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COMPENSATION FOR PAIN: A REAPPRAISAL IN LIGHT OF NEW MEDICAL EVIDENCE

Cornelius J. Peck*

Damages for pain and suffering have long provided a target for critics of the present tort law system. Courts and commentators have characterized payments for pain and suffering as uncertain, "anomalous" in light of present day theories of loss allocation, and without "consistent significance." Longstanding medical theory, however, supports the hypothesis that the conduct of the tortfeasor is the primary cause of the pain experienced by the victim. Thus, defenders of compensation for pain and suffering can relate their claim to a general objective of tort jurisprudence: A wrongdoer who causes harm should provide such compensation to an innocent victim as will place the latter in the position he would have occupied but for the wrongdoing.

The theory that a primary causal link exists between the victim's pain and the tortfeasor's acts provides considerable appeal for the proposition that the wrongdoer should compensate for the victim's pain. However, recent investigations of the phenomenon of pain by disciplines of the health sciences have challenged the medical theory upon which recoveries for pain and suffering are based. The results of that work are of obvious interest to the legal profession, for the new view of pain suggests that the tortfeasor's acts bear only a tangential relationship to the pain that some victims experience. The results thus raise questions of how well the recognition given pain and suffering under existing law serves the interests of society in general and of tort law in particular. An improved understanding of the phenomenon of pain can be put to immediate and practical use by lawyers and judges working with cases that involve damage claims for pain and suffering.

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2. Plant, supra note 1, at 211.
4. Jaffe, supra note 1, at 224.
5. See text accompanying notes 6-7 infra.
I. THE CURRENT MEDICAL VIEWS OF PAIN

Until quite recently medical researchers accepted the view that pain was caused by stimulation of specialized pain receptors. Advocates of this "specificity theory" suggested that stimulation activating the nerve endings resulted from action that either destroyed or irritated tissue. The impulse produced by the stimulation in the peripheral nerve was thought to be transmitted to the spinal column and relayed to the higher levels of the nervous system, passing through the brain from the thalamus to the somatosensory cortex. Stimulation of the receptor, it was thought, always elicited pain and elicited only the sensation of pain. In layman's terms, the process approximated the receipt of a message sent over a telephone system designed to transmit messages clearly and distinctly. The system was not designed to produce messages, and only its malfunction could cause alterations or modifications of the messages.

For tort law, the specificity theory implied that, since a painful experience required physical stimulation of the peripheral nerves, the tortious contact caused by the wrongdoer produced the victim's discomfort. So long as physical injury was considered a sine qua non of pain and suffering the party who caused the injury was believed responsible.

Recent studies, however, have established that a theory of pain based only on tissue damage or irritation cannot explain all the observations of pain in persons who are neither psychiatrically disturbed nor suffering from mental disorders. These studies indicate that pain is not one sensation varying only in intensity; it is many varied sensations. As one observer put it, we should perhaps discuss

6. See H. MERSKEY & F. SPEAR, PAIN: PSYCHOLOGICAL AND PSYCHIATRIC ASPECTS 27 (1967); R. STERNBACH, PAIN: A PSYCHOLOGICAL ANALYSIS 39-40 (1968); Casey, The Neurophysiologic Basis of Pain, 53 POSTGRAD. MED., May 1973, at 53; Melnick & Wall, Psychophysiology of Pain, 8 INTL. ANESTH. CLINICS 3, 4-6 (1970). Consistent with the specific receptor theory is the fact that some nerve fibers have a particularly large diameter and are sheathed with a fatty substance known as myelin; other nerves have a smaller diameter and lack an insulating cover. The larger myelinated nerve fibers conduct impulses at a much faster rate than the smaller nerves. This may account for the two types of pain many persons report following an injury, the first being a bright, pricking pain and the second a dull, aching pain. See R. Sternbach, supra, at 30. But see id. at 30-31.

7. Proponents of the specificity theory recognized certain aberrations in their hypothesis. The phantom pains of an amputee obviously are not caused by nerve endings in the foot that has been removed. In very rare cases persons with mental disorders suffer hysterical pain, and other psychiatric disturbances may produce complaints of pain with no organic basis. These were viewed as exceptional cases, in which the nervous system was operating improperly.

8. See H. MERSKEY & F. SPEAR, supra note 6, at 29-30; R. STERNBACH, supra note 6, at 9-12; Casey, supra note 6, at 59.

9. See R. STERNBACH, supra note 6, at 2; T. SZASZ, PAIN AND PLEASURE 10-11, 40
pain as Eskimos discuss snow, assigning a separate word to each of the forms in which snow may be found but dispensing with a single word encompassing all of its forms.\textsuperscript{10}

One of the first departures from the specificity theory postulated that pain resulted from a pattern of nerve stimuli reported to the central nervous system. According to this "pattern theory," the quality of pain is determined by the spatiotemporal configuration of impulses over nerve routes that serve general sensory functions and are not specific for pain.\textsuperscript{11} The pattern theory departs from the telephone message model; it assumes the existence of some central nervous system process that evaluates the pattern of nerve impulses received from a peripheral source.

A much more radical departure from the specificity theory was the formulation by Doctors Ronald Melzack and P. D. Wall of a theory of "gate control" of nerve impulses arriving at the spinal column.\textsuperscript{12} Essentially, Melzack and Wall propose that the densely packed nerve cells in the dorsal horn of the spinal cord—known as the substantia gelatinosa—mediate, moderate, and filter the incoming signals from peripheral nerves. These signals consist of impulses traveling along small diameter unmyelinated ( uninsulated) or thinly myelinated nerves—an essential component of physiological pain—and faster-traveling impulses conducted along larger diameter myelinated nerve fibers. The impulses traveling along the larger diameter fibers normally produce the sensations of touch and pressure, and quickly activate the first central transmission cells (T cells), which transmit signals to higher levels of the central nervous system. The pain impulses, traveling along the smaller nerve fibers, at first have little effect upon the T cells, but their effect is enhanced as that of the impulses of the larger myelinated nerve fibers diminishes. However, further stimulation of the larger sensory nerves will dampen and reduce the effect of the pain impulses received from the smaller nerve fibers. (It thus may be that a mother in fact reduces the pain sensation when she kisses and rubs a bumped head or knee.)

The exact process that controls the operation of the "gate," or the filtering function, remains uncertain, but the filtering appears to

\textsuperscript{10} T. Szasz, supra note 9, at 10.

\textsuperscript{11} See R. Sternbach, supra note 6, at 40-41; Melzack and Wall, supra note 6, at 7-10.

\textsuperscript{12} Melzack & Wall, Gate Control Theory of Pain, in PAIN 11 (A. Soulairac, J. Cahn & J. Charpentier eds. 1968); Melzack & Wall, supra note 6. See generally Casey, supra note 6.
be regulated by some central mechanism from the brain that has been triggered into action by the patterned impulses transmitted through the T cells. Thus it appears that a physiological mechanism exists through which the higher levels of the central nervous system control the sensory input of pain. Melzack and Wall summarize the significance of this system for the psychological control of pain:

"It is important to recognize the role of cognitive or "higher central nervous system" activities such as anxiety, attention, and suggestion in pain processes. The model suggests that psychological factors such as past experience, attention, and emotion influence pain response and perception by acting on the gate control system. The degree of central control, however, would be determined, in part at least, by the temporal-spatial properties of the input patterns. Some of the most unbearable pains, such as cardiac pain, rise so rapidly in intensity that the patient is unable to achieve any control over them. On the other hand, more slowly rising temporal patterns are susceptible to central control and may allow the patient to "think about something else" or use other stratagems to keep the pain under control."

Other researchers have challenged some aspects of Melzack and Wall's assertions, and the theory will undoubtedly undergo further development. Gate control assumes additional significance, however, insofar as it complements and helps to explain physiologically the contributions made by psychiatrists and psychologists with respect to the understanding of pain. For example, Melzack and Wall refer to the pain experiences of men wounded in battle, an allusion to Dr. Henry Beecher's study of soldiers injured in the battle on Anzio.

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13. Melzack & Wall, supra note 6, at 22. The researchers describe the physiology of the phenomenon:

"It is now firmly established that stimulation of the brain activates descending efferent fibers . . . which can influence afferent conduction at the earliest synaptic levels of the somesthetic system . . . . There is evidence . . . . to suggest that these central influences are mediated through the gate control system. While some central activities, such as anxiety or excitement, may open or close the gate for all inputs at any site of the body, others obviously involve selective, localized gate activity. For example, men wounded in battle may feel little or no pain from the wound (because it signifies that they survived the battle) but may complain bitterly about an inept vein puncture. . . . The signals, then, must be identified, evaluated in terms of prior experience, localized, and inhibited before the action system responsible for pain reception and response is activated. We propose, therefore, that there exists in the nervous system a mechanism, which we call the central control trigger, that activates the particular, selective brain process that exerts control over the sensory input processes."

Id. (emphasis added).


15. See Christensen & Perl, Spinal Neurons Specifically Excited by Noxious or Thermal Stimuli: Marginal Zone of the Dorsal Horn, 33 J. NEUROPHYSIOLOGY 293 (1970); Mosso & Kruger, Spinal Trigeminal Neurons Excited by Noxious and Thermal Stimuli, 38 BRAIN RESEARCH 206 (1972).

16. See note 13 supra.
beachhead during World War II.\textsuperscript{17} The men studied had been under shell fire for several weeks when they received wounds that were serious enough to require their hospitalization and eventual evacuation. When questioned seven to twelve hours after being wounded, only a little more than one quarter of the men said that they had enough pain to require treatment, such as administration of a pain killer.\textsuperscript{18} In a comparison group of civilians who had undergone planned surgery in a hospital, 87 per cent said within an average of 2.9 hours after their operation that they wanted treatment for their pain.\textsuperscript{19} Dr. Beecher believed that the battle wounds, consisting of flesh torn and bones broken by flying shrapnel, provided a greater physiological basis for pain than did the carefully executed incisions of surgeons.\textsuperscript{20} He therefore attributed the difference in the pain responses of the two groups to something other than the degree of physical destruction caused by the wound. For the men at Anzio, wounds provided an escape from a situation involving great anxiety and fear of death.\textsuperscript{21} The neat, surgical incisions of the civilians, on the other hand, signified tragedy. The soldiers' wounds resulted in a lessening of anxiety about their futures; anxieties of the surgical patients may have been intensified. Dr. Beecher's data thus support the widely held hypothesis that anxiety increases the intensity of pain.\textsuperscript{22}

Anxiety is a conditioned (anticipatory) fear response, and the extent to which one suffers pain can therefore be expected to vary with the ease with which he is conditioned to expect unpleasantness. Individuals with a personality type characterized as extrovert are not as easily conditioned and bring less of this pain component to a situation than introverts, who are more easily conditioned.\textsuperscript{23}

Natural childbirth as now practiced in the United States furnishes an excellent example of how anxiety affects the amount of pain experienced. The exercises performed and the classes attended by an

\textsuperscript{17} Beecher, \textit{Relationship of Significance of Wound to Pain Experienced}, 161 J.A.M.A. 1609 (1956).
\textsuperscript{18} Id. at 1610.
\textsuperscript{19} Id.
\textsuperscript{20} Id.
\textsuperscript{21} Id. at 1612.
\textsuperscript{23} R. Sternbach, supra note 6, at 67-72. See also H. Merskey & F. Spear, supra note 6, at 161-62.
expectant mother in preparation for a natural childbirth undoubtedly increase that woman's physical capabilities, but they also develop an attitude of confidence, understanding, and freedom from fear. Such an attitude permits some women to endure childbirth sensations that others find so intolerable as to require anesthesia. 24

The behavior of recipients in organ transplant operations furnishes another striking illustration. To ensure the acceptance of the transplanted organ the recipient is frequently not given analgesic medication. He is, however, psychologically prepared for the transplant and strongly desires it; consequently he often reports no pain. Donors likewise are frequently free of pain. 25

II. THE “SOCIAL” CONTENT OF PAIN

It is thus apparent that pain can no longer be considered simply a physiological phenomenon. It has a social and interpersonal aspect from birth. The pain that produces the baby's cry in turn elicits comforting and loving support from parents or protectors. Similarly, in early childhood pain is commonly associated with discipline and hence with parental or social disapproval. At this time the superego of the personality structure is developing, so that from the beginning pain is firmly connected with guilt. A child learns not only that his behavior can be influenced by pain inflicted upon him, but that he may influence the behavior of others by inflicting pain on them. Pain thus achieves recognition as an effective control of conduct, useful even for the control of one's own aggressions. 26

Pain continues to have an interpersonal communicative role when an individual emerges from childhood. Manifestations of pain remain effective to communicate appeals for attention, love, and sup-

24. J. Bonica, supra note 22, at 151; G. Dick-Read, Childbirth Without Fear 46-48 (1959); R. Sternbach, supra note 6, at 25. Cultural differences in the attitudes of women toward childbirth undoubtedly affect their anxieties. In some societies women are able to give birth naturally without crying out or writhing. See J. Embree, Sute Mura, A Japanese Village 178-79 (1939); M. Mead, Coming of Age in Samoa 20 (1961). See also G. Dick-Read, supra, at 2.

25. Letter from Dr. Richard G. Black, Coordinator of the Pain Clinic of the University of Washington, to the author, January 7, 1974, on file with the Michigan Law Review. Dr. Black's impression is that the donors he did treat for pain were those whose donated organ was biologically rejected by the recipient. Id.

26. See R. Sternbach, supra note 6, at 87; Engel, "Psychogenic" Pain and the Pain-Prone Patient, 26 Am. J. Med. 999, 901 (1959). Indeed, the phenomenon of pain is so affected by the interpersonal relationships of childhood that it has been reported that individuals raised in large families manifest more pain behavior than those raised in small families. Gonda, The Relation Between Complaints of Persistent Pain and Family Size, 25 J. Neurol. Neurosurg. Psychiatry 277, 277-81 (1962). See also H. Merskey & F. Speare, supra note 6, at 176. Problems of communication arise in large families, and the manifestation of pain may be a more effective communication than a well-stated request.
port among adults, and they are so used. It is not only a Pavlov's dog or a grain-seeking pigeon that can be conditioned to perform in a certain manner because that performance usually earns a reward or avoids an undesirable consequence; the connection between the desired goal and a pattern of behavior may also be perceived and acted upon by humans at levels below rational articulation.

Social factors may even produce pain that lacks an adequate organic or physiological basis. In the literature of pain, this phenomenon has been designated "psychogenic" pain. Psychogenic pain may validate communications requesting help or establishing an excuse. For example, the aging laborer learns that manifestation of pain will obtain for him a period of rest. Perhaps he has gradually found the work not only physically exhausting but socially embarrassing, because it demonstrates his declining physical condition and the superiority of the young men with whom he works. Pain may provide an excuse for staying away from work and avoiding not only physical burden but social embarrassment. Or a younger workman, threatened by the removal of a supportive supervisor or the arrival of a workman whose performance is at a higher level, may feel enough pain to justify absenting himself from the potential challenges and embarrassment of work. Similarly, the housewife who experiences and manifests pain may thus avoid the housework she despises. A person who does not desire sexual relations may, upon experiencing pain, learn that it provides an excuse for not satisfying the partner's demands.


28. There is a story, perhaps apocryphal, about students of B.F. Skinner who decided to bring to an end the peripatetic lecture style of one of their professors. They agreed upon a "reward corner" in the lecture room, and manifested great interest in the portions of a lecture delivered from that place—an interest that diminished in proportion to the distance by which the professor removed himself from that corner. As the story goes, the students had the professor pinned in the corner within two weeks, though he did not know why he had altered his lecture style.

29. See Engel, supra note 26.

30. Of course, it is not only tensions of work or family life that may provide the incentive for utilizing pain to achieve desired adjustments. Indeed, it may be the absence of interest or activity that provides the situation in which pain is rewarding. Thus, a woman whose children have grown and left the house or whose husband has become inattentive may learn that manifestation of pain produces interest and concern. If her pain is great enough she will break the monotony of home life by consulting a doctor. If her pain does not respond to treatment she may become a subject of special interest and attract the attention of several medical experts. If she experienced her first pain in an accident her pain may in addition bring the attention and concern of her lawyer. Similarly, the individual whose career has reached its culmination may find that it is no longer interesting, and may seek another career in a life of pain. The noted psychiatrist Thomas Szasz has described such persons as having adopted a career of suffering. Szasz, supra note 27, at 97-99. Others agree that
In psychological terms, these individuals have been subjected to operant conditioning. "Operant" pain is learned pain, produced by systematic and repeated environmental consequences following pain manifestation. Psychologists might assert that those who experience operant pain have learned to do so as a defense to or escape from an aversive situation. Additionally, expressions of concern and solicitude from others may reinforce the manifestations of pain. The pain that has thus been learned may be repeated and rewarded even though its pathologic or organic stimulus lessens or disappears. It becomes chronic, and the patient does not respond to normal treatment.

The experience of psychogenic pain does not, however, imply serious mental disorder. On the contrary, as explained by Professor Wilbert E. Fordyce:

> It is quite unnecessary to postulate some form of personality problem or emotional disturbance. It is equally true that, once burdened with some seemingly noxious or uncomfortable behavioral habit such as pain (smoking, persistent overeating, excessive drinking are equally illustrative), only very rarely does one change that behavior by deciding to do so. Habits are acquired by one's having undergone repeated learning experiences. Habits are changed by undergoing systematic re-learning or de-conditioning.

The experience of psychogenic pain, therefore, may indicate nothing more than the fulfillment of some need that has previously been satisfied by "real" (physiologically based) pain. A person ridden with guilt may find in pain a rewarding punishment for the guilty conduct that obsesses him. Guilt-ridden patients may even reject painless there are many such persons. Hirschfeld & Behan, The Accident Process (pt. 1), 186 J.A.M.A. 193 (1963); Melack & Chapman, supra note 14, at 72; Sternbach, Murphy, Akeson & Wolf, Chronic Low-Back Pain—The "Low-Back Loser," 53 POSTGRAD. MED., May 1973, at 135, 137.

31. See Fordyce, An Operant Conditioning Method for Managing Chronic Pain, 53 POSTGRAD. MED., May 1973, at 123-28. "Psychogenic pain" is the terminology of psychiatrists; the term "operant pain" is used by psychologists. Dr. George Engel explains in his leading article that the term "psychogenic pain" has in recent years been applied by exclusion to those instances in which no physiological cause of pain can be demonstrated, making it an appropriate term for all types of pain that serve as psychic regulators. Engel, supra note 26, at 916.


33. Letter from Wilbert E. Fordyce, Professor of Rehabilitation Medicine, School of Medicine, University of Washington, to the author, December 28, 1973, on file with the Michigan Law Review.

34. H. Merskey & F. Spear, supra note 6, at 86, 172; R. Sternbach, supra note 6, at 72, 145-46; Engel, supra note 26, at 905; Ripley, The Psychologic Basis of Pain, in J. Bonica, supra note 32, at 143, 148.
treatment and instead accept painful procedures. An individual may also use pain to control aggressiveness or sexual desires that he believes to be wrongful or forbidden. Some persons apparently substitute pain for a loved one who has died. Amputees who have chronically painful phantom limbs probably "need" the pain for psychological reasons: It may be an expression of anger turned toward themselves, a denial of the loss of the limb, or a means of justifying unacceptable dependency needs. Finally, pain is useful to persons who are lonely. Most conversations require that the participants know something about the subject and be interested in it, whether it be sports, current events, literature, or something else. Pain, however, is a subject that everyone understands and about which a speaker is an expert if the pain described is his own. It is, moreover, a subject that may be raised formally as an appropriate response to casual greetings, even from relative strangers.

So well does pain serve the needs of some of its sufferers that they resist efforts to bring about a cure. Thus, it has been suggested that some injured workmen fight to preserve their incapacity, hiding symptoms from their doctor for fear that he will diagnose and treat them. Such patients may avoid doctors who seem likely to cure them and seek out doctors who pose no such threat. The anesthesiologist who succeeds in using an analgesic to block pain may encounter violent hostility from the patient whose pain he has taken away. Furthermore, patients with chronic pain are among the most reluctant to accept a psychiatric referral or to participate in psychotherapy.

32. Engel, supra note 26, at 905.
36. Id. at 905.
37. Id. at 901, 908.
38. R. Sternbach, supra note 6, at 131-32.
40. Such a case was described by Dr. Richard G. Black, Coordinator of the Pain Clinic of the University of Washington Medical School to Dr. Herbert Ripley, a psychiatrist associated with the Clinic, at one of the sessions of the Clinic attended by the author. A suggestion made by Dr. Ripley was that the patient was a man "who needs his pain."

Persons suffering from chronic pain are frequently depressed, a condition caused for some by the self-analysis induced by a serious injury or illness. Miller & Fellner, Compensable Injuries and Accompanying Neurosis: The Problem of Continuing Incapacity Despite Medical Recovery, 1969 WIS. L. REV. 184, 189. But it is erroneous to assume that all depressed persons suffering from chronic pain are depressed because of their pain; instead, their pain may be a manifestation of their depression. Engel, supra, at 915; Hirschfeld & Behan, supra note 30, at 195-96; Melzack and Chapman, supra note 14, at 71; Sternbach, Murphy, Akeson & Wolf, supra note 30, at 136.
The principle of cognitive dissonance helps explain why some individuals adopt a life of pain. According to this principle, persons tend to maintain consistent views, or cognitions, about themselves and the world. The presence of dissonance—inconsistency—gives rise to pressures to restore cognitive equilibrium. A person experiences dissonance if his view of himself conflicts with the image he wishes to present to others. The desire to present the image of one in pain, which may arise for many reasons, including those discussed above, may thus prompt a person subconsciously to nurture weak impulses from peripheral nerves into disabling or intolerable pain.

It should be added that recent studies establish that pain thresholds and pain tolerance vary among cultures, races, age groups, and sexes. Social forces are a very likely cause of the variations. Generally speaking, men exhibit a greater tolerance for pain than women. Younger persons have a greater tolerance for pain than older persons. Tolerance of pain also has an identifiable relationship with race and nationality. For example, Jews and Italians are not as inhibited about displays of suffering as the "older American" types, and, contrary to the stereotype of the inscrutable Oriental, one study indicates that Orientals have less tolerance for pain than whites, with blacks occupying a middle ground. Schizophrenics, perhaps because of a divorce of ego from body, have a much greater tolerance for pain than normal individuals. Even among individuals with no markedly distinguishing characteristics reaction to pain stimuli may vary greatly. Indeed, it has even been suggested that reaction to pain may

Some individuals build to a crisis state, which demands the occurrence of an event that will give them the pain they seek for adjustment of their lives. Brodsky, supra note 32, passim; Engel, supra, at 908; Hirschfeld & Behan, supra, at 195-94.

42. See generally L. Festinger, A THEORY OF COGNITIVE DISSONANCE (1957).
43. R. Sternbach, supra note 6, at 64.
44. Blitz & Dinnerstein, Role of Attentional Focus in Pain Perception: Manipulation of Response to Noxious Stimulation by Instructions, 77 J. Abnormal Psychology 42 (1971); Woodrow, Friedman, Siegelb & Collen, Pain Tolerance: Differences According to Age, Sex, and Race, 54 Psychosomatic Med. 548 (1972). But see Clark & Mehl, supra note 22, at 202 (older women had a higher pain threshold than men or young women).
45. R. Sternbach, supra note 6, at 72-73; Woodrow, Friedman, Siegelb & Collen, supra note 44. But see Clark & Mehl, supra note 22, at 208.
46. R. Sternbach, supra note 6, at 74; Woodrow, Friedman, Siegelb & Collen, supra note 44. Cf. Ripley, supra note 34, at 148.
47. Woodrow, Friedman, Siegelb & Collen, supra note 44.
48. H. Merskey & F. Spear, supra note 6, at 103.
49. V. Cassinari & C. Pagni, CENTRAL PAIN 3-4 (1969); Engel, supra note 25, at 902; Melzack & Chapman, supra note 14, at 70; Ripley, supra note 34, at 143-44; Smith, supra note 22, at 190.
vary with birth order in the family, depending upon the family's socioeconomic group.\textsuperscript{50}

In short, recent observations establish that pain is a social and psychological as well as physiological phenomenon. In the past there has been too much reliance solely upon surgical and other physiological attempts to cure chronic pain. Because of the various bases of pain, it can best be treated by a multidisciplinary approach. New procedures may provide a cure for psychogenic pain that cannot be eliminated by traditional methods.\textsuperscript{51}

One must not conclude, however, that psychogenic pain does not involve the sensations associated with physiologically caused pain. Psychogenic pain produces actual discomfort and thus is not imaginary or unreal.\textsuperscript{52} A person who suffers psychogenic pain should be distinguished from a malingerer; a malingerer does not suffer pain, but consciously engages in behavior designed to deceive observers into believing that he does. Indeed, psychogenic pain may, like other

\textsuperscript{50} H. Merskey \& F. Spear, \textit{supra} note 6, at 73.

\textsuperscript{51} A recently developed procedure for the treatment of chronic pain, and one probably better designed for relief of psychogenic pain than others, is operant conditioning. See B. Berni \& W. Fordyce, \textit{Behavior Modification and the Nursing Process} [in press]; E. Reese, \textit{The Analysis of Human Operant Behavior} 49-88 (1965); Fordyce, \textit{supra} note 81; Fordyce, Fowler, Lehmann \& DeLateur, \textit{Some Implications of Learning in Problems of Chronic Pain}, 21 \textit{J. Chronic Disease} 179 (1968). Operant conditioning for the management of chronic pain involves "(1) identification and elimination of positive reinforcers to the pain behavior, (2) increase in physical activity, and (3) gradual decrease in and eventual elimination of intake of analgesics and other drugs." Fordyce, \textit{supra}, at 125. The rewards for pain are diminished or eliminated; rewards for healthy or normal activity are substituted. Pain-related behavior is then abandoned in favor of behavior that is reinforced.

In recognition of the interpersonal aspects of pain, members of the family may be involved in the treatment. This is consistent with the view that pain is frequently the family's pain rather than the sole property of the patient. Family members are instructed not to give positive reinforcement to pain behavior by elaborate demonstrations of concern, but instead to reinforce activities and behaviors that are consistent with a return to a healthy absence of pain. In some cases, family members may reassess their relationship with the patient and identify the reasons that led them to reinforce pain behavior. Bonica, \textit{Fundamental Considerations of Chronic Pain Therapy}, 53 \textit{Postgrad. Med.}, May 1973, at 83, 85; Fordyce, \textit{supra} note 81, at 125; Fordyce, Fowler, Lehmann \& DeLateur, \textit{supra}, at 180-83. See also Abramis, Fellner \& Whitaker, \textit{The Family Enters the Hospital}, 127 Am. J. Psychiatry 1969 (1971) (psychiatric patients).

Other methods for treating chronic pain are also being developed, utilizing what has been learned about attention, anxiety, depression, and conditioning. Melzack \& Chapman, \textit{supra} note 14. Experiences of soldiers in combat and athletes in contact games combine with the gate theory of pain to suggest that attentional processes can be used to control pain. For example, a method known as Alpha feedback training combines the use of distraction of attention from a painful body site, strong or hypnotic suggestions, and relaxation of anxieties. The technique develops a sense of control over pain and reduces both anxiety and pain. Melzack \& Chapman, \textit{supra}, at 73-75.

\textsuperscript{52} J. Bonica, \textit{supra} note 22, at 134-37; H. Merskey \& F. Spear, \textit{supra} note 6, at 25, 85-86; Fordyce, \textit{supra} note 81, at 123-24; Szasz, \textit{supra} note 27, at 99-100.
pain, eventually produce physical deterioration of the sufferer's body. Psychophysiologic processes such as restriction of nasal passages or elevation of blood pressure may over time become biologically destructive, and muscle tension alone may produce a substance that is toxic to living cells. Among the most perverse risks of physical harm from psychogenic pain are unnecessary surgery and drug addiction.

The simple acknowledgment that psychogenic pain exists does not in itself justify an exploration of its legal significance. Problems of proof abound in determining the source of pain, and determination of whether pain is psychological or physiological is not a simple matter. For instance, one study reveals that twenty-five to thirty-five per cent of patients with pain from surgical operations or other organic sources receive the same relief from a placebo as from a narcotic. If psychogenic pain patients are only a nominal portion of all persons with chronic pain, the need for certainty might make it preferable to apply one rule to all cases.

Despite its importance, the amount of research on chronic pain has been relatively small, and there are still large gaps in our knowledge about it. It appears, however, that chronic pain has three main causes: (1) persistent, peripheral noxious stimulation; (2) disease of the cerebral-spinal axis; and (3) operant mechanisms. The first category includes arthritis, herniated disks, ulcers, cancer, and coronary artery disease—the resultant pains have substantial organic or physiological bases. The second category consists of diseases or disorders of cranial or spinal nerves, sometimes referred to as various forms of neuralgia. Third category pain may be initiated by noxious stimulation, but it is so reinforced through operant conditioning that it becomes independent of its organic or physiological base. Doctor John Bonica, a leading investigator of the phenomenon of pain,

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53. J. Bonica, supra note 22, at 149-50.
54. J. Bonica, supra note 22, at 151; Rodbard, Muscle Pain, in PAIN AND SUFFERING, supra note 9, at 154.
56. Bonica, supra note 51, at 82-84.
57. Bonica, supra note 51, at 83-84.
58. The psychological aspects of pain are not limited to the patient. The physician who feels a professional obligation to cure may react to a patient's persistent failure to respond to treatment with hostility, making impossible the rapport that might bring about a success. Behan & Hirschfeld, The Accident Process (pt. 2), 186 J.A.M.A. 300, 301-03 (1963). On the other hand, the physician may attempt to save face by adopting his patient's view that the pain is severe and incurable.
60. See text accompanying notes 31-32 supra.
states that operant mechanisms are "among the most common causes of chronic pain and prolonged disability."61 Hubert Winston Smith, a lawyer and doctor, states that most neurologists agree that very few traumatic injuries produce permanent pain.62 The noted psychiatrist Thomas Szasz writes that one thing that strikes the careful observer of patients with chronic pain is that such patients have made a career of suffering.63 Another psychiatrist, George Engel, suggests that symptoms that deviate from anatomical and physiological principles governing pathological pain should immediately caution the physician that peripheral nerve impulses play no role or that their influence is being obscured by other factors.64

The current medical views of pain—in particular the gate control theory—thus pose obvious and direct challenges to the physiological basis of pain that tort law seems to assume. The degree, duration, and even the existence of a claimant's pain may be determined by matters other than noxious stimulation of peripheral nerves. The relationship between injury and pain therefore may be entirely different from the assumed relationship that underlies the conclusion that a tortfeasor should compensate a claimant for pain experienced

61. Bonica, supra note 51, at 82.
63. Szasz, supra note 27, at 97.
64. Engel, supra note 26, at 903. Two other doctors, who conducted a study of approximately 300 cases of industrial accidents and injuries, give similar advice, stating that except when clearly explained by normal responses to anatomical defects, chronicity in injury cases should be considered psychogenic unless proved otherwise. Behan & Hirschfield, supra note 56, at 303. In another study of 200 patients receiving or seeking compensation as a result of work-incurred disability, it was noted that the patients had common personality characteristics that resulted in a state of crisis of tension on the job preceding the incapacitating event. Brodsky, supra note 32, at 528-29. The patients' view of how severely they had been injured frequently was distorted by their inability to remember realistically what their life situation had been before the injury; they substituted the situation remembered from the prime of their lives. See Fellner, supra note 41, at 348; Miller & Fellner, supra note 41, at 185. Another psychiatrist who has served as a consultant in cases of prolonged incapacitation from industrial injuries notes that medically the most characteristic aspect of the referred patients' symptomatology is the gross discrepancy between the organic impairment and the disability exhibited. Fellner, supra, at 348. Dr. Richard Sternbach, another authority on pain, has noted that there is no dependable relationship between pathological injury and the degree of pain experienced. R. Sternbach, supra note 6, at 27. He and others have identified a type of chronic low back pain sufferer, whom they have characterized as the "low back loser," for whose pain the causes do not appear to be primarily organic. Sternbach, Murphy, Akeson & Wolf, supra note 30. The same appears to be true for man's most common complaint, the headache. Friedman, Headache, 53 Postgrad. Med., May 1973, at 172, 178. Indeed, Dr. Seymour Diamond, a headache expert at the University of Chicago, estimates that nine out of ten headaches are due to emotions and other psychological factors; only ten per cent have an underlying organic cause. Kotulak, Pain Learned?, Detroit Free Press, July 22, 1974, § C, at 1, cols. 1-3.
after injury. The desirability of requiring compensation for pain thus deserves re-examination.

III. THE LEGAL SIGNIFICANCE OF THE CURRENT MEDICAL VIEWS

The significance of the current medical views of pain for the law governing compensation of accident victims depends upon the purposes that that law seeks to serve and how well present rules governing compensation fulfill those purposes. The principal objective of tort law has been considered to be providing such compensation to an innocent victim of an injury wrongfully caused by another as will return the victim to the position in which he would have been but for the wrongdoing. Other objectives include those of punishing the wrongdoer, eliminating the need for retaliation or violent self-help, and deterring wrongful conduct.65

Recently, however, commentators have perceived these traditional objectives as subordinate to an overriding social goal of properly allocating risks and resources. If the law allows recovery in a given case, it transfers the cost of the injury from the victim to others; if the law does not allow recovery, it allocates the cost to the victim. Recognition of this loss allocation function has produced a body of literature in which principles of tort law have been subjected to economic analysis in an attempt to improve their social efficacy.66

Some commentators have concluded that pain and suffering awards do not serve any of the objectives of tort law to a degree that justifies the current generous levels of compensation. Thus, Professor Plant's excellent survey of damages for pain and suffering awarded in personal injury cases led him to conclude that juries often awarded disproportionately large amounts and that such awards were difficult for courts to control because of the absence of definitive principles.67 He suggested that an upper limit for pain and suffering recoveries be established at fifty per cent of the victim's medical, nursing, and hospital expenses.68 Impressed by similar proposals for reformulation

68. Id. at 211.
of the law of damages advanced by Dean Leon Green69 and Professor Fleming James,70 Professor Clarence Morris concurred in the suggestion that a change be made, with the addenda that recoveries should be allowed when pain has disabling economic consequences and that the change be made by the legislature.71 His review of cases led him to conclude that it was erroneous to view the law as providing pocket money to buy distractions from pain, appealing as that view might be.72

Despite their cogency, the arguments of the commentators have not resulted in a general reduction or elimination of recoveries for pain. The new medical evidence provides an additional argument for limiting or excluding such awards, at least in cases in which no physiological basis for pain exists. The current understanding of pain reinforces legislative decisions to omit compensation for pain from statutory accident reparation plans. The new understanding of pain may also persuade judges to limit recoveries for pain, perhaps by distinguishing psychogenic pain from other items more properly compensated.

A. The Role of Pain and Suffering Damages in the Tort Law System

The propriety of awarding damages specifically for pain and suffering under the tort law system did not receive close attention until the middle of the nineteenth century.73 By that time the law had come to rely heavily upon the principle of negligence for allocating responsibility for accidental injuries, and damages for pain and suffering had been allowed in enough cases to give the matter the appearance of being well-settled. The concept of requiring a wrongdoer to compensate for pain and suffering an innocent party whom he has injured had a recognizable appeal in the earlier trespass action, in which no distinction was made between intended and unintended consequences.74 The propriety of awarding such

71. Morris, supra note 1, at 476.
72. Id. at 479.
damages for unintended harm under the negligence standard thus never received the consideration it deserved. The lack of a well-established liability insurance industry at that time at least ensured that it was the negligent party who actually paid the damages for pain and suffering. The rule excluding evidence in the trial of a tort action as to whether a defendant is insured has preserved the appearance that it is the defendant who pays. In fact, however, today the defendant seldom pays pain and suffering damages personally, because the uninsured defendant is not likely to be sued. It is other people who provide through liability insurance premiums the funds from which the pain and suffering damages are paid. The concept of a wrongdoer making amends to the injured party for the unpleasant experience to which he was subjected no longer justifies the payment of damages for pain and suffering.

The best explanation of what society now does in awarding damages for pain and suffering appears to be that advanced by Professor Jaffe: Society is showing its concern for one who has suffered an affront to his personality and bodily integrity by offering "a consolation, a solatium." Perhaps the consolation or solatium flows as much to society as it does to the accident victim. Members of society may rest easier when they contemplate the possibility that they might suffer a similar fate, and they need no longer be concerned with the victim's unfortunate condition because "justice" has been done.

One may question, however, whether a consolation should be awarded to one whose pain is psychogenic or preserved by operant mechanisms. Even if there were a general social fund dedicated to alleviating the unsought sorrows and tribulations of life generally, the legitimacy of compensating such pain would be problematical. But the source of the victim's compensation in tort litigation is not a fund created to assist persons in making social adjustments at home or at work. Moreover, it is possible that the offering of such consolations may, by providing incentives and reinforcement for pain behavior, serve to increase the pain experienced by those who are to be consoled. Other members of society have no need for either the assurance that they will be treated similarly or a release from concern for the person suffering psychogenic pain.

75. The Michigan Automobile Accident Survey indicated that only 1.2% of tort liability payments come from uninsured sources. A. Conard, J. Morgan, R. Pratt, C. Votz & R. Bombaugh, Automobile Accident Costs and Payments 48, 50 n.54 (1964) [hereinafter Accident Costs].

76. Jaffe, supra note 1, at 222-25.
In any event, awards for pain are currently made under the tort system in circumstances in which the victim cannot receive or appreciate the consolation. Thus awards have been made for pain suffered by persons who died very soon after being injured,\textsuperscript{77} and to an infant who recovered completely during the first year of life from a serious infection caused soon after birth.\textsuperscript{78} The assumption in modern American society sometimes seems to be that everything has a money equivalent, but a short period of reflection leads all but the most jaded to a contrary conclusion. If we are to use money as a consolation we should be sure that we have given the consolation because the circumstances are appropriate, and not because everything has a money equivalent.\textsuperscript{79}

As Jaffe noted,\textsuperscript{80} the argument that a consolation be awarded a victim is most valid in cases of disfigurement or loss of a member. That aspect of the tort compensation scheme will not be significantly affected by the new medical views because most of that compensation is now given under the heading of mental suffering rather than pain.\textsuperscript{81} Some of the pain associated with disfigurement or loss of a

\begin{itemize}
\item \textsuperscript{77} E.g., St. Louis, Iron Mountain & S. Ry. Co. v. Craft, 237 U.S. 648 (1915).
\item \textsuperscript{78} Capelouto v. Kaiser Foundation Hosps., 7 Cal. 3d 889, 500 P.2d 880, 103 Cal. Rptr. 856 (1970).
\item \textsuperscript{79} Some insight into the use of money as a consolation in our culture may be obtained from observation of a primitive culture that uses no money or significant form of wealth. The stone age natives of the New Guinea highlands pursue what to us is a gruesome and senseless ceremony if a warrior is killed in battle. Fingers are cut from the hands of little girls and cremated and buried with the body of the warrior. See R. Gardner & K. Heider, Gardens of War 95-96 (1969). Among the motivations for such conduct must be the attempt to give group recognition to the seriousness of the death. My anthropologist friends inform me that in pursuing this practice a concern is shown for its effect on the primitive economy, so that it is the less useful ring fingers and little fingers that are severed. Would a native of New Guinea—assuming he could be informed about our practices of giving money for pain—be better able to understand our practice than we do theirs?
\item \textsuperscript{80} Jaffe, supra note 1, at 224.
\item \textsuperscript{81} The law has generally made no clear distinction between pain and suffering. 2 F. Harper & F. James, The Law of Torts 1322 (1956); C. McCormick, Damages 315 (1955). It has been recognized, however, that for legal purposes the term “pain” is more appropriately used in connection with the physical or physiological phenomenon, whereas “suffering” is more appropriately used in connection with the mental or emotional response to injuries and their probable significance for the future enjoyment of life. C. McCormick, supra, at 315; 22 Am. Jur. 2d Damages § 105 (1955); 4 Restatement of Torts § 905 (1939). “Suffering” thus includes a wide variety of reactions to physical injury, such as fear, worry, and anxiety about future health, embarrassment and humiliation about disfigurement or disabilities, depression, and resultant functional mental disturbance. In assessing the damages to be awarded for suffering consideration may be given to the inability to engage in sports or other recreational or family activities, the inability to perform customary household chores, and in general the inability to pursue the normal activities of life. Downie v. United States Lines Co., 359 F.2d 544 (3d Cir. 1965); Dagnello v. Long Island R.R. Co., 289 F.2d 797 (2d Cir. 1961); Hanson v. Reiss S.S. Co., 184 F. Supp. 545 (D. Del. 1960);
member may be psychogenic, but if the burden of proof lies with the defendant it is unlikely that juries will decide any but the clearest cases against the victim.

Another suggested function of the present law of damages is compensation for pain as a noneconomic loss. This theory is of dubious value even without consideration of the new medical evidence. It assumes that the degree of pain that the victim suffers determines the amount of money that he receives. In practice, however, while any payment to the plaintiff will provide some consolation for his noneconomic injury, the amount recovered depends upon a variety of factors other than the degree of harm done.\textsuperscript{82}

The concept that awarding damages deters the victim or others acting for him from taking retaliatory action may be served by the award of damages in cases of intentional wrongdoing, but it does not provide a compelling rationale for awarding damages for pain suffered because of unintentional injuries. A lawsuit claiming damages for pain may reflect hostility, but it is more likely pursued for financial gain. This common sense judgment is fortified by a study indicating that at the time of injury most automobile accident victims do not expect that they will be compensated for their pain.\textsuperscript{83}

The same study also revealed remarkably little resentment on the part of traffic victims toward other parties involved in the accident, and the possibility of recovery for pain and suffering produced very


The mental aspect of suffering is illustrated by one court's holding that damages for suffering may be reduced in light of the plaintiff's lack of comprehension or the ability to be rationally cognizant of his suffering. Helms v. United States, 231 F. Supp. 901 (N.D. Tex. 1964).

Although pain can be distinguished from suffering, a strong relationship between the two may exist in some cases. Thus, as mentioned above, see text accompanying notes 37-38 supra, the persistent phantom pains experienced by amputees are probably psychogenic and may be related to embarrassment or guilt over unacceptable dependency needs. Likewise, the suffering that one experiences because of physical disabilities or disfiguring scars may well be affected by the reactions of family, friends, or work companions, in a manner comparable to the way in which such reactions establish operant pain mechanisms.

82. See ACCIDENT COSTS, supra note 75, at 209-21; Adams, Economic-Financial Consequences of Personal Injuries, 7 ECON. & BUS. BULL. 5, 73 (1935).

83. See note 111 infra.
little change in attitude. Society has even less reason to deter retaliation by sufferers of psychogenic pain. If the victim "needs" his pain to achieve desired social adjustments he is not likely to attack the person who gave him what he wanted.

The concept that liability for damages deters parties from dangerous and harmful conduct is of limited applicability to cases involving unintended consequences. The random and questionable effect on the conduct of tortfeasors of liability for pain and suffering is apparent without consideration of the new medical views of pain. Those views give added emphasis to the unpredictability of the amount of damages that may be awarded if conduct results in painful injury, thus eliminating such awards from consideration as controlled regulators of conduct.

A final and desperate rationalization for pain and suffering damages is that they compensate the victim for economic losses that are not otherwise fully met. Some have noted that remuneration for a plaintiff's out-of-pocket losses do not fully return him to the position he would have occupied but for the tort because his award makes no provision for inflation or attorney's fees. Thus, it is argued that pain and suffering damages are proper because they make up for these uncompensated losses.

This defense of pain and suffering damages evokes a myriad of responses. It is unsound even without considering the new medical evidence. First, implicit in the suggestion that recoveries for pain properly indemnify economic losses lies the admission that they are not intended to compensate for noneconomic losses. Second, the suggestion that pain and suffering damages may properly be used to pay attorney's fees is disingenuous. The American judicial system has established that, except in specific instances, successful parties may

not recover litigation costs. There may be cogent arguments against the general rule, but if injured plaintiffs deserve to recover attorney's fees, the fees should be awarded to them on that basis, so that they receive neither more nor less than full compensation for those expenses.

Pain and suffering damages reveal their most serious lack of justification if one considers the overriding objective of tort law to be a proper allocation of risks and resources. Misallocations occur for two reasons: Transactional costs produce irrational distributions, and costs are not allocated on a justifiable basis. Awarding compensation for pain and suffering almost certainly produces economic distortions because it gives weight to a factor—pain—that has no definite economic measure. The distortions grow because pain is highly variable and the procedures for fixing its economic weight in given cases—for example, jury trials—are so expensive that there is a great incentive to avoid using them.

Focusing on accurate cost accounting, the question arises whether the cost of pain—and especially the cost of psychogenic pain—is more appropriately allocated to one of life's activities that may have a more significant causal relation to the pain than the defendant's tortious conduct.\footnote{The concern for maintaining accurate cost accounting is not as great under the negligence principle as it might be under other principles of liability. The negligence principle assumes the reallocation of accident costs will occur only when these costs are caused by a failure to exercise the care of a reasonably prudent person and are not the normal incidents of an activity. Moreover, even if we were to pursue a policy of proper allocation of resources and could prove that such a system required satisfaction of economic losses from accidents, we could not be certain that such a result would be ensured by eliminating pain and suffering damages. Nevertheless, there is a concern about the justice done by a system that, as will be seen, leaves demonstrable economic losses uncompensated while a substantial amount of the available economic resources are paid for an elusive item having no readily ascertainable market value.} The import of the new medical evidence on the accuracy of cost accounting is discussed below, in the context of investigating legislative attempts to allocate damages to one or another precipitating activity.\footnote{See text accompanying note 108 infra.} However, some variations of the allocation argument should be dealt with first.

Professors Blum and Kalven have challenged the efficacy of any attempted reallocation by suggesting that critics of compensation for pain and suffering have mistakenly considered it as a specific item of damage added by a judge or a jury to medical expenses and economic losses.\footnote{W. BLUM & H. KALVEN, PUBLIC LAW PERSPECTIVES ON A PRIVATE LAW PROBLEM 35 (1965).} They suggest that if pain and suffering recoveries were...
disallowed damage awards might remain as high as they are now, because juries search for a sum that corresponds with the dignitary aspects of injuries and do not add compensation for pain to what would otherwise be an appropriate award. Thus, an attempt to re-allocate resources by eliminating damages for pain would fail, as juries would simply increase the award in other categories.

As Professor Kalven himself has noted, however, the popular supposition is that juries are responsive to claims for compensation for pain. And even if Blum and Kalven are correct about jury behavior, lawyers assume that pain and suffering claims are of significance to the jury, and they almost certainly act in accord with those assumptions when they negotiate settlements. Moreover, it is unlikely that a jury would deal with the dignitary aspects of an injury if it had not first compensated for economic loss. It is not sensible to do something of doubtful efficacy while leaving undone something that would more certainly further a desired objective. Juries may be trusted to see that compensation of demonstrated economic losses more certainly returns the injured victim to his position before the accident than does the payment of damages for pain.

While increased damages for pain and suffering have achieved greatest publicity in the few cases in which enormous amounts have been awarded, they have had their major effect upon the pattern of compensation awards in the much more numerous cases in which smaller amounts have been recovered. The result has been an egregious misallocation of resources in that the substantial economic losses of some parties remain unsatisfied while other parties recover amounts vastly in excess of their relatively small economic losses.

90. If so, juries are acting in a manner consistent with Professor Jaffe's suggestion that damages for pain and suffering function as a solatium for the victim. See text accompanying note 76 supra.


93. A study conducted by the U.S. Department of Transportation indicates that while persons with economic losses of $1,000 or less received 46% of all tort payment dollars, those persons incurred only 33% of the economic losses. Ninety-three per cent of the payment dollars went to persons with economic losses of $10,000 or less, while they suffered only 84% of the economic losses. U.S. Dept. of Transportation, Motor Vehicle Crash Losses and Their Compensation in the United States 35 (1971) [hereinafter Crash Losses]. See also Franklin, Chanin & Mark, Accidents, Money and the Law: A Study of the Economics of Personal Injury Litigation, 61 Colum. L. Rev. 1 (1961). The misallocation of resources seems even greater in cases involving death or serious injuries. The tort system provided a recovery of 4.5 times economic losses for persons suffering losses of less than $500, whereas victims who had suffered economic losses of $25,000 or more recovered only 30% of their losses. Crash Losses, supra, at 36. Serious injury was defined to be an injury that resulted in medical

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The explanation for this misallocation of funds to pain and suffering rather than economic losses lies in the dynamics of the out-of-court settlements that govern almost all liability cases.\(^4\)

Limits on liability under insurance policies are undoubtedly a very significant factor in producing the incomplete compensation of the largest economic claims. Of greater importance in determining where the available resources go is the fact that from the defense side it may be wise to settle a case without the expense of careful investigation and evaluation. Particularly, it makes sense from a business viewpoint for insurance companies to buy up small claims—those that involve little or no economic loss—at a relatively low price, thus avoiding the possibility of large judgments for pain and suffering. Consequently, out of the 44 cents of the liability insurance premium dollar that finally reaches automobile accident victims, 21.5 cents is used to pay general damages, such as pain and suffering, leaving only 22.5 cents for compensation of economic losses.\(^5\)

One may protest, however, that in the dynamics of negotiation the threat of substantial damages for pain and suffering is necessary to force compensation for economic losses. But, as indicated above, the threat has not worked for those who suffer the most serious harm and it appears to have worked too well for those who do not have substantial economic losses. In any event, the integrity of the law is not served by permitting recovery for the alleged purpose of changing the balance of power in negotiations. It would be far more direct and efficacious to change the balance of bargaining power by allowing recovery of attorney’s fees, expenses of litigation, or interest on sums ultimately found due.

B. Legislative Allocation: Automobile Accident Reparation Plans

Drastic proposals for revision of the tort law system have been made in the various no-fault plans that have been proposed and even adopted in a number of states.\(^6\) Probably the most controversial costs (excluding hospital costs) of $500 or more, or two weeks or more of hospitalization, or, if working, three weeks or more of missed work, or, if not working, six weeks or more of missed normal activity. 1 U.S. DEPT. OF TRANSPORTATION, ECONOMIC CONSEQUENCES OF AUTOMOBILE ACCIDENT INJURIES 17 (1970). Persons who suffered only 7% of the economic losses in death or serious accident cases received 27% of the net tort payments. CRASH LOSSES, supra, at 40.

94. See CRASH LOSSES, supra note 93, at 37.
95. Id. at 51-52. Of the 22.5 cents used to compensate for economic losses, 8 cents is duplicative of payments from other sources, leaving only 14.5 cents for otherwise uncompensated economic losses. Id.
96. Several states have enacted automobile accident reparation laws that bar
aspect of no-fault automobile accident reparation plans has been the elimination or drastic limitation of compensation for pain and suffering. Hence, the new medical views of pain are of great significance for an appraisal of the provisions found in the automobile accident reparation plans. It is in legislatures, rather than courts, that general principles may properly be framed for the majority of cases.

The pertinent provision of the proposed Hart-Magnuson National No-Fault Motor Vehicle Insurance Act currently reads as follows:

A person remains liable for damages for noneconomic detriment in excess of $2,500, if the accident results in

(A) death, serious and permanent disfigurement, or other serious and permanent injury; or

(B) more than ninety continuous days of total disability. As used in this subparagraph, “total disability” means medically determinable physical or mental impairment which prevents the victim from performing all or substantially all of the material acts and duties which constitute his usual and customary daily activities.97

The Uniform Motor Vehicle Accident Reparation Act proposed by the Commissioners on Uniform State Laws contains a comparable limitation on tort liability:

Tort liability with respect to accidents occurring in this State and arising from the ownership, maintenance, or use of a motor vehicle is abolished except as to:

....

(7) damages in excess of $5,000 for non-economic detriment, but only if the accident causes death, significant permanent injury, serious permanent disfigurement, or more than 6 months of complete inability of the injured person to work in an occupation. “Complete inability of an injured person to work in an occupation” means inability to perform, on even a part-time basis, even some of the duties required by his occupation or, if unemployed at the time of recovery of damages for pain and suffering in cases not involving impairment of bodily function or serious permanent disfigurement, unless the medical and hospital bills necessary for treatment of the injury exceed a fixed dollar figure. See, e.g., CONN. GEN. STAT. ANN. § 38–323(a)(7) (Supp. 1973) ($400); FLA. STAT. ANN. § 627.737(2) (Supp. 1973) ($1,000); KAN. STAT. ANN. § 40–3117(b) (1973) ($500); MASS. ANN. LAWS ch. 231, § 6D (Supp. 1973) ($500); N.Y. INS. LAW §§ 671(4)(b), 673(1) (McKinney Supp. 1973-74) ($500).

Part of the Florida provision establishing a threshold for recovery of pain and suffering damages was recently ruled unconstitutional by the Florida supreme court. See Lasky v. State Farm Ins. Co., No. 42,856 (April 17, 1974).

the injury, any occupation for which the injured person was qualified. 98

The Michigan no-fault motor vehicle insurance act permits recovery under tort law for noneconomic loss "... only if the injured party has suffered death, serious impairment of body function, or permanent serious disfigurement." 99

The reluctance to allow recovery for pain and suffering expressed in these proposals is not a response to the new medical evidence discussed here. In part the exclusion of compensation for pain reflects the understanding that such claims are weaker under a no-fault system because the victim's recovery is no longer grounded on the presence of a culpable defendant. 100 Also, to some extent the reluctance to allow such compensation is motivated by a concern for the fiscal viability of the no-fault system and the difficulty and expense of assessing the proper amount of compensation for pain and suffering. 101 The world is not perfect, and the difficulties created by small claims for pain and suffering provide a justification for settling for less than an exquisite perfection in compensating such claims. Pain endured over a long period of time is obviously a matter of greater concern. Here the new medical views of pain may make a valuable contribution in formulating plans.

Although the medical data do not permit precise statement of what proportion of chronic pain has no organic or physiological basis, the proportion is apparently quite substantial. 102 Operant mechanisms are among the most common causes of chronic pain. 103 Knowledge that chronic pain is likely to be psychogenic or preserved by operant mechanisms may reduce the sympathy or concern that

98. UNIFORM MOTOR VEHICLE ACCIDENT REPARATION ACT § 5(9)(7). "Non-economic detriment" is defined in section 1(9)(9) of the Act to mean "... pain, suffering, inconvenience, physical impairment, and other nonpecuniary damage recoverable under the tort law of the State. The term does not include punitive or exemplary damages."


100. See Jaffe, supra note 1, at 235; James, supra note 70, at 297. This consideration has provided a major argument for elimination of pain and suffering compensation from no-fault automobile accident reparation plans. See, e.g., R. REITON & J. O'CONNELL, BASIC PROTECTION FOR THE TRAFFIC VICTIM 359-61 (1965). See also L. GREEN, supra note 69, at 88.

101. That determination of the amount of compensation that should be given for pain and suffering is a substantial obstacle to settlement of claims under the existing tort system is clearly indicated by the Michigan automobile injury survey. Sixty-six per cent of both claimants and defense lawyers designated it as a cause of disagreement causing a trial and seventeen per cent of both groups of lawyers designated it as the first ranking factor. ACCIDENT COSTS, supra note 82, at 214-15.

102. See note 64 supra and text accompanying notes 57-64 supra.

103. See text accompanying note 61 supra.
some persons would otherwise feel for the accident victim. More important, it indicates that compensation for pain cannot with confidence be assessed as a cost properly allocated to the activity of driving automobiles,\textsuperscript{104} and that it may therefore properly be eliminated from a no-fault plan.

If chronic pain usually is suffered only by certain persons and if it is caused or preserved by operant mechanisms that function only because of interpersonal problems in family, work, or other social relationships, it is a cost more properly allocated to the activities or forces causing the stress in the victim's life than to automobile transportation. Indeed, if the pain is caused or preserved by operant mechanisms—if it is in fact "needed" or "desired"—it is likely that some other event would soon have triggered a career of suffering. There may be a cause-in-fact relationship between the automobile accident and the initial pain, but it is not an adequate basis for requiring users of automobiles to provide compensation for the victim's ongoing experience of self-serving psychogenic pain.

The latest medical conceptions of pain thus support the limitations on pain and suffering claims found in most automobile accident reparation plans. However, the plans do not bar such claims completely. The extent to which the provisions will prevent recovery for psychogenic pain depends upon whether words such as "permanent injury" and "serious impairment of body function" are construed to require a substantial and identifiable organic or physiological base for the injury or impairment. Recoveries for psychogenic pain will probably be allowed where the pain has impaired body function or disabled one from working.\textsuperscript{105} To the extent that psychogenic pain is not properly allocable to the activity of operating automobiles these recoveries will improperly charge automobilists. Recoveries for psychogenic pain may also be allowed in cases of disfigurement or loss of a limb. Despite the mutilation, if tissue destruction or irritation has ceased, the peripheral nerves no longer receive the stimulation that causes them to send impulses to the central nervous system,\textsuperscript{106} and continued pain is probably psychogenic or produced by operant mechanisms.\textsuperscript{107} Perhaps the physical trauma required to produce these injuries, however, makes even psychogenic pain a cost properly allocable to the operation of automobiles.

\textsuperscript{104} W. Blum & H. Kalven, supra note 89, at 57-61; G. Calabresi, supra note 66, at 133-97.
\textsuperscript{105} See text accompanying notes 52-55 supra.
\textsuperscript{106} See authorities cited in note 6 supra. See also Bonica, supra note 51, at 82.
\textsuperscript{107} See R. Sternbach, supra note 6, at 131-82.
It should be noted that compensation for nonpsychogenic pain does not result in a misallocation of costs (assuming the costs can be measured). Numerous factors other than the use of an automobile—some social and some personal—must converge after an accident to produce psychogenic pain. For pain that does have a physiological basis, however, no such convergence of forces is necessary, and use of the automobile remains the dominant factor in the loss suffered. In this respect, schemes such as the Michigan act,108 which at least requires an initial physiological basis for compensable pain by conditioning the maintenance of tort actions on death, serious impairment of body function, or permanent serious disfigurement, may be preferred over flat dollar limitations, such as the exclusion of the first 5,000 dollars of pain and suffering damages under the Basic Protection Act proposed by Professors Keeton and O'Connell.109

Even the Michigan act, however, may reflect no more than a judgment that persons suffering severe injuries deserve some compensation for pain, and, since it is beyond available economic resources to fully compensate such persons without regard to fault, some tort actions are preserved. This judgment has the appeal of traditional tort law, but if no-fault schemes as a whole are designed to make automobile transportation bear only the costs that are properly allocable to it, it should be recognized that psychogenic pain is not such a cost. Accordingly, the provisions in no-fault plans preserving tort recoveries in certain cases should be revised to preclude recoveries for psychogenic pain.110

The new medical evidence proves useful even where tort claims are preserved. Knowledge that physiologically-based pain may be maintained or magnified by operant mechanisms suggests that there should be no dollar thresholds on the amount of pain that must be suffered to make compensation possible. The reinforcement power of money is obvious, and an injured person may well heighten his suffering to qualify for an award.111

108. See note 99 supra and accompanying text.
109. PROPOSED MOTOR VEHICLE BASIC PROTECTION INSURANCE ACT § 4.2(1), in R. KEETON & J. O'CONNELL, supra note 100, at 323.
110. For example, the words "physical injury" could be substituted for the word "injury" in provisions saving tort actions, and "physical injury" could be defined to mean an injury for which there is an identifiable organic or physiological base.
111. A survey made by O'Connell and Simon suggests that this should not be a matter of great concern. It indicates that only 28 per cent of the persons injured in automobile accidents expected at the time of the accidents that they would be paid for pain and suffering, and only 34 per cent of those who did not initially know about payments made for pain and suffering ever learned about them. J. O'CONNELL & R. SIMON, supra note 73, at 19-20. Consulting a lawyer did not significantly increase awareness of the possibility of obtaining damages for pain; only
The converse of this argument is also important. Adoption of a no-fault accident reparation plan that permits no recovery for pain might actually reduce the pain experienced by accident victims, because it would make certain the recovery of economic losses and reduce the uncertainties and anxieties that beset an accident victim under the tort system. As mentioned above,\textsuperscript{112} there is little doubt that anxiety increases the intensity of pain. True, such anxiety is usually about the injury, and is distinguishable from anxiety about whether one will be compensated. But the anxieties created by feeling sensation from and viewing a bandaged limb and the anxieties about whether the limb will operate well enough to permit one to earn a living certainly overlap. If the security that came to soldiers on Anzio beachhead from knowing that they would be removed from the battle zone could reduce their pain,\textsuperscript{113} it is not implausible that the security of knowing that economic losses will be reimbursed may reduce the pain of one who contemplates his economic future.

Even if compensation is limited to economic loss, the form of compensation should be considered in light of the new medical evidence. A common feature of automobile reparation plans is reimbursement of lost earnings on an installment basis for a stated period of time.\textsuperscript{114} The danger that claimants might malinger in order to stretch their eligibility to the maximum is obvious. The same concern exists regarding the provision of the Uniform Act preserving

\textsuperscript{36} per cent of those who initially did not know about payments for pain and suffering and who later consulted a lawyer learned about them, \textit{id.} at 25, and most of those questioned who knew that damages could be awarded for pain and suffering said that the possibility of payment had no effect on their pain. \textit{Id.} at 26. The reliability of this last finding, however, diminishes when one considers how unlikely it is that a victim would ever admit or know that the possibility of a larger recovery had affected his pain. Moreover, the O'Connell and Simon survey involved cases in which the median award in litigated cases was only $200, and the median for all cases surveyed only $487. \textit{Id.} at 16. The survey, therefore, probably does not reflect the extent to which claimants become aware of payments for pain and suffering in more serious cases or the effect of that knowledge on their pain. In cases involving large claims many lawyers probably would inform their clients that their pain is an element of damages. In any case, proper preparation by a lawyer of a large claim would involve a detailed investigation of the pain experienced by the client and hence alert all but the most obtuse to the fact that pain is an important part of the claim. That knowledge of payment for pain and suffering affects conduct is indicated by the fact that only 24 per cent of all survey respondents consulted a lawyer, whereas 40 per cent of those who initially knew about payment for pain and suffering did so, \textit{id.} at 20.

\textsuperscript{112} See text accompanying notes 17-25 \textit{supra}.
\textsuperscript{113} See text accompanying notes 17-22 \textit{supra}.
tort claims in cases involving a six month inability to work.\textsuperscript{115} There must now be added concern that operant mechanisms and cognitive dissonance\textsuperscript{116} will create or preserve physically disabling pain. Perhaps lump sum payments, which are permitted, for example, under the Uniform Motor Vehicle Accident Reparation Act,\textsuperscript{117} would be preferable to installment payments. In any case, information comparing the activities of persons receiving lump sum payments and those compensated on an installment basis is needed.

C. \textit{Practical Implications of the New Views Under Present Tort Law}

1. \textit{Psychiatric or Psychological Examination of a Plaintiff}

Absent legislation barring recovery for pain, the new medical evidence may have an effect upon the law developed and applied by judges and juries.\textsuperscript{118} If the effect is to be that of limiting compensation, more will be required than a showing of a generalized possibility that pain sensations are psychogenic. A defendant will have to prove through testimony of expert witnesses that the pain suffered by a particular plaintiff is psychogenic.

It may be difficult, however, to find doctors who are sufficiently familiar with the new medical views of pain to make an assessment of whether a claimant's pain is psychogenic. There are no statistics on such a question, but it is likely that most practicing physicians adhere to the older, specific pain receptor theory of how pain is reported to the brain. Furthermore, the average busy physician is understandably

\begin{itemize}
\item \textsuperscript{115} Uniform Motor Vehicle Accident Reparation Act \textsection{} 5(a)(6) (1972).
\item \textsuperscript{116} See text accompanying notes 42-43 supra.
\item \textsuperscript{117} Section 26 of the Act permits lump sum settlement, not exceeding $2500, without court intervention. Settlements exceeding that amount require court approval.
\item \textsuperscript{118} Professor Morris suggests that it is inappropriate for the judiciary to undertake comprehensive revision of the law regarding pain and suffering. Morris, supra note 1, at 477. He argues that legislatures have better facilities for investigation and formulation of law than courts, that the law should not be changed retroactively to reduce the claim of a victim awaiting the proper time for settlement, and that courts should not risk public censure by undertaking what would be recognizable as a lawmaking function. Id. at 482-83. However, as I have demonstrated elsewhere, see Peck, \textit{The Role of the Courts and Legislatures in the Reform of Tort Law}, 48 Minn. L. Rev. 265 (1965), legislatures seldom if ever use their information-gathering powers for the purpose of proposing or formulating legislation; courts may, if it is deemed desirable, utilize the technique of prospective overruling, and the judiciary rightfully plays an active role in the reform of tort law. Cf. R. Kerron, \textit{Venturing To Do Justice} (1969). The judiciary should utilize a case-by-case development in order to produce what might be considered the experimental data from which it may more confidently formulate a complete statement of the rules applicable to psychogenic pain. Cf. Peck, \textit{A Critique of the National Labor Relations Board's Performance in Policy Formulation: Adjudication and Rule-Making}, 117 U. Pa. L. Rev. 254, 271-72 (1968).
\end{itemize}
not likely to have made a personality survey of his patient or to have investigated the interpersonal stresses to which his patient has been subjected at home or at work. A neurologist, psychiatrist, or psychologist hired by the defendant would be the more likely source of such expert testimony. However, the expert's examination of the plaintiff may prove procedurally complicated.

Rule 35 of the Federal Rules of Civil Procedure makes express provision for a physical or mental examination by a physician when the physical or mental condition of a party is in controversy. Comparable provisions are found in the procedural rules of a number of states. Psychiatric examinations have been ordered under these rules, but there is very little case law to assist one in determining whether they provide a basis for an examination to determine whether a plaintiff's pain is psychogenic. By the language of rule 35 such an examination cannot be ordered unless the plaintiff's "mental or physical condition" is "in controversy" under the prevailing substantive rules of tort law. The nature of the plaintiff's pain in this instance would relate to his physical and mental condition both; and, since the amount of compensation would depend on the examination, his condition should be considered "in controversy."

Assuming that examinations may be ordered under rule 35, or

119. (a) Order for examination. When the mental or physical condition (including the blood group) of a party, or of a person in the custody or under the legal control of a party, is in controversy, the court in which the action is pending may order the party to submit to a physical or mental examination by a physician or to produce for examination the person in his custody or legal control. The order may be made only on motion for good cause shown and upon notice to the person to be examined and to all parties and shall specify the time, place, manner, conditions, and scope of the examination and the person or persons by whom it is to be made.

FED. R. CIV. P. 35.


121. A decision of a New Jersey county court held that it was proper for a deputy of the Workmen's Compensation Division to order sua sponte that a claimant be examined by an independent neuropsychiatrist. It was also held that the neuropsychiatrist's testimony that the claimant suffered from a neurosis supported an increase in disability payments. Polulich v. J.G. Schmidt Tool Die & Stamping Co., 46 N.J. Super. 135, 134 A.2d 29 (1957). On the other hand, a federal district court refused to order a mental examination of a plaintiff in an action for invasion of privacy in which the plaintiff alleged emotional distress, mental anguish, and injury to personal health, welfare, and well-being, because it was not satisfied that the mental condition of the plaintiff had been placed in controversy. The court stated that it would entertain a motion for a mental examination after hearing the opinion of the physician who conducted the physical examination. Stuart v. Burford, 264 F. Supp. 191 (N.D. Okla. 1967). In any case, precedent has limited value in this area. Medicine is constantly advancing, and each case is different. C. WRIGHT & A. MILLER, supra note 120, at 684.
a comparable state rule, a question may arise as to whether they may be made by psychologists or whether only those holding a medical degree will be considered “physicians” within the meaning of the rule. The question may be significant because an important diagnostic tool used in the operant treatment of pain is the Minnesota Multiphasic Personality Inventory, an elaborate personality test consisting of over 550 written, true-false questions. The answers give an outline of the subject’s personality from which generalizations may be made about his attitude toward life and his susceptibility to operant mechanisms for production of pain. Although its value is recognized by the medical profession, the test is more frequently used by psychologists than psychiatrists. Indeed, operant treatment of chronic pain has its foundations in the teachings of psychologist B. F. Skinner, rather than in traditional medical or psychiatric methods. The qualification of psychologists to conduct an examination under rule 35 is therefore an important but unresolved question. As a compromise solution, a psychiatrist might have a psychologist administer the test as part of the psychiatrist’s total examination of the party.

2. The Per Diem Argument

New styles of advocacy have undoubtedly contributed to the dramatic increase in damages awarded for pain and suffering. One recently developed tactic to which the new medical views have application is the per diem argument. The per diem argument, which stresses a unit of time system for determining the amount of damages that should be given for pain and suffering, is a favored—and controversial—tool of claimants’ attorneys. Melvin Belli first described the technique as follows:

You must break up the 30-year life expectancy into finite detailed periods of time. You must take these small periods of time, seconds and minutes, and determine in dollars and cents what each period is worth. You must start with the seconds and minutes rather than at the other end of thirty years. You cannot stand in front of a jury and say, “Here is a man horribly injured, permanently disabled, who

122. Operant treatment makes use of operant conditioning. See note 51 supra.
124. See Bonica, supra note 51, at 83 (test is frequently applied at the Pain Clinic of the University of Washington School of Medicine).
will suffer excruciating pain for the rest of his life, he is entitled to a verdict of $225,000.125

Using the case of a man with an irreparably injured back and a thirty-year life expectancy, Belli illustrated a possible closing argument to the jury:

You are asked to evaluate in dollars and cents what pain and suffering is. This honorable court will instruct you that a man of this age has a life expectancy of thirty years. Let's put it to you bluntly, what's pain and suffering worth? You've got to answer this question. You've got to award for this as well as the special damages and loss of wages. Let's take Pat, my client, down to the waterfront. He sees Mike, an old friend. He goes up to him and says, "Mike, I've got a job for you. It's a perfect job. You're not going to have to work any more for the rest of your life. . . . You don't have to work even one second. All you have to do is to trade me your good back for my bad one and I'll give you five dollars a day for the rest of your life. Do you know what five dollars a day for the rest of your life is? Why that's $60,000! Of course, I realize that you are not going to be able to do any walking, or any swimming, or driving an automobile, or be able to sit in a moving picture show; you're going to have excruciating pain and suffering with this job, thirty-one million seconds a year, and once you take it on, you'll never be able to relieve yourself of this, but you get $60,000!" Do you think that Mike would take on that job for $60,000?126

The obvious appeal of such an argument before a jury makes it understandable that defense counsel have labored hard to prevent its use. The major arguments against the propriety of the per diem tactic have been concerned with whether it has a foundation in evidence, whether counsel should be permitted to substitute their statements for evidence, whether counsel making such an argument invade the province of the jury, and whether a mathematical formula creates an illusion of certainty.127 By now the issue has been settled in most jurisdictions, with a majority allowing the use of the per diem argument.128

125. M. BELLI, THE USE OF DEMONSTRATIVE EVIDENCE IN ACHIEVING "THE MORE ADEQUATE AWARD" 33-34 (1952) [hereinafter DEMONSTRATIVE EVIDENCE]. See also 1 M. BELLI, MODERN TRIALS 870-72 (1954).

126. DEMONSTRATIVE EVIDENCE, supra note 125, at 34.

127. An excellent summary of the cases and law review literature dealing with the problem may be found in 2 F. HARPER & F. JAMES, supra note 81, at 141-45 (Supp. 1968). See also Baron Tube Co. v. Transport Ins. Co., 356 F.2d 868 (5th Cir. 1966); Beagle v. Vasold, 65 Cal. 2d 166, 417 P.2d 673, 53 Cal. Rptr. 129 (1966).

128. The Supreme Court of California concluded that as of 1966 twenty-one jurisdictions permitted the argument and eleven did not. Beagle v. Vasold, 65 Cal. 2d
The new medical evidence concerning variations in pain tolerances and thresholds suggests the impropriety of setting a price for pain on a per unit basis. The experience of and reaction to pain may vary widely from plaintiff to plaintiff and juror to juror, and an argument such as the per diem argument, which gives a value to pain that is supposedly valid for all persons, is highly questionable.

Of even greater concern is the discovery that Mr. Belli's client with the irreparably injured back may well be a "low back loser" who has "applied for the job" of suffering because of the secondary gains that his painful career brings him. There is an obvious danger in asking jurors who have no desire for such a "job" to assess damages on the basis of the pay they personally would find appropriate.

These new arguments are probably not sufficient to reopen debate over the per diem argument in jurisdictions in which the issue is settled, but they most certainly may be used in those jurisdictions in which the permissibility of the per diem argument rests in the discretion of the trial court.

3. Psychogenic Pain and Traditional Tort Concepts

a. Taking a victim as the tortfeasor finds him. The new medical evidence may have only a limited effect on tort law if it is considered simply a better explanation of why an accident victim experiences pain. The impact of the evidence depends on how it is related to exculpation of the wrongdoer under familiar tort law concepts. The remainder of this article suggests that such concepts provide an opportunity for the use of the evidence to limit compensation for pain.

At first glance the well-established principle that the tortfeasor takes his victim as he finds him seems to contradict this conclusion. The principle requires that the wrongdoer bear the consequences of his tortious act regardless of any condition that made the plaintiff...
susceptible to greater harm than the ordinary person would have suffered as a result of the defendant's conduct.\textsuperscript{132} It applies not only to intentionally inflicted injuries, where it fits most appropriately, but to negligently inflicted injuries as well.\textsuperscript{133}

Although usually invoked where the plaintiff's damages were exacerbated by a preexisting physical weakness, courts have applied the principle in cases in which excess pain and suffering were due to the plaintiff's neurotic condition.\textsuperscript{134} In \textit{Thomas v. United States},\textsuperscript{135} the leading decision to this effect, the plaintiff was injured when a government mail truck collided with the automobile in which she was riding. Three years before the accident the plaintiff had been hospitalized and treated for six months for a psychoneurotic depressive reaction, and the injuries she received were a substantial factor in arousing this dormant condition. She suffered pain for more than two years, wore a neck brace for more than six months, was hospitalized three times, and was unable to return to work for two years.

The court of appeals reversed for lack of supporting evidence a trial court finding that the plaintiff had suffered "gratification"\textsuperscript{136} from her pain and suffering. However, the court noted evidence that the plaintiff was "ripe"\textsuperscript{137} for the reaction she experienced and concluded that the superimposition of physical injuries on her mental problem increased her anxieties until she could no longer control them.\textsuperscript{138} As a result she underwent a more extreme reaction than would normally follow. Nevertheless, the court held that the secondary effect of the injuries upon the plaintiff did not lessen the obligation of the government to pay for her pain and suffering. In rejecting the government's argument that pain resulting from a plaintiff's psychological makeup is not compensable, the court said:


\textsuperscript{133} \textit{RESTATEMENT (SECOND) OF Torts} \textsuperscript{\textsc{135}} § 461, comment b (1965); \textit{2 F. Harper & F. James, supra note 81, § 20.3, at 1127-28.}

\textsuperscript{134} \textit{Bourne v. Washburn}, 441 F.2d 1022 (D.C. Cir. 1971); \textit{Steinhauser v. Hertz Corp.}, 421 F.2d 1169 (2d Cir. 1970); \textit{Parrish v. United States}, 357 F.2d 828 (D.C. Cir. 1966); \textit{Thomas v. United States}, 327 F.2d 379 (7th Cir. 1964).

\textsuperscript{135} 327 F.2d 379 (7th Cir. 1964).

\textsuperscript{136} 327 F.2d at 380.

\textsuperscript{137} 327 F.2d at 381.

\textsuperscript{138} 327 F.2d at 381.
"Until the sciences of law, psychiatry and psychology co-develop to a stage at which there is a fuller understanding of human pain and suffering, we think it unwise to formulate a rule of damages which reduces the compensation for an injured plaintiff to a 'net,' after crediting the tortfeasor with a secondary effect of the injury due plaintiff's psychic weakness, aroused by the injury." 139 The Courts of Appeals for the District of Columbia 140 and the Second Circuit 141 have similarly held that damages may be recovered for pain suffered because injuries received in an accident cause a recurrence or aggravation of a preexisting psychic weakness.

It is not surprising that courts have so held. It has become conventional to discuss mental disorders in terms of mental "illness," a construct that carries with it a strong suggestion of a physiological base. 142 Uncritical acceptance of such a view, or unwillingness to be persuaded by a psychiatric analysis disclosing a nonorganic base, leads to treatment of preexisting psychic weakness as though it were a thin skull, a weak back, or hemophilia—the classic hornbook illustrations of the principle requiring a tortfeasor to take his victim as he finds him. 143 However, as noted above, 144 not all persons suffering from psychogenic pain have personality disorders, and it is quite unnecessary to postulate some form of emotional disturbance for the existence of operant pain. It is therefore inaccurate to characterize such pain as a product of a preexisting physical or mental condition of the person injured. The pain is experienced because family, work, or other social factors lead the victim subsequently to adopt a life of chronic pain. While the tortfeasor may have to take his victim as he finds him, it is a different matter to require the tortfeasor to take his victim as the victim's family, friends, or co-workers relate to him and as he subsequently responds to those relationships.

Moreover, the rationale for the principle that the tortfeasor must take his victim as he finds him is by no means clear. The doctrine originated when the principal mode of tort recovery was an action for trespass, in which no distinction was drawn between foreseen and

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139. 327 F.2d at 381 (footnote omitted).
142. For a vigorous criticism of this view, see T. Szasz, The Myth of Mental Illness (1961).
144. See text following note 32 supra.
unforeseen consequences. Once established, the principle may have been carried to negligence actions for reasons other than those that led to its adoption. Certainly it has served the judiciary well by sparing it the difficult tasks of deciding how severe an injury “should” have become, how much pain “should” have been suffered, or how much income “should” have been lost.

The new medical understanding, however, makes it administratively feasible to distinguish between psychogenic pain and pain that has a physiological base, particularly if the burden of proof is on the defendant. Indeed, defense counsel might even be able to establish what pain is suffered because of a preexisting psychic disorder. Thus, that portion of the plaintiff’s pain properly allocable to the defendant’s actions may be isolated, and recovery limited accordingly. Viewed in terms of how well compensation for psychogenic pain serves the interests of society, the principle requiring the tortfeasor to take his victim as he finds him should not inexorably require compensation for psychogenic pain.

b. Avoidable consequences. Another familiar principle of tort law is that a victim is not entitled to recover for harm he could have avoided by making reasonable efforts or expenditures after the tortious injury. The principle bears a close relationship to the contributory negligence doctrine; factors considered in determining whether a person made reasonable efforts to avoid harmful consequences are generally the same as those considered in determining whether conduct is negligent. However, contributory negligence must be a cause in fact of the accident or injury to bar recovery. By contrast, conduct to which the avoidable consequences principle is applicable simply affects the amount of resultant harm. A typical case is that of an injured person’s failure to obtain medical treatment that would have reduced the seriousness of his injuries. The roots of the principle include a policy of discouraging waste and community notions that fair compensation need not extend to injuries that are in a practical sense self-inflicted.

While the principle usually applies when the plaintiff fails to mitigate his harm after the tort, related cases include those in which

145. W. Prosser, supra note 143, § 7, at 23.
147. Id., comment c.
149. Ellerman Lines, Ltd. v. The President Harding, 288 F.2d 288, 290 (2d Cir. 1961); RESTATEMENT OF TORTS § 918, comment a (1939).
the plaintiff’s negligent conduct *prior* to the accident contributes to the seriousness of his injuries, although not a legal cause of the accident. In *Mahoney v. Beatman*, a classic case of this sort, the defendant’s automobile crossed the center line and grazed the left front wheel of the plaintiff’s automobile. Because of its speed, the plaintiff’s automobile went out of control and was demolished; only slight damage had been done by the contact with the defendant’s automobile. A majority of the Connecticut supreme court concluded that the plaintiff was entitled to full recovery, but its opinion has never received the approval that the commentators have bestowed upon Justice Maltbie’s dissent. Justice Maltbie would have limited the plaintiff’s recovery to the damage done by the initial impact and denied recovery for that part of the damages attributable to the excessive speed of plaintiff’s automobile.

A comparable problem recently came before the Court of Appeals for the Second Circuit, and Judge Friendly gave his approval to Justice Maltbie’s view. The owner of a building sought to recover for losses suffered when employees of a tenant negligently failed to call the fire department after the outbreak of a fire. Because of building code violations of the owner, however, the building was particularly susceptible to fire. Judge Friendly concluded that a jury could consider the faulty construction of the building in awarding damages to the owner, and he gave his approval to a jury verdict of 120,000 dollars, in lieu of the 820,000 dollars actually lost by the plaintiff, as a just, although unscientific, apportionment.

What might be called the “seat belt” cases have recently presented additional occasions for considering the principle of avoidable consequences and the related treatment of contributory negligence that does not cause an accident but does aggravate the injuries suffered. A number of courts have allowed juries to consider whether damages should be reduced because the plaintiff’s injuries in an automobile accident would have been less if he had been wearing a seat belt.

150. 110 Conn. 184, 147 A. 762 (1929).
152. 110 Conn. at 206-07, 147 A. at 770-71.
other courts have indicated that the failure to wear an available seat belt may go to the jury on the question of contributory negligence.155

The applicability of the avoidable consequences doctrine to psychogenic pain turns in large part upon whether the adoption of a career of pain after injury is something that reasonable efforts or expenditures could have avoided. Since victims of psychogenic pain are generally unconscious of the mechanisms that produce their pain, it is difficult to charge them on a subjective standard with failure to behave reasonably. Perhaps also their reactions following injury should not be characterized as conduct because the reactions are unconscious rather than understood and voluntary acts. However, the law ordinarily determines reasonable conduct on the basis of an objective standard.156 Unless the actor is a child or a mental incompetent deficiencies and variations of temperament and emotional balance are not taken into account.157 If an objective standard is used to judge the response to accidental injury the conclusion might well be reached that psychogenic pain is an "avoidable consequence." The reactions that produce it certainly are not socially desirable, nor are they reactions that all persons similarly situated would have had. And, to the extent that the plaintiff contributed to his damages before the accident by surrounding himself with a social environment that is conducive to pain, his pain was "avoidable." Community notions of fairness might well lead to a conclusion that compensation is not required for such conduct.158

c. Inevitable consequences. If a defendant cannot invoke the avoidable consequences principle, he may perhaps avoid liability by


156. RESTATEMENT (SECOND) OF TORTS § 283, comment c (1964); RESTATEMENT OF TORTS § 918, comment c (1939).

157. Id. § 283(b), comment b.

arguing the relevance of the rule of causation and damages applicable to inevitable consequences. According to this rule an actor is not responsible for harm that another would have suffered even if the actor had not injured him.\textsuperscript{159} In the leading case of \textit{Dillon v. Twin State Gas & Electric Co.},\textsuperscript{160} a fourteen-year-old boy playing on a girder of a bridge lost his balance and fell. He attempted to save himself from the fall by grabbing an electrical wire that the defendant had negligently failed to insulate. The boy was electrocuted and suit was brought by his estate. The New Hampshire court held that if it could be shown that the boy would have fallen with serious injury regardless of the defendant’s negligence—that is, that some injury was an inevitable consequence of the boy’s situation without regard to the defendant’s acts—his loss of life or earning capacity should be measured by its value in light of his inevitable injury.\textsuperscript{161}

The inevitable consequences doctrine follows from the traditional view that conduct is not a cause in fact of harm that would have occurred irrespective of the conduct. That view has been accepted in the \textit{Restatement of Torts},\textsuperscript{162} subject to an exception that permits, but does not require, a finding that the actor’s negligent conduct was a substantial cause of harm even though there was another force equally capable of producing the harm.\textsuperscript{163} It is consistent with the requirement that events occurring after tortious injury but prior to trial be taken into consideration if they indicate that the damages suffered were either greater or less than would have been expected at the time of the accident.\textsuperscript{164} The principle has found recognition in recent years in cases involving a preexisting physical condition of a plaintiff that might have worsened even without the tortious injury.\textsuperscript{165} More to the point, it has also been recognized in a

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\item[159.] See W. Prosser, supra note 143, § 65, at 423-24.
\item[160.] 85 N.H. 449, 163 A. 111 (1932).
\item[161.] 85 N.H. at 457, 163 A. at 115.
\item[162.] \textit{Restatement of Torts} § 432(1) (1934). See also W. Prosser, supra note 143, § 52, at 321-22. This principle is consistent with the principle that events occurring after tortious injury, but prior to trial, should be considered as relating to the foreseeability of the amount of damages. See \textit{Restatement of Torts} § 910, comment b (1939); Seavey, \textit{The Effect on Tort Damages of Events Occurring Before Trial}, 66 Harv. L. Rev. 1237 (1953).
\item[163.] \textit{Restatement of Torts} § 432(2) (1934).
\item[164.] \textit{Restatement of Torts} § 910, comment b (1939); Seavey, supra note 162.
\item[165.] See, e.g., Henderson \textit{v. United States}, 328 F.2d 502, 504 (5th Cir. 1964); Evans \textit{v. S.J. Groves & Sons Co.}, 315 F.2d 335, 347 (2d Cir. 1963); Kegel \textit{v. United States}, 289 F. Supp. 790 (D. Mont. 1968). \textit{Cf. Sweet Milk Co. v. Stanfield}, 333 F.2d 811 (9th Cir. 1965). On the other hand, in workmen’s compensation cases the effect of the accident and a prior disease are not weighed in determining the loss of
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decision dealing with a tortfeasor's liability for psychic harm suffered because the plaintiff's mental condition made her more susceptible than the average person to such injury.\textsuperscript{166} Judge Friendly remarked:

Although the fact that [the plaintiff] has latent psychotic tendencies would not defeat recovery if the accident was a precipitating cause of schizophrenia, this may have a significant bearing on the amount of damages. The defendants are entitled to explore the probability that the child might have developed schizophrenia in any event. While the evidence does not demonstrate that [the plaintiff] already had the disease, it does suggest that she was a good prospect. . . . [I]f a defendant "succeeds in establishing that the plaintiff's pre-existing condition was bound to worsen * * an appropriate discount should be made for the damages that would have been suffered even in the absence of the defendant's negligence.\textsuperscript{167}

The problem for the defendant in psychogenic pain cases, then, is not so much law as it is proof. It must be shown that the plaintiff, because of his psychic or social condition, was primed for pain: At some time after the accident he would have utilized some other injury to produce the pain of which he complains. Such proof is obviously difficult, and the plaintiff is further protected by the rule placing the burden of proof on the defendant.\textsuperscript{168} Again to quote Judge Friendly, however: "It is no answer that exact prediction of [the plaintiff's] future apart from the accident is difficult or even impossible. However taxing such a problem may be for men who devoted their lives to psychiatry, it is one for which a jury is ideally suited."\textsuperscript{169}

d. Proximate cause. Many of the important policy decisions in the law of torts are made under the heading of proximate cause. The term itself, for which it would be better to substitute the phrase "legal cause,"\textsuperscript{170} offers nothing to assist analysis of whether the relationship between the conduct of the defendant and the resultant harm is such that the defendant should be held responsible. However confused and obfuscating proximate cause language may be, the

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\textsuperscript{166} Steinhauser v. Hertz Corp., 421 F.2d 1169 (2d Cir. 1970).
\textsuperscript{167} 421 F.2d at 1173-74, quoting Evans v. S.J. Groves & Sons Co., 315 F.2d 335, 347-48 (2d Cir. 1963).
\textsuperscript{168} 2 F. HARPER & F. JAMES, supra note 81, at § 20.3.
\textsuperscript{169} 421 F.2d at 1174.
\textsuperscript{170} See \textit{Restatement of Torts} § 431 (1934).
\end{footnotes}
principal function of the concept is to limit the scope of liability to less than it would be if causation in fact were the only test.

Confidence in psychiatry and medicine has in recent years increased the scope of liability for tortious conduct.\textsuperscript{171} Perhaps it may also lead to some limitations on liability. The strongest case for such a limitation is one in which the plaintiff's preexisting idiosyncrasy is so rare that he suffers injury as a result of psychic stimuli that are not likely to injure an average person. Conduct that is a cause in fact of the injury does not give rise to liability where there is neither negligence nor legal cause.\textsuperscript{172} In most cases involving psychogenic pain, however, there has been some physical injury and negligence has been established. The question is whether liability should be cut short of responsibility for all consequences, although recognized for some of the consequences.

In his famous \textit{Palsgraf} opinion,\textsuperscript{173} Justice—then Chief Judge—Cardozo suggested the possibility that liability be limited to the interests invaded by a negligent act: "There is room for argument that a distinction is to be drawn according to the diversity of interests invaded by the act, as where conduct negligent in that it threatens an insignificant invasion of an interest in property results in an unforeseeable invasion of another order, as, e.g., one of bodily security."\textsuperscript{174} The suggestion found approval in the \textit{Restatement of Torts}, but approval was later withdrawn for lack of case support.\textsuperscript{175} Nonetheless, the basic \textit{Palsgraf} formula is an appealing resolution for disputes about the ambit of liability for harm-producing conduct: "The

\begin{footnotes}
\textsuperscript{171} From a rule requiring that there be at least some tortious impact upon the person of the plaintiff, the law has moved to allow recovery where the bodily harm results from shock or fright at harm or peril to an immediate family member occurring in the plaintiff's presence. \textit{Restatement (Second) of Torts} \S 436 (Tent. Draft No. 19, 1975). See 2 F. \textit{Harper} & F. \textit{James}, supra note 81, \S 18.4, at 1031-34; W. \textit{Prosser}, supra note 145, \S 54, at 330-34. Earlier cases viewed suicide as an intervening cause and refused to impose liability when a seriously injured person, depressed by his condition and future prospects, chose to end his life. E.g., \textit{Scheffer v. Railroad Co.}, 105 U.S. 249 (1881). See W. \textit{Prosser}, supra, \S 44, at 280-81. More recently liability has been imposed where expert testimony establishes that the suicide is the result of an uncontrolable impulse that was in turn the result of the tortious injuries suffered. \textit{Orcutt v. Spokane County}, 58 Wash. 2d 846, 364 P.2d 1102 (1961); W. \textit{Prosser}, supra, \S 44, at 280-81.

\textsuperscript{172} Smith, supra note 62.


\textsuperscript{174} 248 N.Y. at 346-47, 162 N.E. at 101.

\textsuperscript{175} \textit{Restatement of Torts} \S 281, comment \textit{j} (1934). See id., app. \S 281, at 307-08. See also W. \textit{Prosser}, supra note 145, at 259-60.
\end{footnotes}
risk reasonably to be perceived defines the duty to be obeyed." The formula suggests that an actor has a duty to refrain from conduct that unreasonably threatens the physical safety of another, but does not have a duty to protect the other from pain that is experienced as a reaction to interpersonal relationships with family, fellow workers, or others. An analogous formulation has recently been offered by Professor George Fletcher. He suggests that rights to recover for losses should depend in part on an analysis of the reciprocity of risks imposed by parties upon one another. Thus, "we all have the right to the maximum amount of security compatible with a like security for everyone else. This means that we are subject to harm, without compensation, from background risks, but that no one may suffer harm from additional risks without recourse for damages against the risk-creator." Psychogenic pain, or pain maintained by operant mechanisms, may be considered a "background" risk. In any case, it is so individualized that surely it is nonreciprocal within Fletcher's formulation. Thus, it does not deserve compensation.

IV. CONCLUSION

These observations have explored the possibility that new medical evidence will result in a limitation on damages awarded for pain. However, so well entrenched is the right to recover for pain suffered after physical injury that the new understanding of pain is unlikely to produce significant change. Still, sooner or later we must acknowledge the questions the data raise about what the law of compensation

176. 248 N.Y. at 344, 162 N.E. at 100.
177. An analogy may be found in the principle that imposes strict liability upon one engaging in an abnormally dangerous activity. The absolute liability is restricted to the types of risks that make the conduct abnormally dangerous. Restatement of Torts § 519, comment b (1938). Thus, persons engaging in blasting operations, who would be liable for damages done by flying debris or concussion, have been held not liable for the destruction of mink kittens by their frightened and agitated mothers. Madsen v. East Jordan Irrigation Co., 101 Utah 552, 125 P.2d 794 (1942); Foster v. Preston Mill Co., 44 Wash. 2d 440, 268 P.2d 645 (1954). Of course, there is a wide range for social decision-making in defining the risks that lead to characterization of conduct as abnormally dangerous. Definition of the risks of blasting as not including the risk that mother minks will kill their young is a way of saying that it is better that mink ranchers bear the risks of the excitable nature of minks than that blasters compensate them for harm for which blasting operations were a cause in fact. The decision will determine how much mink coats will cost as well as how much it will cost to build on land that must be cleared by blasting.
179. Id. at 550 (emphasis added).
is doing and what it should be doing to serve better the interests of society. Tort law will be improved if lawyers and judges attack the problem of compensating victims of pain with a better understanding of the new medical evidence. Permitting recovery only for pain that has a physiological basis would be a major step toward ensuring that compensation furthers useful social values.