

A Dramatic Analysis of the Psychology of Fear

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Fear must be understood not just in terms of the mechanics of self-protection, but also in terms of the pervasive but often invisible dramatic climate of the times.¹ The playwright Arthur Miller describes an audience's reaction to an old film of Hitler at the Nuremburg rallies. People giggled at Hitler's absurd posturing and his overacting. Similarly, films about the Cold War—when anti-Communist fears were rampant—can cause bemused smirking in our times. We meekly take off our shoes in airports and suffer the erosion of privacy rights and civil liberties because of pervasive fears that are part of the lingering shadow of September 11, 2011. The pervasive dramatic contexts of which I speak can change rapidly or slowly—and these changes alter the meaning of the signs and symbols that once suggested dreadful fear. Witches were once looked upon as loathsome agents of death and destruction. Now we dress our children in witches garb and set them to play at games that are a variant of the gangster's shakedown. Fear, we begin to perceive, can be deadly serious or can verge and merge into adventure and thrills and even fun.

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In the United States, long after the Civil War had concluded, political partisans could control the passions of the crowd by invoking memories of the massive death and destruction of the war. This tactic came to be called “waving the bloody shirt,” for such garments were once literally displayed at rallies and speeches. But in the drama of everyday life, even these powerful symbols do lose their fearful force—only to be replaced by new symbols of new fears in each new dramatic era. Marc Antony displayed Caesar's bloody toga to the crowd at the funeral with great dramatic effect. The actual bloody shirts waved at Republican rallies after the Civil War

were a way of reinforcing revulsion at the barbarian ways of the Confederacy. But with time the toga and the bloody shirt lose their immediacy and their power to evoke active fear and thus to control action. The cross upon which Jesus was crucified is an image of a device of human torture and execution. But it is no longer fearsome—but rather a comforting symbol of a benign Christianity.

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Escaping Pain and Avoidance Responses

This analysis of the psychology of fear from a dramatic perspective attempts to demonstrate a larger coherence of these phenomena in the course of history. Even so, it will be instructive to look at a classical treatment of fear in the behaviorist psychology of the last century—when it was thought that psychology could proceed in a universalistic and decontextualized form, with the accompanying belief that every psychological phenomenon of importance could be studied in rats.

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A device called a shuttle box, used in research by Neal Miller (1948) and O.H. Mowrer (1939), provides a powerful means of conceptualizing the classical view of fear. It consists of a double chamber, separated by a partition with an opening that allows a rat to jump from one side of the box to the other. In initial trials a conditioned stimulus such as a tone is followed by an electric shock to the floor grid of the part of the box containing the rat. By trail and error, the rat escapes the shock by jumping to the other side of the box, where the floor grid is not electrified.

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But this move is soon followed by another tone, then another shock to the hapless rat, which must escape the shock by returning to the original chamber. This pattern of conditioning is continued until the rat learns not just to escape but to *avoid* the shock by jumping to the safe chamber before the onset of the shock to its feet. Of course, the remarkable fact about avoidance conditioning of this type is that it is resistant to extinction. Once the animal has learned to avoid

the shock by jumping when the conditioned stimulus is delivered, it can continue to exhibit the avoidance response by jumping to the other side of the chamber for hundreds of trials, with no repetition at all of the unconditioned stimulus, the electric shock.ⁱⁱ

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To take another case of an animal model for the establishment of an avoidance fear response, consider bait shyness, or one-trial, traumatic avoidance conditioning. Trappers of wild animals have observed that animals that have escaped from traps are unlikely to approach the same trap again. Similarly, rats made sick by a poison but not killed by it show a long-standing aversion to the food substance used as bait. The Garcia effect refers to a food aversion induced by a radiation treatment administered after rats drank sweetened water in a red-lighted room. Thereafter, the rats showed an aversion to sweetened water, but they did not avoid red light. This demonstration showed that taste aversions are established not by simple association, but rather are selective for specific kinds of stimuli—stimuli which might commonly be linked with getting sick—likely to result from ingesting something, not likely to result from the color of light (Garcia & Koelling, 1966).

A case of one-trial, traumatic aversive conditioning might be that of a child who becomes violently ill after consuming a bowl of oatmeal—for reasons that have to do with a virus rather than with the oatmeal. Even so, the child might thereafter acquire a lifelong aversion to oatmeal. Many people have reported the establishment of permanent food aversions established in this way—for particular foods—fruits, vegetables, cereals or meats.ⁱⁱⁱ

Do these demonstrations provide good models for the acquisition and operation of fear in human beings? The answer is both yes and no. In order to understand the complexity of this matter, it will be necessary to explore the phenomenon of conditioned avoidance in rats more carefully. After a thorough review of the many studies done on avoidance conditioning in

animals, Sluckin (1979) concludes that avoidance responses change in their character over time and repeated trials. The direct and physiological responses elicited by a conditioned stimulus tend to extinguish rather quickly, even as the avoidance response continues to occur, but in a calmer, less agitated manner. “Typically classically conditioned responses extinguish within 30 or 40 unreinforced trials whereas avoidance responses survive for hundreds of trials which are similarly unreinforced by UCS (the unconditioned stimulus)” (p. 211). No firm evidence supports the conclusion that overt fear is necessary to support avoidance behavior. Thus, a person might daily ingest massive doses of vitamins as a way of warding off illness, but without any sense that active fear is driving this behavior.

It may seem like a fine point, but we must distinguish between the role of fear in *establishing* a pattern of behavior, and the diminished role of fear in *maintaining* that behavior. To broaden the case, the establishment of security measures at airports and public events is initially a direct response to an act of terrorism, or a threat or attempt at terrorism that may not have resulted in actual harm. This might be said to be the unconditioned stimulus. After 9/11/2001, all commercial air traffic within the continental United States was grounded for at least 24 hours. Thereafter, security inspections were intensified and enhanced. But these increased security measures quickly became routine. I remember flying back from Mexico to the United States just four days after 9/11. Flights were cancelled or rerouted. Passengers talked openly of the events of the past few days. Fear was overt and manifest—and passengers were extremely patient with delays made necessary by increased precautions. The announcement that we would be taking off was greeted with applause. But avoidance and defensive security arrangements quickly become habitual—and are endured by the clientele of airports with sullen resignation—rather as inmates in a prison obey their guards without overt displays of resistance.

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Episodes of pain, loss, suffering and threat do result in powerful fears, which may be associated with a range of features linked with those fears. This often leads to the adoption of precautions that are intended to avoid repetitions of such episodes. It is for this reason that one locks one's house, takes vitamins and other medications, has one's automobile serviced regularly, pays one's taxes on time, avoids smelly foods, submits to routine medical examinations and engages in a large range of actions that fall under the heading of Taking Simple Precautions.^{iv} The entire insurance industry is founded on the fear of loss.^v

The Face of Fear

Distinguishing between acute and chronic instances, we can see that fear is at once quite rare and extremely common. To illustrate this distinction, I show you now an illustration taken from Darwin's (1872/1916) book on *Expressions of Emotion in Animals and Man*.

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Darwin's objective in his book was to demonstrate a consistency in the modes of emotional expression in animals and human beings. He supported his contention that this is the face of fear by showing this woodcut to observers and asking their opinion of the emotion being represented. Most observers agreed that this person is experiencing terror or extreme fear, while a few thought of the person as experiencing pain. Indeed, we may observe a rough similarity in this representation of fear and the famous painting by the Edvard Munch, *Der Shrei*, or *The Scream*.

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More recently, Ekman and Friesen (1975) have described the facial changes involved in the expression of fear in more analytic detail—and have shown, as well, that faces showing these changes are regularly perceived as showing fear across cultures.

Fear	brows raised eyes open mouth opens slightly	5 linear muscles 1 sphincter for the mouth
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Here is a version of the face that Ekman and Friesen have used to illustrate fear.

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Let us take it as established that there is a typical face of fear. Actual encounters with acute fear that would result in expressions of this kind are not frequent in our everyday lives. In fact, I have inquired of a number of people about the occurrence of episodes of extreme fear in their adult lives. Most people can tell a story in which they were truly afraid—when an airplane encountered extreme turbulence, when confronted by a mugger with a drawn knife, when spinning out of control in a car on an icy road. But the twenty or so people I have talked to can only recall one or a few such episodes in their lives. Yet surely fear is much more pervasive in our lives than these results might indicate. Darwin’s figure is a caricature. We have learned to live with fear and to present a calm countenance to the world.

The Enduring Effects of Public Disasters

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The abduction of the infant son of Charles and Ann Morrow Lindbergh occurred on the night of March 1, 1932. I was born almost exactly five years later. But as a young child—growing up in Illinois, not in New Jersey, where the kidnapping occurred—I vividly remember hearing stories of this kidnapping and subsequent murder of the Lindbergh child. It was a cautionary tale. Beware of strangers. Lock doors behind you. Stay close to family and friends. The Lindbergh kidnapping was publicized as the “Crime of the century.” I and millions of other children worldwide grew up in its long shadow. The story was not likely to cause acute fear; but once heard and assimilated by the child, it surely became a source of an inner and chronic fear.

I take another example closer to my present home. On July 28, 1989, a nine-year-old girl was murdered in broad daylight on Main Street in Middletown, Connecticut. In the presence of her mother and sister, and many other people attending a sidewalk sale event, she was repeatedly

stabbed by an inmate who had walked away from Connecticut Valley Hospital, a mental institution about a mile away from Main Street. It is now almost 23 years since this event occurred. But it is still vivid and powerful not only as a memory but also as a determinant of policies and case decisions at the hospital as well as the politics of institutional relationships in Middletown. To this day, when a case is up for review by the Psychiatric Review Board of the hospital in which any inmate with a criminal record might be released, a hue and cry is unleashed by city hall against the possibility of release. This fear is amplified in newspapers, where, uniformly, the case of Jessica Short, the young girl who was killed in 1989, is invoked as a justification for this opposition. I maintain contact with a current inmate of the hospital who was judged not guilty by reason of insanity for his crime—and who has now enjoyed normal mental balance for over a decade without medications. Even so, he views the likelihood of his own release as minimal—and largely because of the hangover of fear from the murder of young Jessica back in 1989.

This is another instance of “waving the bloody shirt” as a way of dissuading the population from acting with tolerance and understanding. Chronic fears can easily be revived.

Disaster produces Drama, and with it Meaning

The most outstanding recent example of a public disaster producing massive fears is, of course, the attacks in the United States of September 11, 2001. On a clear and bright Tuesday, an ordinary day, the United States was attacked by hijacked commercial airliners being used as deadly projectiles. One of the products of that attack was the creation of an agency of the federal government designed to avoid any repetition of this kind of disaster. A book describing the development of the Transportation Security Administration bears the title, *Permanent Emergency: Inside the TSA and the Fight for the Future of American Security* (Hawley &

Means, 2012). The immediate response of the federal government was to take steps to avoid the repetition of an attack of this sort, which manifestly took us by surprise. The shock of attack was quickly replaced by a collective surge of energy—first to defend against further attacks, and then, of course, to retaliate. The first challenge was to defend.

This is the story of the people who took up that challenge, the task of reimagining our aviation and transportation security. On the day of the attacks, some of these people were already deeply involved in America's security and governmental network. Others were retired, working for private industry, even attending college or playing in bands. But over the next eight years, their individual contributions, sense of purpose, and commitment would be irreplaceable. In a breathtakingly short period of time, they created from scratch an agency that was simultaneously ambitious, flawed, inspired, innovative and entirely unique within the federal government: the Transportation Security Administration. (p. 7)

Just as the attack on Pearl Harbor on December 7, 1941 resulted in an immediate declaration of war and thus altered the course of life of virtually everyone living in the United States, so did the attack of 9/11/2001 bring about a new and universal focus on a new and dangerous enemy—Al Qaeda, Osama bin Laden, and Muslim extremists. If a nation has a conspicuous enemy—Japan or Al Qaeda—then the citizens of that nation have an immediate, pervasive, and powerful dramatic focus to their lives. The focus is this: To defend against that enemy and then to destroy it. Certainly the immediate response to attack is one of panic—of people fleeing for their lives. This was true at Pearl Harbor and at the World Trade Center. And this panic becomes burned into a particularly date in our collective memory—December 7, 9/11. These events become everlasting reference points for world history.

Attack also immediately provides the condition for the creation of heroes—for the demonstration of high courage. The people of Pearl Harbor did flee the Japanese bombs—but our troops and ships fought back heroically. At the World Trade Center, fire fighters, police, and emergency workers formed a cadre of first responders—who risked (and in many cases gave) their lives in order to rescue people from the burning ruins. They did this in the midst of general panic—so strong as to impel many people to jump to their certain deaths rather than to remain trapped in the towers. On United Airlines Flight 93, intended as a fourth deadly blow by the attackers, the passengers organized and delivered an attack on the hijackers. The aircraft crashed in western Pennsylvania, resulting in the death of all on board, but saving countless lives in the purported target in Washington, DC. The film, *Flight 93*, provides a dramatization of this magnificent example of heroic response.

Of course, the military engagements in Afghanistan and Iraq which followed 9/11 have produced hundreds of books and movies, scores of thousands of stories of sacrifice, courage, and heroism. It is as if war produces a new and highly serviceable set of coordinates for the achievement of collective and individual meaning. One finds one's bearings. You know now clearly the difference between friend and foe—between right and wrong, between virtue and depravity. King Henry exults in his famous speech prior to the battle of Agincourt, “We few, we happy few, we band of brothers....” It is hard to imagine much of a drama in the lives of the citizens of a nation which has no enemies—perhaps no standing army, no military history. The Swiss are famous for their cuckoo clocks, and Costa Rica does not often make an appearance on the world stage of worthy news. War is the stuff of strong stories.

Qui Bono?

This leads us to examine more closely the significance of the creation of a federal bureaucracy such as the Transportation Security Agency. Surely human disasters are to be avoided before they occur and deplored after they occur. But such episodes and even the threat of them does have a bright side. The insurance industry is perhaps the most conspicuous example of an institution that benefits hugely from misfortune. Hurricanes, tornadoes and floods have the effect of making one feel vaguely sorry for the massive amounts that insurance companies will be made to pay in loss compensation. But one need not weep for them, for everyone, in and out of the pathway of harm, is warned of the necessity of acquiring insurance against such disasters and they will pay whatever rates are asked.

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The 9/11 attacks, of course, were an enormous boon to the military establishment in the United States. Those who manufacture weapons, aircraft, and military equipment of all kinds are prospering. Generals have meaningful and demanding commands. Young men and women have enlisted in our armed forces in high numbers—not as a matter of compulsory service in this age, but as an opportunity to live and work in a way that is regarded by the population at large as highly honorable and which provides both steady employment and career training in a time of economic hardship and job scarcity. In our times, it is difficult to argue that the nation ought to save money and resources by cutting back on defense spending. We may not actually need more nuclear submarines, but woe to the politician, Republican or Democrat, who has the temerity to argue against their continued manufacture.

Seen from this angle, the roughly 45,000 employees of the Transportation Security Administration are all beneficiaries of 9/11. Hawley and Means (2012) provide a timeline for the TSA—and that timeline begins with 9/11. The timeline also includes what might be seen as

“booster shots”—such as Richard Reid’s bungled attempt in late 2001 to blow up an airliner with a shoe bomb, or suicide bombers destroying two Russian flights in 2004, or a “Baby Carriage” threat to the New York subway system in 2005, or the identification of a “liquid bomb plot” in 2006 (resulting in the banning of liquids from all hand luggage for airline passengers), or the disruption of a JFK plot in 2006, a bombing in Glasgow in 2006, or eight more threats of attack or disrupted plots, culminating in the famous “underwear bomber” attack—a failed attempt in December, 2009 to use a bomb packed in underwear to blow up an airplane. Since the TSA book was published there have been other reinforcing events—including the possibility introduced most recently that a bomb might be surgically implanted in a person’s body. It looks like the TSA is here to stay.

The amount of publicity given to bomb threats is enormous. News media give ample coverage to each incident of a plot disrupted or of a failed attempt at a terrorist attack. Such news might be seen as negative—in that it makes everyone more fearful that a successful attack might sometime occur. But every such dollop of publicity is good news for those who make their living working for the TSA and for the entire complex of defense-related industries that comprise a significant and growing portion of economic activity in the United States.

We are conditioned, like rats in a shuttle box, to move benignly and without complaint in response to the instructions of TSA agents. Who knows how many horrible incidents have been prevented by these pervasive efforts to avoid harm by close inspection of passengers and their luggage? Is it many? Is it few? There is no way of knowing. Preventative measures do not produce compelling stories about tragedies avoided through their exercise. Over the last generation, the death rates in highway traffic and commercial airline traffic have both dropped dramatically. It is certain that tens of thousands of lives have been saved through improvements

in automobile safety, highway improvements, and increased safety requirements for aircraft. And yet no one is walking around with a sign on them that says, “My life was saved because of the development of limited access highways.” Instead, the stories that are told in the media about travel safety are always on the side of dramatizing disaster and loss. We have little hope of relinquishing the security controls that are now in place—even though they might seem to be unnecessary. No one seems willing to take that kind of chance.^{vi}

The dramatization of disaster leads to what Daniel Kahneman refers to as an “availability cascade.” Images of poisonings caused by toxic wastes or of innocent passengers hurtling to their deaths in a hijacked airplanes are hard to ignore. Kahneman asserts that our minds are incapable of dealing rationally with small risks: “We either ignore them altogether or give them far too much weight” (2011, p. 143). Consider the controversy about global warming. On the one hand we have people who deny the reality of a slowly warming planet; on the other we have images of the flooding of coastal cities, the disappearance of the ice caps, and the drowning of polar bears. Fear has difficulty occupying a middle ground.

Replacing Fear with Confidence: The End of the Great Depression and the Control of Inflation in Brazil

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But pervasive fear can be replaced successfully by confidence. Sometimes this conversion can be achieved by means of advances in science and technology—as when dreaded diseases such as smallpox, polio, and yellow fever are basically eliminated by the development of vaccinations and other preventative techniques.

In general, economic fears do not yield to a technological or rhetorical solution. The fears that perpetuated the Great Depression of the 1930’s led to Roosevelt’s famous assertion that, “The only thing we have to fear is fear itself.” How true! And yet this assertion did little to

relieve economic fears that kept the world economy in shackles. It is widely recognized that the depression ended only when the threat of World War II led to a mass mobilization of efforts that suddenly increased industrial production and stimulated the building of an enormous military force supplied with weapons, ships, tanks, airplanes, munitions, and all manner of supplies and equipment. All of this was required in order that we might meet the fearsome challenges posed by Japan in Asia and by the Axis powers in Europe. We were willing to go into debt and to sacrifice enormously in order to pay our taxes and to work beyond the ordinary limits of endurance. The fears that produced the Great Depression were suddenly gone. Fears were turned into the courage to confront our known and named enemies. Once again, we can see that fears respond to the large dramas in which we are enveloped.

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A more recent and surprising case of fear being replaced by confidence is provided by this history of monetary inflation in Brazil over the past 25 years. In 1990, Brazil's inflation rate hit 80% per month. A loaf of bread might cost \$1 one day, and cost almost \$2 a month later. Compounded at this rate, such an item might cost nearly \$1000 within a year. And this was not a new story: Brazilians had been living with high inflation rates for decades and had developed all sorts of devices for continuing to live with a semblance of order. For example, salaries and annuities and even capital assets could be indexed to inflation and could be adjusted regularly to retain purchasing power for the population. However, with the end of the military dictatorship in 1984 and return of popular elections, inflation became not better but worse. It was as if the general public had more grudging confidence in the generals than they had in opportunistic presidents they first elected. Each new president would present a plan for controlling inflation—for example, freezing prices or confiscating bank accounts—and each plan failed. That is, until the implementation by Fernando Henrique Cardoso of the Plano Real. While Cardoso was

Minister of Finance during the administration of Itamar Franco, he invited a small group of economists at the Catholic University in Rio to come up with a plan to control Brazil's chronic and rampaging inflation. This team of professors presented Cardozo with the Plano Real.

It has been argued in this case that chronic failure was a precondition for success—for it was generally acknowledged that Brazilians were sick to death of inflation (see Granza, 2011). The economists consulted by Cardozo presented him with a plan based on a fictitious new currency unit, called the Unidade de Real Valor (Unit of Real Value or URV). This unit was arbitrarily pegged to the value of the US dollar—a familiar and reliable world currency. For a time, prices of all commodities were quoted both in terms of the URV and the Cruzeiro—which remained for a time the currency for payment. Wages were stated in URVs, as were mortgages and taxes. The idea was to induce people to think in terms of URVs rather than Cruzeiros, and thereby to gain confidence that prices were not always going up. People did observe that the URV prices were stable. With this, the finance ministry could declare that the Real was the new currency of Brazil and the Cruzeiro was retired.

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The result was not only the control of the inflation of goods and services, but soon there was a massive inflow of new capital investment in Brazil. To be sure, this was not the end of the struggle—and some modest inflation did continue, with adjustments and counter-measures by the government. Cardozo was elected President of Brazil in 1995 and served two terms, until 1993. His successors in office have maintained the basic policies that he established and implemented. Now, 18 years after the inauguration of the Real plan, the Brazilian currency is quoted as worth about .50 US\$, or a devaluation of less than 3% per year. Here is a graph showing the exchange rate over the past 10 years, showing that the Brazilian currency is not only stable relative to the dollar, but has gained considerable strength over this time.

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This is one of the most remarkable economic achievements in recent history. The elimination of pervasive and endemic fear for an entire population of 190 million people seems to have been accomplished by a piece of economic legerdemain. All currencies are, of course, fictitious—entirely dependent upon the confidence in which they are held by the population at large. The trick in Brazil was to figure out a way of replacing fear by confidence through the intermediate mechanism of creating a new monetary unit with ostensible links to the US dollar—a familiar and trusted vehicle. And then, presto, the new unit was replaced with a new Brazilian currency with the title “Real”, which carries the treble significance in Portuguese of meaning “real” as well as “royal” and linking back to an ancient Portuguese currency known as the “Real.”

The Extremes of Fear are Greater than the Extremes of Greed

Daniel Kahneman has observed that people run to the exits in the case of fire with a good deal more ardor than they exhibit when they are lined up to buy tickets or to board a train. Kahneman and Tversky (1984) have also made the observation that people somehow experience losses more intensely than they enjoy success. Losing \$1000 is more painful than winning \$1000 is pleasurable. Loss aversion is a highly reliable phenomenon. One may say that the fear of loss is in general more pronounced than the hope for gain. If one takes the present state of one’s general well being as a reference point, then the intensity of fears for losses is greater than the intensity of hope for gain.

If the behavior of the stock market is taken as an index that reflects fear and greed in operation, then the fluctuations in stock market prices over time should reflect this same asymmetry. This is, in fact, the case. The figure below exhibits the values of the Dow-Jones Industrial Average (DJIA) over time—from its inception in 1901 to its value in 2012. The

reassuring overall observation is that the slope of this line is inexorably upward. Over its entire history, the DJIA has increased at the rate of approximately .024% per day. Days of positive change vastly outnumber days of negative change. However, the most extreme changes are negative. The greatest loss on a single day was 23.52%. The greatest gain on a single day was 16.83%. Moreover, if one looks at the entire distribution of daily changes, the resulting distribution is fairly normal—as one would expect. However, for the DJIA, as well as for all other major stock indices, these distributions of daily changes are negatively skewed—with longer tails to the left than to the right. This phenomenon may be seen by close inspection of the graph of the history of DJIA averages. For example, the steep losses in stock values experienced in the Great Depression, began in 1929 and hit a low point just three years later in 1932. But it took until 1954—22 years after the low point—for the index to reach its 1929 value. The major decline in 1987 was quite steep—but was recovered in a matter of months (cf. Scheibe, 2000). The recession that began in 2008 hit a low point in 2009—and three years later, has still not recovered its pre-recession value. Patience is required to enjoy the benefits of the upside—but recovery has always happened eventually.

This asymmetry of fear and greed is not confined to the stock market. One may have vague hopes for Heaven, but Hell is strongly dreaded. With respect to physical health, cataclysmic losses are easily envisaged, while dramatic improvements from being basically healthy are not easily imagined. Even so, surveys consistently show that people rate themselves as more optimistic than pessimistic. We may *fear* loss and deterioration, but we somehow *expect* at least to hold our own, and perhaps improve our condition.^{vii} Pervasive optimism might be seen as reaction to a pervasive and deeply ingrained fear of loss.

Incongruity: A Source of Fear and Humor

It is striking to note in the literature on fear that *incongruity* is commonly cited as a source of fear. In Watson's (1930) famous study of fear in young Albert, a sudden and unexpected noise caused the infant to show fear and crying. Hebb (1946) noted that dead, dismembered, or mutilated bodies produced spontaneous signs of fear in monkeys—not a learned reaction, he argued, but somehow built-in. Children will sometimes react to clowns with crying, sometimes with laughter. Certainly fear may be instigated from several causes—such as pain or threat. But incongruity often produces fear. However, with a slight shift in the drama of the occasion incongruity can also produce laughter. The sudden appearance of a rabbit to a child in its room might cause fear. However, a magician pulling a rabbit out of a hat at that child's birthday party is a cause for merriment. Here is a set-up line from a joke: “A grasshopper walks into a bar.” Surely were a huge grasshopper to walk into an actual bar, it would cause panic. But framed as a joke, it is immediately funny.

The incident of Orson Welles' broadcast of the “War of the Worlds” is well known. On October 30, 1938, the Mercury Theater on CBS presented an hour-long broadcast based on an H.G. Wells novel describing an invasion by earth of Martians—a prospect so incongruous as to seem easily beyond belief. However, such was the quality of Welles' simulation that this national broadcast was apparently taken as a report of a real invasion by many listeners who did not tune in at the beginning of the broadcast to be advised of the fictional nature of the story. While the magnitude of the response is debatable, it is clear that the incongruous and threatening episode was the occasion for genuine fear and panic for a significant number of people. Now, of course, with the distance of time, the whole episode seems faintly amusing.^{viii}

The connection between novelty and the elicitation of fear has been extensively studied in developing infants and young children. Suffice it to say that the relationship is complex--in part because reactions to incongruity change markedly over the course of first years of life. Also, the same strange situation does not produce the same response in different children—as Ainsworth (1973) demonstrated in her work on attachment theory. Securely attached children react with relative equanimity to being left along with a stranger, while anxious-ambivalent children react with tears and virtual panic.

Of course, adults can also react with fear to incongruity. Once again, this depends upon dramatic framing. I take the biblical tale of Abraham and Isaac as an instructive example. Kierkegaard's (1856/1983) meditation entitled *Fear and Trembling* is based on this story. Old Abraham and Sarah, a barren couple, are miraculously blessed by God with a son, Isaac. Sarah's reaction to this incongruity, when she informed by an angel of the prospect of a son, is to laugh. Abraham was led to understand that this son, Isaac, was to be the link between himself, who was joined in covenant with God, and the eventual people of Israel, who would be in number as great as the grains of sand in the desert. But then, he was asked by God to take his son to Mount Moriah, and there to make a sacrifice of him. Abraham must act in obedience with this command—of course. But he does so with *Fear and Trembling*, for nothing could possibly be more incongruous—more completely inconsistent—with his previous understandings of his responsibility, than this request from his maker to sacrifice his only son. Of course, he passed the test of faith and God provided Isaac with a reprieve, substituting a lamb instead. But Kierkegaard is right in using this story as the *ne plus ultra* example of the production of fear.^{ix}

Cheap Thrills and Fear

The story of Abraham and Isaac is certainly thrilling—when viewed from the perspective of our time—many thousands of years after the putative date of the incident. A thrill has been defined as an activity that is (a) engaged in voluntarily, that is (b) potentially dangerous and that (c) is almost certainly going to result in complete escape and no harm actually incurred (see Balint, 1959; Scheibe, 1995). We can be sure that neither Abraham nor Isaac chose to engage in this scrape with death for the thrill of it—for the third condition named above—certainty of deliverance—was by no means obvious before the fact.

But in our times, thrill seeking is extraordinarily common. One rides the rollercoaster, laughing and crying at the same time. The most popular spectator sport in the United States is automobile racing. If the possibility of death and destruction were utterly removed from these contests, they would have no more appeal than standing by the highway watching the traffic go by. But high speed is dangerous, and people will pay for the thrill of watching this flirtation with death. Such activities as sky-diving, bungee jumping, scuba diving, running marathons, racing boats, motorcycles and horses, mountain climbing, rodeos, and game hunting have elements of danger associated with them. Almost all of the participants in these activities survive them unscathed, and walk away not with wounds but with the memory of great thrills experienced. It has also been suggested, certainly with reason, that when human sexual activity is rendered completely safe and without danger—either physical or moral—it is no longer as pleasurable as once it was, for it is no longer thrilling. Sexologists consider sex to be most exciting when it is testing boundaries (see Masters & Johnson (1966).

Cheap thrills abound in our world. Witness the following display of posters for recent motion pictures—selected by a student assistant more or less arbitrarily from thousands of

candidates. Alfred Hitchcock was a master at providing vicarious thrills for his audiences.

Scenes from *Psycho*, *The Birds*, *Vertigo*, or *Rear Window* are iconic and are all studies in the thrills that can be produced by the vicarious experience of fear.

Cosmic Fear

William James observed in *Varieties of Religious Experience* that the starting point for all religions is the worried awareness that the person as naturally given has a poor or strained standing with the forces or powers of creation. Commenting on his own case of abject depression early in his life, he asserts: “The worse kind of melancholy is that which takes the form of panic fear.” (cf. Wilshire, p. 232). And here, he asserts, “Religion comes to our rescue and takes our fate into her hands.” (cf. Wilshire, p. 228) In the best of cases, religion creates a means by which the human being can acquire a sense of secure connection with the powers of the universe vaguely sensed but nowhere verified. The very idea of somehow resting secure in the love of God can produce a thrill of a different kind than that described in the last section. Religious thrills are, according to James, experienced as profound reassurance that one is not regarded as a divine reject or even with indifference. Religion can provide a means—let us say rightly or wrongly, truly or falsely—of providing the believer with a deep sense of inner meaning and security, deriving from a sense of firm connection to the powers of the universe. Fear is then replaced with courage.

In closing, I wish to illustrate the dichotomy between fear and courage by exhibiting two short excerpts from motion pictures. Both of them depict a man going to his death—inexorably, and with sure foreknowledge.

The first excerpt is from Ingmar Bergman’s *The Seventh Seal*, which is set in the 14th Century—as a knight returns from his Crusade, only to learn of the inevitability of his own

death—as he plays a game of chess with the Grim Reaper himself. Near the conclusion of the film, a different man who is afflicted with the plague and who has acted in such a way as to alienate himself from all his fellows and all sources of comfort both human and divine, is seen in the final throes of his death—a naked exhibition of cosmic fear.

The second excerpt is taken from *A Man for All Seasons*, a depiction of the life of Sir Thomas More (1478-1535) who as Chancellor to King Henry VIII found himself so committed in principle to the Roman Catholic Church that he refused to give even tacit sanction to his master's subversion of those principles in favor of his intended divorce from Catherine of Aragon so that he might marry Anne Bolyen. For his refusal to sanction this marriage, and with the connivance of Thomas Cromwell, More was convicted of high treason and was beheaded. But such were his secure convictions that he approached his death with a great display of dignity and courage.

The contrast here is extreme. On the first case, we see abject fear and a total loss of control. In the second case, supported by faith, the subject approaches death with a generous and even forgiving attitude. The result, in both cases, is the same—the finality of death. But Sir Thomas More is remembered to this day as a paragon of high principle and human courage—particularly as it relates to the rule of law. The poor plague victim is without name or lasting history. At the very least, the story of Sir Thomas More gives us hope that it is at least possible for fear to be replaced with courage. And this is an exchange devoutly to be hoped for in our times and in all times.

The Functions of Fear in Dramatic Context

The final word is this: Fear has dramatic function and significance for the human actor. Like the body's immune system, fear functions to defend the person from physical, social and

even cosmic dangers and threats. Fears seem to be given, automatic, but also acquired through painful experiences. Fears are easily generalized and are often quite enduring. Fears can and often are institutionalized and presented as codified social regulations. Fears are part of the positive emotional bouquet of life, in that they provide the material for thrills, adventures, and delightful surprises. They can also be crippling, as they develop unchallenged into phobias or descend into an abject sense of terror. Death can be a source of such terror, or can be approached with courage, depending entirely upon the dramatic context in which it is conceived.

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ⁱ The general approach of considering psychological problems from the dramatic point of view is developed in *The Drama of Everyday Life* (Scheibe, (2000).

ⁱⁱ Electric fences for horses, cattle and dogs make use of this principle. After leaving the current on for awhile, animals often stay obediently in their confines without repetitions of the painful shocks.

ⁱⁱⁱ If food aversions were established in this way, then one should find that people can remember traumatic episodes associated with hated foods. Alas, this is rarely the case (cf. Sluckin, 1979). Also, when a traumatic or painful episode does coincide with the ingestion of some food, an aversion should thereby be established. Evidence for the uniform effectiveness of trauma to establish aversions is sparse also.

^{iv} To extend the list, consider fastening seatbelts, carrying an umbrella, carrying a handkerchief, observing traffic signals on empty roads in the dead of night, keeping records of financial transactions, washing hands before eating, carrying legal identification documents, keeping first aid kits handy, making sure newspapers do not pile up on doorsteps while away on vacation, and so on. These are not activities that are normally accompanied by any experience of fear at all. But to each of them is connected a specific potential fear. The important point to observe is

that these activities do not require additional “reinforcements” in order to be continued indefinitely as simple routines in living.

^v “Certainly there is no nobler field for human effort than the insurance line of business--especially accident insurance. Ever since I have been a director in an accident-insurance company I have felt that I am a better man. Life has seemed more precious. Accidents have assumed a kindlier aspect. Distressing special providences have lost half their horror. I look upon a cripple now with affectionate interest--as an advertisement. I do not seem to care for poetry any more. I do not care for politics--even agriculture does not excite me. But to me now there is a charm about a railway collision that is unspeakable.” (Twain, 1875)

^{vi} I was astonished two years ago to take a flight between two cities on the south island of New Zealand without passing through a security control of any kind. I was later told by people living on the island that the practice of forcing passengers through an inspection for domestic flights in New Zealand was quietly dropped a few years ago.

^{vii} A huge literature has developed recently on “Positive Psychology” (see Seligman, 1991, 2002) Additional support for the pervasiveness of optimism may be found in Ridley (2010) and Kagan (2010).

^{viii} Bourke (2005) reports a similar radio-induced panic in 1926, when citizens of London were taken in by a play called “Broadcasting from the Barricades”, which purported to describe a demonstration of unemployed people in Trafalgar Square who were setting fires and arbitrarily executing certain public figures. As in the case of the Welles episode, many people in London reacted to this reported incongruity with genuine panic.

^{ix} The fear addressed by Kierkegaard is a particularly human creation. Ortega y Gasset has noted that for human beings, as for other animals, the days of life are numbered and will end. However, Ortega speculates that only for human beings are the spaces above those numbers empty—that other animals do not seem much troubled by how to fill their time with meaningful activity. It is a simple extension of this insight to note that human beings are likely the only animals to have the sense of being somehow connected to an abstract and invisible higher power—and then to worry about whether they are or are not properly connected to or related to that creative force. Let us speculate that the lamb finally sacrificed by Abraham’s knife also knew fear—but that it was a different order of fear than Isaac or Abraham might have experienced.