Roseman (1990, 231) says that the Temiar trance dancers are celebrating their intimacy with the spirits. What characterizes this kind of trance is the detachment from the materiality of the self. In a culture with sociocentric selves in which the self is permeable, trance dancing allows the dancers to lose the boundaries between the self and others. Finally, what is healing is the renewed establishment of the self within its place in the community, the seasonal cycles, and the cosmos.

A Dispirited Patient

Following is a story about a young man, who was brought by his father to Lorin Smith for healing, that illustrates a conflict that is specific to sociocentric cultures in transition. The nuclear family of the dominant culture is replacing the extended family; there is minimal support for the single parent. In Mr. Smith's assessment, this patient was dispirited—spirit bodies had split off and wandered away from his material body. The patient was searching for his spirit. As in the case of Mr. Smith's patient from Alaska, a mental illness model intrudes on the spiritual experience—"you're crazy!" It is in the trance of prayers and songs with the help of the spirit ancestor who guides him that Mr. Smith can see the young man's wandering bodies, and in the seemingly nonsensical language that validates his experience—"making it real"—that his bodies are brought together. Mr. Smith first describes the process whereby he diagnosed the young man's illness. Then he describes his treatment process (Mertz 1991).

I have my own way of going out there and searching
. . . to go out and search for what's missing from that person.
I had to do that with him to find what was wrong with him.
He was searching for his mother.
See, when you're young and when your parent dies, you think you're left behind,
that they had no love for you,
they had left you. 'Cause you don't understand about dying.
So that's where he was.
It's kind of like his mother, she'd leave that child and wouldn't come back
—that's the way it feels with somebody that don't understand about death
—why she had to go? Why she left? Why she had to die?
Far as he knew, she left
—to him, she wasn't buried or anything, she just left him, and he wondered why that happened and what he did wrong.

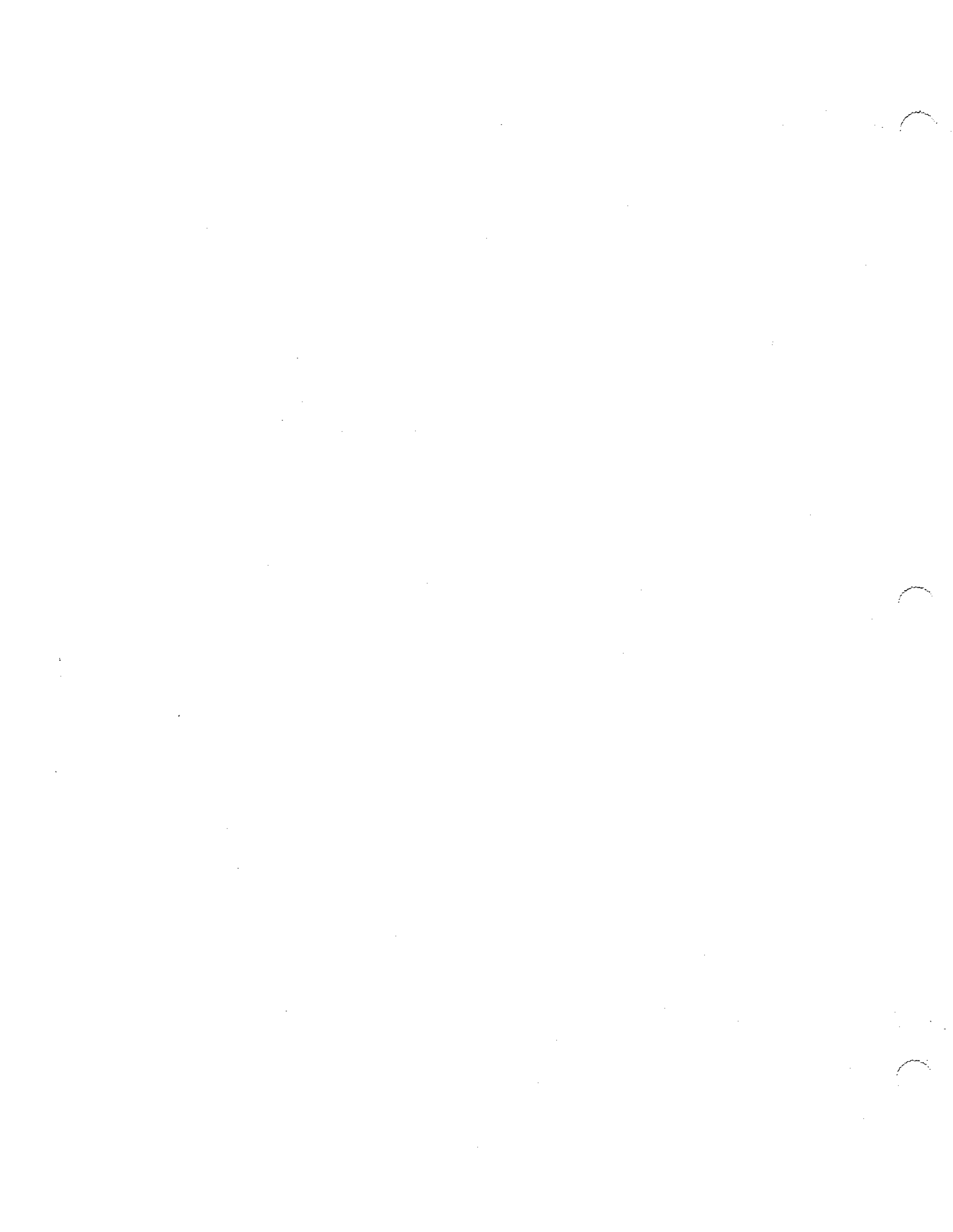
The mother had left him at a certain age where he needed her yet, you know,
and the thing is that the father wasn't like the mother—that's why he was lonely
—the father didn't show that much love to him.

Night time, he walked on the road, on Highway 1.
He always walked there.
His father said a lot of times, he'd walk off when everybody go to sleep,
then the father would check and find him missing,
and then the father used to go out in the car and find him and take him back.
But after a while the father got to where he couldn't do that, you know,
'cause the boy kept on doing it, and far as he knew, his boy was going crazy.

The father couldn't understand what his role was or what as a parent, he should've done, showing love to that son of his,
so the boy didn't have anything.
The mother was gone.

I had to talk to him, and tell him what I see.
He couldn't figure out why we have to eat or why there were certain times that he had to eat
—to him, there was no time.
The only thing there was, was the mother that was missing.
Where did she go? Why did she leave? All that was in his mind.
So he walked the road at night, and his spirit walked the road all the time—he never rested.
He didn't know how to rest any more.

I just call it "spirit," but there's a lot of names for it in our way.
It's kind of like, see, if you put it in words, the same person's kind of like in three personages, but they're supposed to be all together.
But, for him, they're all like they're following each other.
Like three different parts,
and they all walk in the road because he's not all together.
So that's what I have to put together.



In Pomo it would be like, *bodies.*
With him, it's three parts
—how many parts depends on how many years he's been that way, too, but far as I could see, there was three,
and they were all walking.
The main part of him was up front, another one was following,
hoping somehow to get himself together so he could be a whole person again.

They have to follow him, follow that person.
We could talk to them too—
we have to talk to all of them to see what made him be that way, what happened.
And it's hard—it hurts.
When I was talking to him, I used to hurt.

But it was very interesting.
But nobody ever did tape it, and we had long conversations.
Sometime he'd come to the house and we'd just talk.
He was really interested because he knew I was getting close to something.
Nobody ever healed him except me, I guess.
He was already adult, he was probably about twenty-five.

I guess years and years of suffering and loneliness finally tore the rest of him away from the main part of the body.
He was the most interesting person I ever worked with 'cause he was just a struggle and such a new experience for me.
My [spirit] teacher was always so close to me all the time
—just around me so close.

I had to keep on talking to that boy.
He kept telling me things that he never told anybody else, even his dad.
He'd tell me things, where he went, why he did things,
and I say, you can't hold anything back,
and then he start getting angry
because he was angry at his one parent that was left.
I said, you can get angry but, you know, just talk in a normal tone of voice,
and don't use cuss words.
When he spoke, he was angry at what his father didn't do
—what he wanted his father to do for him.

The father had blamed him for his mother's death,
and he knew that his father was accusing him of the mother's death.
But far as I know, she showed a lot of love to all of them when she was alive.
But the father favored the oldest son over all of them.
And that young boy knew it.
He was the second youngest.
He just couldn't communicate with the father because the father wouldn't listen and spoke out in anger, and said the son was a dumb man because he was crazy
—"you're crazy."
The father wanted him even locked up
—that's pretty heavy when you want your own son to get locked up.

Well, I just told him that I was there to help him.
I said no matter how hard or how long it's gonna take me, I said, I'll be here,
and if you ever need to see me, you can come here.
He walked from Sebastopol one time to Santa Rosa,
and he came there when I was still at work during the day
so when I came he was asleep laying on the couch.
He woke up and "hi," you know, he say, he asked me how I was doing.
I said I'm doin ok.
We fed him and we talked afterwards.
My family left us alone.
We talked in the living room and then he got tired again
and I said, "Well you're welcome to stay overnight if you want to,
but if you want to go home then I'll drive you home."
So he chose to go home because he said he felt better,
and staying away from me was scary for him for awhile,
but now he got stronger, and he felt he could go home and feel safe.

He came together by really talking about what *he* feel,
showing the other parts that drifted off that he *did* want to live.
Each time he talked, I could see it getting closer and closer together.
By studying him, I could tell he was coming closer together even more because he was starting to make more sense.
Before, he didn't care if he was going to die.
And he started to eat and used telephone
—*that* he never did do before.
And if he went to town, he'd buy him some clothes and stuff that he didn't feel was necessary before
—he didn't care how he dressed.

He didn't care if he needed to bathe or eat or anything.
That didn't make sense to him.
Closing his eyes didn't make sense.
He said, "Why do you have to close your eyes?
Why do I have to close my eyes when I go to sleep?"
I said, "You don't have to close your eyes to go to sleep."
He said, "I don't?"
I said, "No, you can keep your eyes open if you want to
—if you're comfortable that way, do it that way."

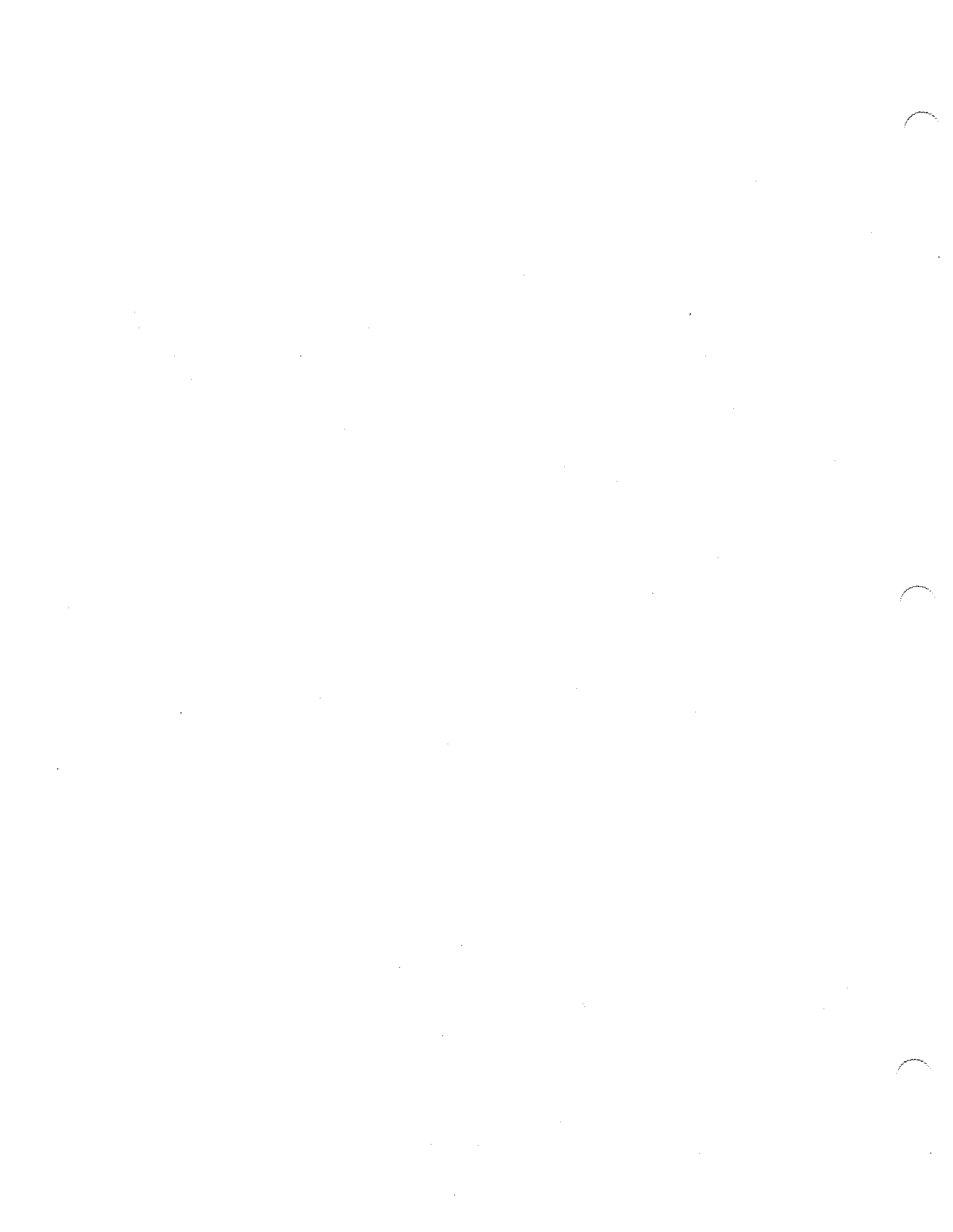
"Ok," he said.
You know, things like that sound silly to other people, I made it real.
I had to make it real
—what was going on in other people's thinking was strange for him to do.
And that's what really brought him together you know:
somebody wasn't calling him crazy for what he was saying.

Others said, "Why are you doing that? It's stupid!
A grown man like you acting that way."
You know, like, aren't you ashamed of yourself?
Lecturing all the time.
Lecture's no way to heal anybody
—you're just pushing that person farther away from you
and losing the trust the person should have in you.

It took me awhile to cure him but it was very interesting,
very delicate—you got to know what you're doing.
If you're not a real loving person, you can damage that person too.
If you're scared, you don't do it
—scared means you're not sure you can do it, and that's the thing
—you don't do it when you know you got that fear in you.
'Cause fear can stop you from a lot of messages that can come to you.
It's kind of like somebody's here telling you what to do and if you're afraid,
you're not going to hear what they're saying to you.
A very interesting thing.

I kind of *knew* that some day he was going to come to me, but I didn't know when.
But in my mind, I wasn't too sure at the beginning, so he never did come.
But when I got myself ready, then he came.
They just came when I got home from work one time
—here, the door bell rang, and there they were.
I knew some day they were going to come, but I was thinking about being scared because I didn't know what to do.
So that's where I was. (Pp. 29–32)

The way Mr. Smith interprets this young man's experience is specific to



a sociocentric (i.e., cosmologically holistic) culture. A psychological interpretation would remove the experience from a cultural context that includes the possibilities of wandering souls and messages from spirits. To interpret this experience from within a mental illness model would do both patient and healer a disservice. A psychological interpretation would simplistically define this event in a narrow context. A perspective that considers cultural context, allowing a more holistic view of individuals' experiences and their own interpretations requires dialogue. The researcher has to move over and let tribal voices be heard.

NOTES

1. That is, healing "energy," or spiritual power.
2. The film "Sucking Doctor" shows Mrs. Parrish doing this kind of healing work. University of California Extension Media Center, 2176 Shattuck Avenue, Berkeley, Calif. 94704.

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Lisa Mertz holds a Ph.D. (1991) in anthropology from the Union Institute, and an M.A. in performance studies from Goddard College. She has been researching and teaching trance states, ritual, and spiritual healing practices for over fifteen years. She currently lives in Northern California,, where she has conducted fieldwork with the Kashaya Pomo and is studying alternative medicine in the treatment of cancer and AIDS.

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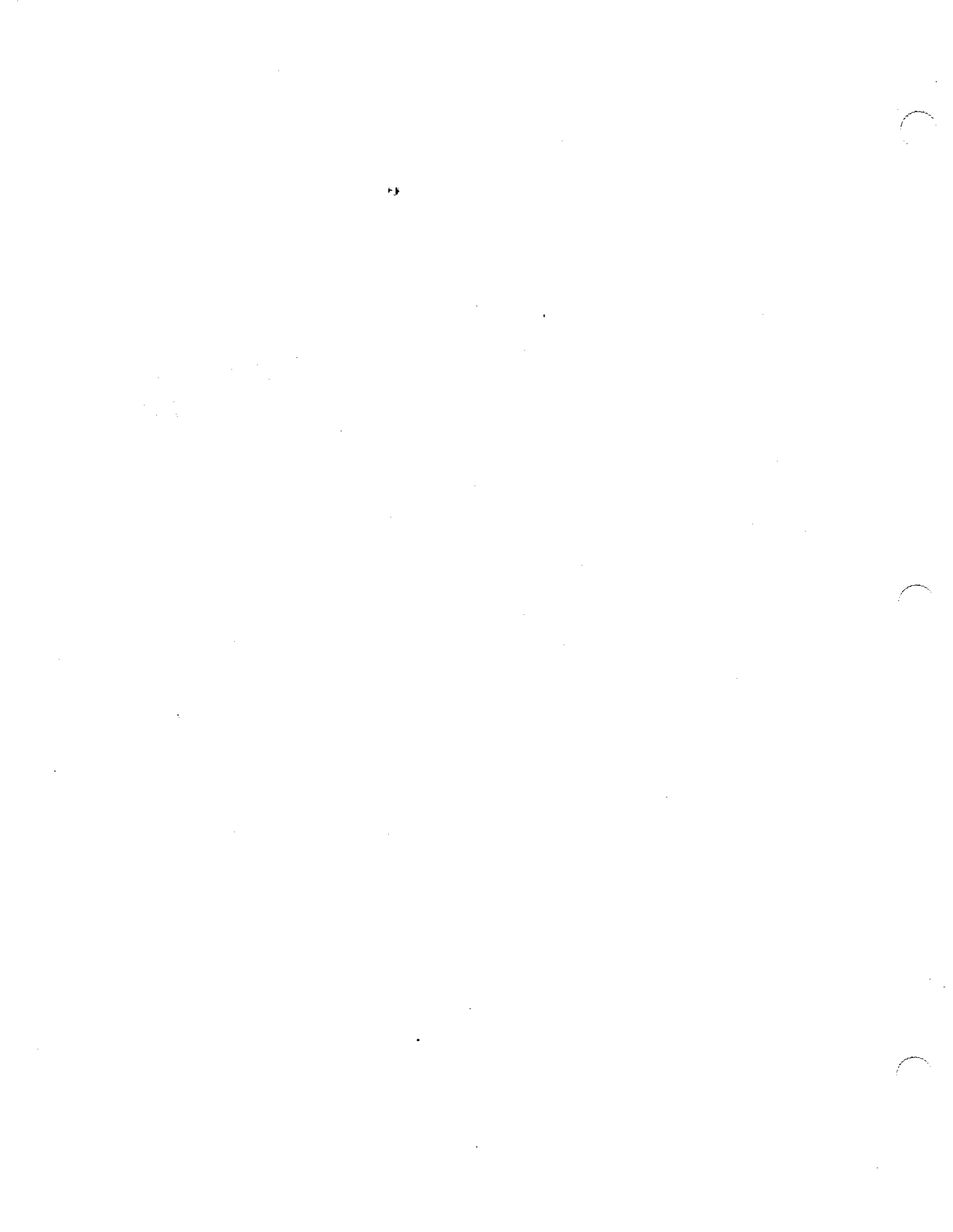

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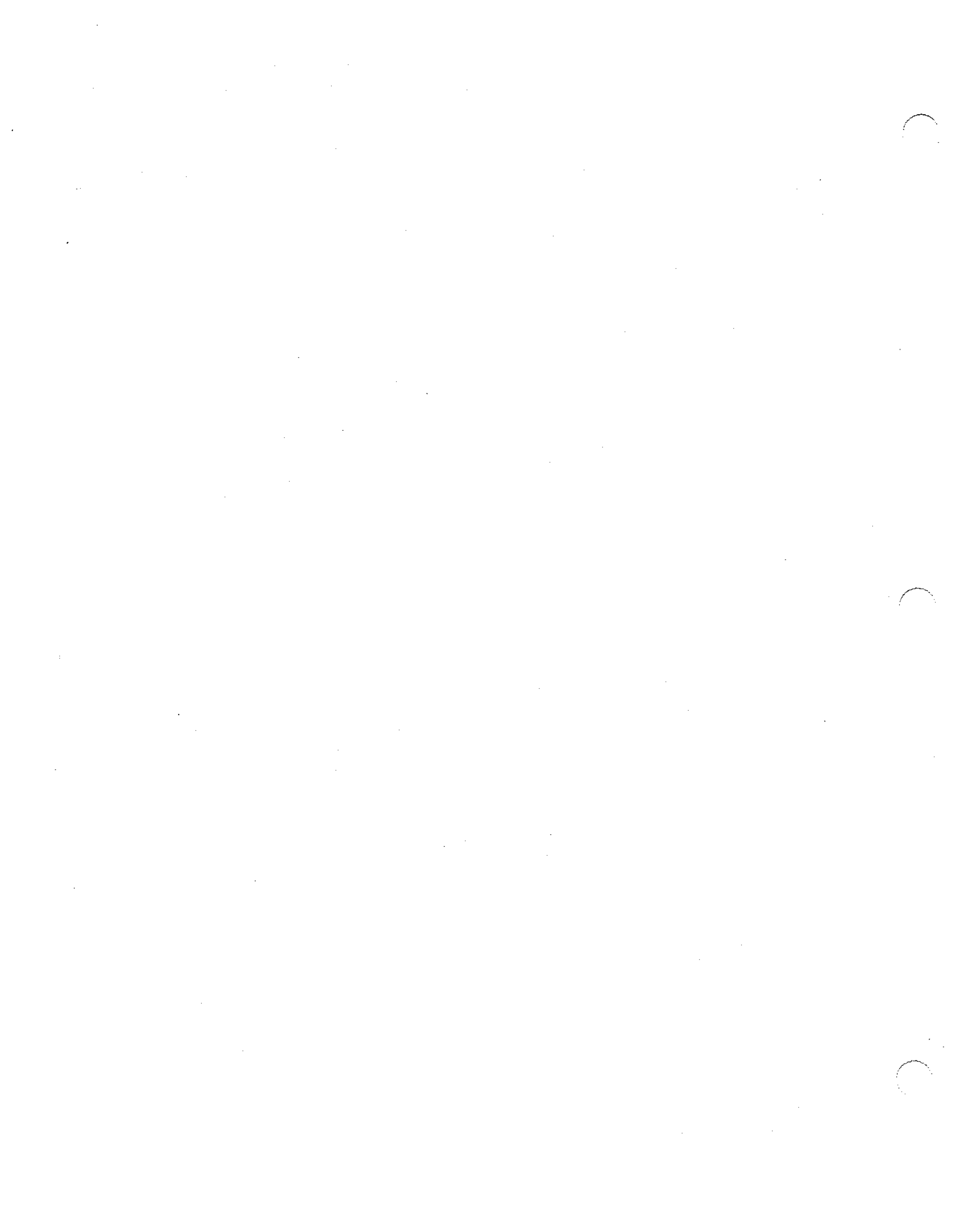
PCL-C

Instructions: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing *memories, thoughts, or images* of a stressful experience from the past?	1	2	3	4	5
2. Repeated, disturbing *dreams* of a stressful experience from the past?	1	2	3	4	5
3. Suddenly *acting or feeling* as if a stressful experience from the past *were happening again* (as if you were reliving it)?	1	2	3	4	5
4. Feeling *very upset* when *something reminded you* of a stressful experience from the past?	1	2	3	4	5
5. Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when *something reminded you* of a stressful experience from the past?	1	2	3	4	5
6. Avoiding *thinking about or talking about* a stressful experience from the past or avoiding *having feelings* related to it?	1	2	3	4	5
7. Avoiding *activities or situations* because *they reminded you* of a stressful experience from the past?	1	2	3	4	5
8. Trouble *remembering important parts* of a stressful experience from the past?	1	2	3	4	5
9. *Loss of interest* in activities that you used to enjoy?	1	2	3	4	5
10. Feeling *distant or cut off* from other people?	1	2	3	4	5
11. Feeling *emotionally numb* or being unable to have loving feelings for those close to you?	1	2	3	4	5
12. Feeling as if your *future* somehow will be *cut short*?	1	2	3	4	5
13. Trouble *falling or staying asleep*?	1	2	3	4	5
14. Feeling *irritable* or having *angry outbursts*?	1	2	3	4	5
15. Having *difficulty concentrating*?	1	2	3	4	5
16. Being "*superalert*" or watchful or on guard?	1	2	3	4	5
17. Feeling *jumpy* or easily startled?	1	2	3	4	5



TRAUMA HISTORY QUESTIONNAIRE - L

The following is a series of questions about serious or traumatic life events. These types of events actually occur with some regularity, although we would like to believe that they are rare, and they affect how people feel about, react to and/or think about things in the future. The questionnaire is divided into questions covering crime experiences, terrorist experiences, general disaster and trauma questions, and questions about physical and sexual assault/abuse.

For each event please indicate (circle) whether it had ever happened to you and number of times and your approximate age when it happened.

Crime-related Events

				If Yes: Number of times	If Yes: Approximate age
1.	Has anyone tried to take something directly from you by using force or the threat of force such as stick-up or mugging?	No	Yes	______	______
2.	Has anyone attempted to rob you or actually robbed you (i.e., stolen your personal belongings?	No	Yes	______	______
3.	Has anyone attempted or succeeded in breaking into your home while you weren't there?	No	Yes	______	______
4.	Has anyone attempted or succeeded in breaking into your home while you were there?	No	Yes	______	______

General Disaster and Trauma

				If Yes: Number of times	If Yes: Approximate age
5.	Have you had a serious accident at work, in a car or somewhere else? *If yes*, please specify ______________________	No	Yes	______	______
6.	Have you experienced a natural disaster such as a flood, major earthquake, etc? *If yes*, please specify ______________________	No	Yes	______	______
7.	Have you experienced a "man-made" disaster such as an industry disaster, fire, building collapse, etc? *If yes*, please specify ______________________	No	Yes	______	______
8.	Have you been exposed to dangerous chemicals or radioactivity that might threaten your health at work, at home or elsewhere? *If yes*, please specify ______________________	No	Yes	______	______

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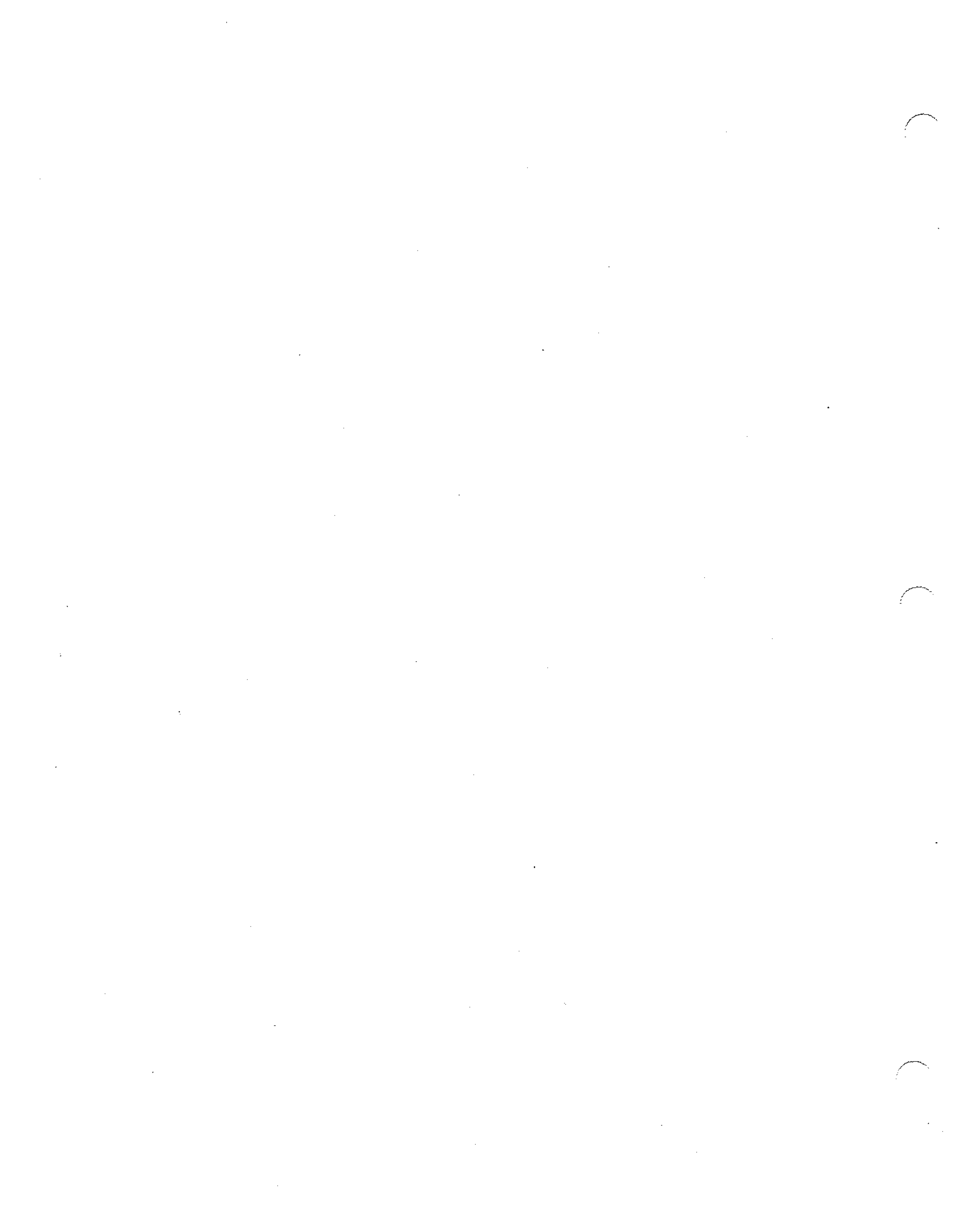

			If Yes :	
			Number of times	Approximate age
9. Have you been exposed to a terrorist act, such as a bomb, stabbing, kidnapping? <u>If yes</u>, please specify ______	No	Yes	______	______
10. Have you been exposed to war events such as fire fights, shelling, missile or artillery alarm? <u>If yes</u>, please specify ______	No	Yes	______	______
11. Have you been in any other situation in which you feared you might be killed or seriously injured? <u>If yes</u>, please specify ______	No	Yes	______	______
12. Have you seen someone killed or seriously injured? <u>If yes</u>, please specify ______	No	Yes	______	______
13. Have you been exposed to dead bodies (other than at a funeral) or had to handle dead bodies for any reason? <u>If yes</u>, please specify ______	No	Yes	______	______
14. Have you had a spouse, romantic partner or child die? <u>If yes</u>, please specify ______	No	Yes	______	______
15. Have you had a serious or life-threatening illness? <u>If yes</u>, please specify ______	No	Yes	______	______
16. Have you received news of a serious injury, life-threatening illness or unexpected death of someone close to you? <u>If yes</u>, please specify ______	No	Yes	______	______
17. Have you had to engage in combat or have you been in a situation that involved a threat to your life while in the military (reserve) service? <u>If yes</u>, please specify ______	No	Yes	______	______

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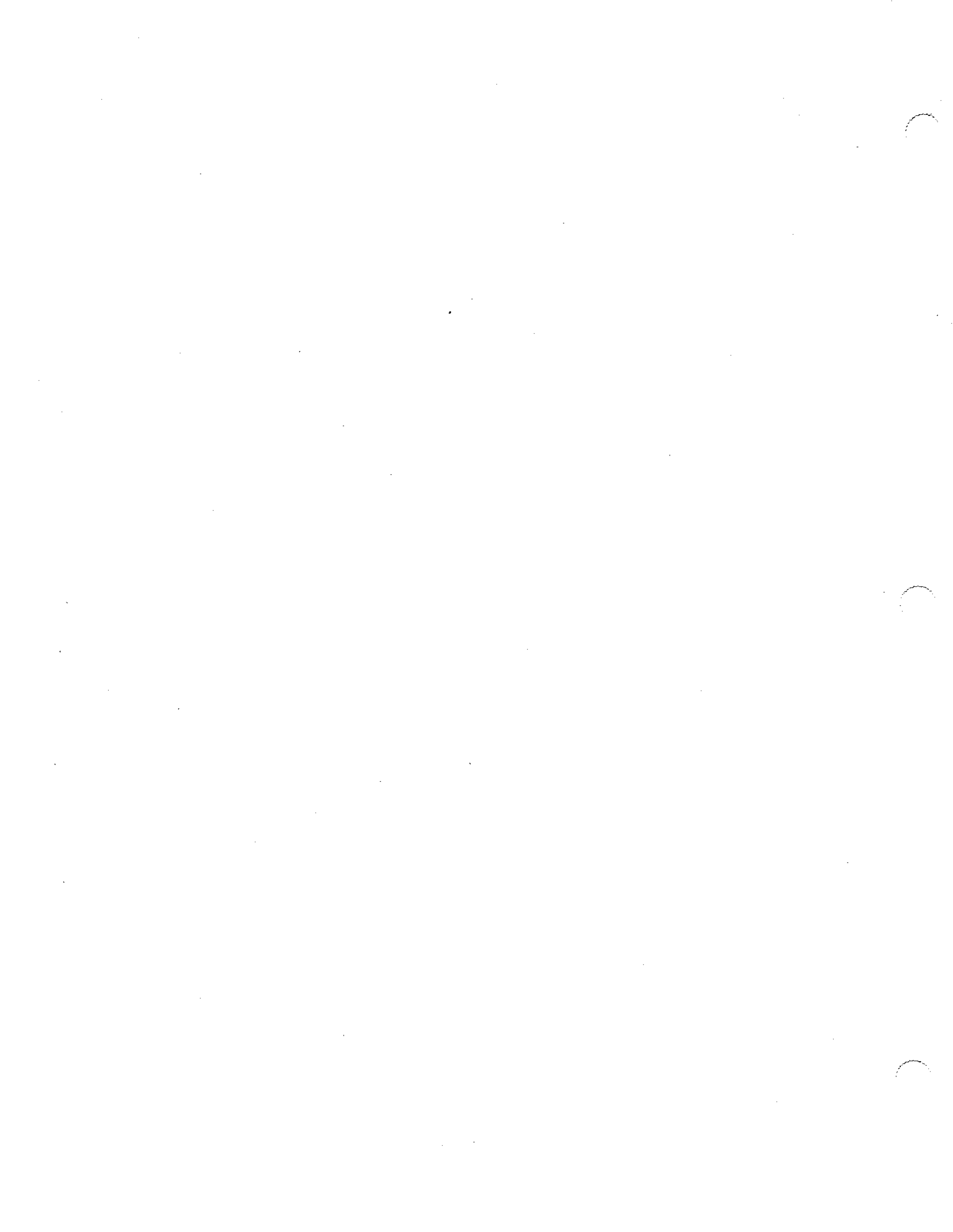

			If Yes: Number of times	Approximate age

Physical and Sexual Experiences

18. Has anyone made you have intercourse, oral or anal sex against your will? No Yes ______ ______
    If yes, please indicate the nature of the relationship with the person (e.g., stranger, friend, relative, parent, sibling) ______________________________

19. Has anyone touched private parts of your body, or made you touch theirs under force or threat? No Yes ______ ______
    If yes, please indicate the nature of the relationship with the person (e.g., stranger, friend, relative, parent, sibling) ______________________________

20. Other than incidents mentioned in Questions 18 and 19, have there been any other situations in which another person tried to force you to have unwanted sexual contact? No Yes ______ ______

21. Has anyone, including family members or friends, attacked you with a gun, knife or some other weapon? No Yes ______ ______

22. Has anyone, including family members or friends, attacked you without a weapon and seriously injured you? No Yes ______ ______

23. Has anyone in your family beaten you, "spanked" you or pushed you hard enough to cause injury? No Yes ______ ______

24. Have you experienced any other extraordinarily stressful situation or event that is not covered above? No Yes ______ ______
    If yes, please specify ______________________________