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ABSTRACT

If we define irrationality as thought, emotion, or behavior that leads to self-defeating consequences or that significantly interferes with the survival and happiness of the organism, we find that literally hundreds of major irrationalities exist in all societies and in virtually all humans in those societies. These irrationalities persist despite people's conscious determination to change; many of them oppose almost all the teachings of the individuals who follow them; they persist among highly intelligent, educated, and relatively undisturbed individuals; when people give them up, they usually replace them with other, sometimes just as extreme, irrationalities; people who strongly oppose them in principle nonetheless perpetuate them in practice; sharp insight into them or their origin hardly removes them; many of them appear to stem from autistic invention; they often seem to flow from deepseated and almost ineradicable tendencies toward human fallibility, overgeneralization, wishful thinking, gullibility, prejudice, and short-range hedonism; and they appear at least in part tied up with physiological, hereditary, and constitutional processes. Although we can as yet make no certain or unqualified claim for the biological basis of human irrationality, such a claim now has enough evidence behind it to merit serious consideration. (Author)

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The Biological Basis of Human Irrationality

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## Abstract

If we define irrationality as thought, emotion, or behavior that leads to self-defeating consequences or that significantly interferes with the survival and happiness of the organism, we find that literally hundreds of major irrationalities exist in all societies and in virtually all humans in those societies. These irrationalities persist despite people's conscious determination to change; many of them oppose almost all the teachings of the individuals who follow them; they persist among highly intelligent, educated, and relatively undisturbed individuals; when people give them up, they usually replace them with other, sometimes just as extreme irrationalities; people who strongly oppose them in principle nonetheless perpetuate them in practice; sharp insight into them or their origin hardly removes them; many of them appear to stem from autistic invention; they often seem to flow from deepseated and almost ineradicable tendencies toward human fallibility, overgeneralization, wishful thinking, gullibility, prejudice, and short-range hedonism; and they appear at least in part tied up with physiological, hereditary, and constitutional processes. Although we can as yet make no certain or unqualified claim for the biological basis of human irrationality, such a claim now has enough evidence behind it to merit serious consideration.

### The Biological Basis of Human Irrationality

Before I state any hypothesis about the basis of human irrationality, let me do a rather unique thing: define what I mean by the main terms I shall employ in this article, biological basis and irrationality. By biological basis I mean that a characteristic or trait has distinctly innate (as well as distinctly acquired) origins--that it partly arises from the organism's natural, easy predisposition to behave in certain stipulated ways. I do not mean that this characteristic or trait has a purely instinctive basis, that it cannot undergo major change, nor that the organism would perish, or at least live in abject misery, without it. I simply mean that, because of its genetic and/or congenital nature, an individual easily develops this trait and has a difficult time modifying or eliminating it.

By irrationality, I mean any thought, emotion, or behavior that leads to self-defeating or self-destructive consequences--that significantly interferes with the survival and happiness of the organism. More specifically,

irrational behavior usually has several aspects: (1) The individual believes, often devoutly, that it accords with the tenets of reality although in some important respect it really does not. (2) People who adhere to it significantly denigrate or refuse to accept themselves. (3) It interferes with their getting along satisfactorily with members of their primary social groups. (4) It seriously blocks their achieving the kind of interpersonal relations that they would like to achieve. (5) It hinders their working gainfully and joyfully at some kind of productive labor. (6) It interferes with their own best interests in other important respects (Ellis, 1974, 1975; Maultsby, 1975).

After defining my main terms in this manner, I state my major hypothesis as follows: Humans ubiquitously and constantly act irrationally in many important respects. Just about all of them do so during all their lives, though some considerably more than others. We therefore have some reason to believe that they do so naturally and easily, often against the teachings of their ~~families~~ families and their culture, frequently against their own conscious wish and determination. Although modifiable to a considerable extent, their ~~irrational~~ irrational tendencies seem largely ineradicable and intrinsically go with their biological (as well as sociological) nature.

This hypothesis goes back to the statements of some of the earliest historians and philosophers and has received adequate documentation over the ~~years~~ years by a host of authorities, including Frazer (1959), Levi-Strauss (1970), Hoffer (1951), Pitkin ~~(1970)~~<sup>32</sup> (1970), Rachleff (197<sup>3</sup>A), and Tabori (1959, 1961). A few modern psychologists, such as Ellis (1962) and Parker (1973), have

agreed with this documentation. The latter, for example, has noted that "most people are self-destructive, they behave in ways that are obviously against their best interest (Parker, 1973, p. 3). Nonetheless, whenever I address an audience of psychologists or psychotherapists and point out this fairly obvious conclusion and state or imply that it arises out of the biological tendency of humans to behave irrationally, a great many dyed-in-the-wool environmentalists almost always rise with horror, foam at the mouth, and call me a traitor to objective, scientific thinking.

Hence this paper. I shall try to summarize here, as briefly as I can--for the amount of supporting evidence assumes overwhelming proportions and would literally take many volumes to summarize properly--some of the main reasons behind the thesis that human irrationality roots itself in basic human nature. Someday I shall try to document this summary presentation with gory details, taken from physiological, genetic, experimental, historical, anecdotal, clinical, and other sources. For the nonce, I shall confine myself merely to outlining the multiplicity of major ~~human~~ irrationalities and <sup>To</sup> giving some of the logical and psychological reasons why it seems almost certain that they have biological origins.

Let me first list some of the outstanding irrationalities among the thousands that I have collected over the years. The following manifestations of human behavior certainly do not appear completely irrational--for they also have (as what behavior has not?) some distinct advantages. Some people, such as those Eric Hoffer calls true believers, will even

hold that many of them bring about much more good than harm. Almost any reasonably objective observer of human ~~and~~ affairs, however, will probably tend to agree that they include a large amount of foolishness, unreality, and danger to our survival or happiness.

### 1. Custom and Conformity Irrationalities

- a. Outdated and rigid customs.
- b. Ever-changing, expensive fashions.
- c. Fads and popular crazes.
- d. Customs involving ~~royalty~~ royalty and nobility.
- e. Customs involving holidays and festivals.
- f. Customary gifts and presentations.
- g. Customs in connection with social affairs and dating.
- h. Courtship, marriage, and wedding customs.
- i. Puberty rites, Bar Mitzpahs, etc.
- j. Academic rites and rituals.
- k. Hazing of schools, fraternal organizations, etc.
- l. Religious rites and rituals.
- m. Customs and rites regarding scientific papers.
- n. Circumcision conventions and rituals.
- o. Rigid rules of etiquette and manners.
- p. Blue laws.
- q. Strong disposition to obey authority, *even when it makes unreasonable demands.*

## 2. Ego-related Irrationalities

- a. Tendency to deify oneself.
- b. Dire need to have superiority over others.
- c. Tendency to give oneself a global, total, all-inclusive rating.
- d. Tendency to desperately seek for status.
- e. Tendency to prove oneself rather than enjoy oneself.
- f. Tendency to believe that one's value as a human depends on one's competency at an important ~~or~~ performance or group of important performances.
- g. Tendency to value oneself or devalue oneself in regard to the performances of one's family.
- h. Tendency to value or devalue ~~or~~ oneself in regard to the performances or status of one's school, neighborhood group, community, state, or country.
- i. Tendency to denigrate or devil-ify oneself.

## 3. Prejudice-related Irrationalities

- a. Strong prejudice.
- b. Dogma.
- c. Racial prejudice.
- d. Sex prejudice.
- e. Political prejudice.
- f. Social and class prejudice.
- g. Religious prejudice.
- h. Appearance prejudice (tendency to strongly favor or disfavor people or their acts because of their physical attractiveness or unattractiveness).



4. Common ~~are~~ Kinds of Illogical Thinking

- a. Overgeneralization.
- b. Magnification and exaggeration.
- c. Use of nonsequiturs.
- d. Strong belief in anti-empirical statements.
- e. Strong belief in absolutes.
- f. Gullibility <sup>g</sup> and over-suggestibility.
- g. Strong belief in contradictory statements.
- h. Strong belief in utopianism.
- i. Strong adherence to unreality.
- j. Strong belief in unprovable statements.
- k. Shortsightedness.
- l. Overcautiousness.
- m. Giving up one extreme statement and going to the other extreme.
- n. Strong belief in shoulds, oughts, and musts.
- o. The dire need for certainty.
- p. Wishful thinking.
- q. Lack of self-perspective.
- r. Difficulty of learning.
- s. Difficulty of unlearning and relearning.
- t. Deep conviction that because one believes something strongly it must have objective <sup>e</sup> reality and truth.
- u. Conviction that because one had better respect the rights of others to hold beliefs different from one's own their beliefs have truth.

## 5. Experiential and Feeling Irrationalities

- a. Strong conviction that because one experiences something deeply objective and "feels" its truth that it must have ~~subjective~~ reality and truth.
- b. Strong conviction that the more intensely one experiences something the more objective reality and truth it has.
- c. Strong conviction that because one authentically and honestly feels something it must have objective truth and reality.
- d. Strong conviction that all authentic and deeply ~~felt~~ experienced feelings represent legitimate and healthy feelings.
- e. Strong conviction that when a powerful irrational thought or feeling exists (e.g., a mystical feeling that one understands everything in the universe) it constitutes a deeper, more important, and objectively truer idea or emotion than a rational thought or feeling.

## 6. Habit-making Irrationalities

- a. ~~The~~ The acquiring of nonproductive and self-defeating habits easily and ~~unconsciously~~ unconsciously.
- b. The automatic retention and persistence of nonproductive and self-defeating habits in spite of one's conscious awareness of their irrationality.
- c. Failure to follow up on conscious determination ~~and~~ and resolution to break a self-defeating habit.
- d. Inventing rationalizations and excuses for not giving up a self-defeating habit.
- e. Backsliding into ~~self-defeating~~ self-defeating habits after one has temporarily overcome them.

## 7. Addictions to Self-defeating Behaviors

- a. Addiction to ~~me~~ over-eating.
- b. Addiction to smoking.
- c. Addiction to alcohol.
- d. Addiction to drugs.
- e. Addiction to tranquilizers and other medicines.
- ~~2~~ f. Addiction to work, at the expense of greater enjoyments.
- g. Addiction to approval and love.

## 8. Neurotic and Psychotic Symptoms

- a. Overweening and disruptive anxiety.
- b. Depression and despair.
- c. Hostility and rage.
- d. Extreme feelings of self-downing and hurt.
- e. Extreme feelings of self-pity.
- f. Childish grandiosity.
- g. Refusal to accept reality.
- h. Paranoid thinking.
- i. Delusions.
- j. Hallucinations.
- k. Psychopathy.
- l. Mania.
- m. Extreme withdrawal or catatonia.

## 9. Religious Irrationalities

- a. Devout faith unfounded in fact.
- b. Slavish adherence to religious dogma.
- c. Deep conviction that a supernatural force must exist.
- d. Deep conviction that a supernatural force or entity has special, personal interest in oneself.
- e. Deep conviction in Heaven and Hell.
- f. Religious bigotry.
- g. Persecution of other religious groups.
- h. Wars between religious groups.
- i. Scrupulous adherence to religious rules, rites, and ~~and~~ taboos.
- j. Religious antisexuality and extreme puritanism.
- k. Religious conviction that all pleasure equates with sin.
- l. Complete conviction that some deity will heed one's prayers.  
or soul
- m. Absolute conviction that one has a spirit <sup>or soul</sup> entirely divorced from one's material body.
- ~~---~~
- n. Absolute conviction that one's soul will live forever.
- o. Absolute conviction that no kind of superhuman force can possibly exist.

## 10. Population Irrationalities

- a. Population explosion in many parts of the world.
- b. Lack of education in contraceptive methods.
- c. Families having more children than they can afford to support.
- d. Restrictions on birth control and abortion for those who want to use them.
- e. ~~Some~~ Some nations deliberately fomenting a population explosion to create more cannon fodder.

## 11. Health Irrationalities

- a. Air pollution.
- b. Noise pollution.
- c. Drug advertising and promotion.
- d. Poor health education.
- e. Harmful food additives.
- f. Uncontrolled medical costs and resultant poor health facilities.
- g. Unnecessary surgical procedures.
- h. Avoidance of physicians and dentists by people requiring diagnostic and medical procedures.
- i. Neglect of medical research.

## 12. Acceptance of Unreality

- a. Widespread acceptance and following of silly ~~myths~~ myths.
- b. Widespread acceptance and following of extreme romanticism.
- c. Widespread acceptance and following of foolish, inhumane fairy tales.
- d. Widespread acceptance and following of unrealistic movies.
- e. Widespread acceptance and ~~following~~ following of unrealistic radio and TV dramas and serials.
- f. Widespread pollyannaism.
- g. Widespread utopianism.

### 13. Political Irrationalities

- a. Wars.
- b. Undeclared wars and cold ~~war~~ wars.
- c. Civil wars.
- d. Political corruption and graft.
- e. Foolish election and voting procedures.
- f. Political riots.
- g. Terrorism.
- h. Political persecution and torture.
- i. Extreme patriotism.
- j. Extreme nationalism.
- k. Constant international bickering.
- l. Sabotaging of attempts at world collaboration and cooperation.

### 14. Economic Irrationalities

- a. Ecological waste and pollution.
- b. Poor use and development of natural resources.
- c. Economic boycotts and wars.
- d. Needless employer-employee bickering and strikes.
- e. Extreme profiteering.
- f. Business bribery, corruption, and theft.
- g. Extreme economic status-seeking.
- h. Union bribery, corruption, and graft.
- i. Misleading and false advertising.
- j. Foolish restrictions on business and labor.

X

- k. Inefficiency in business and industry.
- l. Addiction to foolish economic customs.
- m. ~~Some~~ Inequitable and ineffectual taxes.
- n. Gambling abuses.
- o. Foolish consumerism (e.g., expensive dog funerals, ~~funerals~~ funerals, weddings, alcohol consumption, etc.)
- p. Production of shoddy materials.
- r. Lack of intelligent consumerism information and control.
- s. Inefficiently run welfare system.
- t. Inefficiently run government agencies.

#### 15. Avoidance Irrationalities

- a. Procrastination.
- b. Complete avoidance of ~~some~~ important things; inertia.
- c. Refusal to face important realities.
- d. Oversleeping and avoidance of sufficient sleep.
- e. Refusal to get sufficient exercise.
- f. Lack of thought and preparation for the future.
- g. Needless suicide.

#### 16. Dependency Irrationalities

- a. Need for approval and love of others.
- b. Need for authority figures to run one's life.
- c. Need for superhuman gods or devils.
- d. Need for parents when one has matured chronologically.
- e. Need for a helper, guru, or therapist.
- f. Need for a hero.
- g. Need for magical solutions to problems.

## 17. Hostility Irrationalities

- a. Condemning people totally because some of their acts appear undesirable or unfair.
- b. Demanding that people ~~be~~ absolutely must do what ~~one~~ one would like them to do and damning them when they don't.
- c. Setting up perfectionistic standards and insisting that people have to follow them.
- d. Commanding that justice and fairness must exist in the universe and making oneself quite incensed when they do not.
- e. Insisting that hassles and difficulties must not exist and that life turns absolutely awful when they do.
- f. Disliking unfortunate conditions and not merely working to overcome or remove them but over-rebelliously hating the entire system that produces them and the people involved in this system.
- g. Remembering past injustices and vindictively feuding against the perpetrators of these injustices forever.
- h. Remembering past injustices in gory detail and obsessing ~~over~~ about them and their perpetrators forever.

## 18. Excitement-seeking Irrationalities

- a. Continuing to gamble compulsively in spite of serious losses.
- b. Leading a carousing, playboy or playgirl type of life at the expense of other more solid enjoyments.
- c. Engaging in dangerous sports or pastimes, such as mountain climbing, hunting, or skiing under hazardous conditions.
- d. Deliberately having sex without taking contraceptive ~~measures~~ or venereal disease precautions.



- e. Engaging in college hazing or other pranks of a ~~harmful~~ hazardous nature.
- f. Turning in false fire alarms.
- g. Dangerous forms of dueling.
- h. Engaging in stealing or homicide for excitement-seeking.
- i. Engaging in serious forms of brawling, fighting, rioting, or warring for excitement seeking.
- j. Engaging in cruel sports, such as clubbing baby seals or cock-fighting for ~~excitement-seeking~~ excitement-seeking.

19. Magic-related Irrationalities.

- a. Devout belief in magic, sorcery, witchcraft, etc.
- b. Devout belief in astrology.
- c. Devout belief in phrenology.
- d. Devout belief in mediums and ghosts.
- e. Devout belief in talking horses and other talking animals.
- f. Devout belief in ~~extra~~ extrasensory perception.
- g. Devout belief in demons and exorcism.
- h. Devout belief in the power of prayer.
- i. Devout belief in superhuman entities and gods.
- j. Devout ~~belief~~ belief in damnation and salvation.
- k. Devout belief that the universe really cares for humans, ~~and~~.
- l. Devout belief that some force in the universe spies on humans and regulates their lives on the principle of deservingness and undeservingness.
- m. Devout belief in the unity and union of all things in the world.
- n. Devout belief in immorality.

## 20. Immorality Irrationalities

- a. Engaging in immoral and criminal acts opposed to one's own strong moral code.
- b. Engaging in immoral or criminal acts for which one has a good chance of getting apprehended and severely penalized.
- c. Engaging in immoral and criminal acts when one would have a good chance of gaining more with less effort at noncriminal pursuits.
- d. Firmly believing that virtually no chance exists of one's getting caught at immoral and criminal acts when a good chance actually exists.
- e. Strong belief that because a good chance exists that one can get away with a single criminal act a good chance also exists that one can get away with repeated acts of that nature.
- f. Stubborn refusal to amend one's immoral ways even though one suffers severe penalties for engaging in them.
- g. Engaging in criminal, assaultive, or homicidal acts without any real sense of behaving irresponsibly or immorally.

21. Irrationalities Related to Low Frustration Tolerance of <sup>r</sup>A Short-range Hedonism.

- a. Strong insistence on going ~~mainly~~ mainly or only for the pleasures of the moment instead of for those of the present and future.
- b. Obsession with immediate gratifications, whatever the cost.
- c. ~~Whining~~ Whining and strongly pitying oneself when one finds it necessary to surrender short-range pleasures for other gains.
- d. Ignoring the dangers inherent in going for immediate pleasures.
- e. Striving for ease and comfort rather than for greater satisfactions that require some temporary discomfort.

- f. Refusing to work against a harmful addiction because of the immediate discomfort of giving it up.
- g. Refusing to continue with a beneficial or satisfying program of activity because one views its onerous aspects as too hard and devoutly believes that they should not exist.
- h. Champing at the bit impatiently when one has to wait for or work for a satisfying condition to occur.
- i. Procrastinating about doing activities that one knows would turn out beneficially and that one has promised oneself to do.
- j. Significantly contributing to the consumption of scarce commodity, that one knows one will very much want in the future.

## 22. Defensive Irrationalities

- a. Rationalizing about one's poor behavior instead of trying to honestly admit it and correct it.
- b. Denying that one has behaved poorly or stupidly when one clearly has.
- c. Avoiding facing some of one's serious problems and sweeping them under the rug.
- d. Unconsciously repressing some of one's "shameful" acts because one will savagely condemn oneself if one consciously admits them.
- e. Projecting one's poor behavior onto others and contending that they did it, in order to deny responsibility for it.
- f. Using the sour grapes mechanism, and claiming that you really do not want something you do want, ~~when~~ when you find it too difficult to face your not getting it.
- g. Identifying with outstanding individuals and believing that you

have the same kinds of abilities or talents that they have.

- h. Resorting to transference: confusing people who ~~affected you~~ affected you seriously in your past life with those whom you have interests in today and assuming that the present individuals will act pretty much the same way as the past ones did.
- i. Resorting to a reaction formation: expressing reverse feelings (such as love) for someone for whom you really have the opposite feeling (such as hate).

### 23. Attribution Irrationalities

- a. Attributing to people feelings for you that they really do not have.
- b. Attributing certain motives for people's behavior when they do not actually have those motives.
- c. Attributing to people a special interest in you when they have no such interest.
- d. Attributing certain characteristics or ideas to people because they have membership in a group whose constituents frequently have such characteristics or ideas.

### 24. Memory-related Irrationalities

- a. Forgetting painful experiences soon after they end, and not using them to avoid future pain.
- b. Embellishing the facts about people's behavior and inventing exaggerations and rumors about them.
- c. Focusing mainly or only on the immediate advantages, or disadvantages of things and shortsightedly ignoring what will probably happen in connection with them in the future.

- d. Repressing one's memory of important events, so as not to feel responsibility or shame about their occurring.
- e. Remembering some things too well and thereby interfering with effective thought and behavior in other respects.

#### 25. Demandingness-related Irrationalities

- a. Demanding that one must do well at certain goals in order to accept oneself as a human.
- b. Demanding that one must win the approval or love of significant others.
- c. Demanding that one must do perfectly well at practically everything and/or win the perfect approval of practically everyone.
- d. Demanding that others must treat one fairly, justly, considerately, and lovingly.
- e. Demanding that everyone must treat one perfectly fairly, justly, considerately, and lovingly.
- f. Demanding that the conditions of life must remain easy and that one must get practically everything one wants quickly, without any undue effort.
- g. Demanding that one must have almost perfect enjoyment or ecstasy at all times.

#### 26. Sex-related Irrationalities

- a. The belief that sex acts have intrinsic ~~evil~~ dirtiness, badness, or wickedness.
- b. The belief that sex acts prove <sup>absolutely</sup> bad or immoral unless they

- go with love, marriage, or other nonsexual relationships.
- c. The belief that orgasm has a sacred quality and that sex without it has no real joy or legitimacy.
  - d. The belief that intercourse has a sacred quality and that orgasm must come about during penile-vaginal intromission.
  - e. The belief that one must have sex competence and that one's worth as a person doesn't exist without it.
  - f. The belief that good sex must include simultaneous orgasm.
  - g. The belief that masturbation and petting to orgasm have a ~~shameful~~ shameful quality, not the legitimacy of intercourse.
  - h. The belief that men can legitimately and morally have more sex or less restricted sex than can ~~men~~ WOMEN.
  - i. The belief that sex competence should occur spontaneously and easily, without any particular kind of knowledge or practice.
  - j. The belief that women have little natural interest in sex, remain naturally passive, and have inferior sexual ~~sexual~~ abilities and capacities.
  - k. The belief that two people who love each other <sup>can</sup> have little or no sexual interest in other individuals.

### 27? Science-related Irrationalities

- a. The belief that science provides a panacea for the solution of all human problems.
- b. The belief that the scientific method constitutes the only method of advancing human knowledge.

- c. The belief that all technological inventions and advances prove good for ~~most~~ humans.
- d. The belief that because the logico-empirical method of science does not give perfect solutions to all problems and has its limitations that it has little or no usefulness.
- e. The belief that because indeterminacy exists in scientific observation, the logico-empirical method has no validity.
- f. The belief that because science has found evidence and explanations for hypotheses that <sup>originally</sup> only existed in the human imagination (e.g., the theory of relativity), it has to <sup>and undoubtedly will</sup> find evidence and explanations for other imagined hypotheses (such as the existence of a soul or of God).
- g. The belief that because a scientist gets recognized as an authority in one area (e.g., Einstein as a physicist), he or she must have authoritative views in other areas (e.g., politics).
- h. The strong tendency of highly competent, exceptionally well-trained scientists to act in a highly prejudiced, foolish manner in some important aspects of their scientific endeavors, and to behave even more foolishly in their personal lives.
- i. The strong tendency of applied social scientists--such as clinical psychologists, psychiatrists, social workers, counselors, and clergymen--to behave self-defeatingly <sup>and unscientifically</sup> in their personal and professional lives.

The foregoing list of human irrationalities, which in no way pretends to ~~encompass~~ exhaust the field, includes 259 major happiness-sabotaging tendencies. Some of these, admittedly, overlap; so that the list includes repetitions. At the same time, it consists of only a bare outline; and under each of its headings we can easily subsume a large number of other irrationalities. Under heading 1e, for example, irrationalities related to courtship, marriage, and wedding customs, we could easily include hundreds of idiocies, many of them historical but many still extant.

My own field, that of psychotherapy, represents one of the most tragic examples in this respect. I have mentioned it briefly, under heading 27i, ~~science~~ science-related irrationalities, and have listed "the strong tendency of applied social scientists--such as clinical psychologists, psychiatrists, social workers, counselors, and clergymen--to behave self-defeatingly in their personal and professional lives." This hardly tells the tale! For psychotherapy supposedly consists of a field of scientific inquiry and application whose practitioners remain strongly devoted to helping their clients eliminate or minimize their irrational, self-destructive thoughts, feelings, and behaviors. Actually, the opposite largely appears to hold true. For most therapists seem to have almost innumerable irrational ideas and to engage in ~~similar~~ ubiquitous anti-scientific activities that help their clients maintain or even intensify their unreasonableness.

Let me, in this connection, briefly mention a few major irrationalities of psychotherapeutic "helpers": (1) Instead of taking a comprehensive, multimodal, cognitive-emotive-behavioral approach to treatment, they fetish-



istically and obsessively-compulsively overemphasize some ~~monolithic~~ monolithic approach, such as awareness, insight, emotional release, understanding of

the past, experiencing, rationality, or physical release <sup>(Lazarus, 1971).</sup> (2) They have their

own dire needs for their clients' approval and frequently tie these clients to

them in an extended dependency relationship. (3) They abjure scientific, empir-

ically based analysis for far-fetched conjectures that they rarely relate to

<sup>(Dutjevich, 1974; Heites, 1971).</sup>

factual data. (4) They tend to focus on helping clients feel better rather than

get better by learning specifically how they upset themselves and how they can

stop doing so in the future. (5) They dogmatically assume that their own system

or technique of therapy, and it alone, helps people and have a closed mind to

other systems or techniques. (6) They promulgate therapeutic orthodoxies

and excoriate and excommunicate apostates of deviate from their dogmas.

(7) They confuse correlation with cause and effect and assume that if an

individual hates, say, his mother, and later hates other women, his former

feeling must have caused the latter feeling. (8) They mainly ignore the biol-

ogical bases of human behavior and assume that special situational reasons

for all disturbances must exist--and, worse yet, that if one finds these

special reasons the disturbances will almost automatically disappear.

~~They~~ (9) They tend to look for (and "find") unique, clever, and

"deep" explanations of behavior and ignore many obvious, "superficial,"

and truer explanations. ~~They~~ (10) They either promulgate the need, on

the part of their clients, for interminable therapy; or they promulgate the

myth that easy, quick, miracle cures exist (LeShan, 1975). (11) They turn

more and more to magic, faith healing, astrology<sup>B</sup>, tarot cards, and other unscientific means of "transpersonal" psychotherapy (Ellis, 1973<sup>b</sup>, 1975; Frank, 1975). (12) They strive for vaguely define, utopian goals that mislead and harm clients (Watzlawick et al, 1974). (13) They make irrational, unscientific attacks on experimentally-inclined therapists (Hook, 1975; Strupp, 1975a, 1975b). (14) They apotheosize emotion and invent false dichotomies between reason and emotion (Frankel, 1973; ~~Shibles, 1974~~; Shibles, 1974; Strupp, 1975b).

Again, I don't intend ~~to~~ this list as an exhaustive one; and ~~to~~ I could easily double or ~~triples~~ triple it. ~~My main point is to repeat~~ To repeat my main point: virtually all the main headings and subheadings in the above list of major human irrationalities have a score or more further subdivisions; and for each subdivision a fairly massive amount of observational and experimental ~~evidence~~ confirmatory evidence exists. For example, we have a massive amount of observational evidence that innumerable people overeat, procrastinate, think dogmatically, lose considerable amounts of money in foolish gambling, devoutly believe in astrology, and continually rationalize about their own inept behavior. And we have considerable experimental evidence that humans ~~take~~ feel favorably biased in regard to those whom they consider attractive, that they backslide after giving up a habit like overeating, ~~that~~ that they go for specious immediate gratifications instead of more ~~enjoyable~~ enjoyable longterm satisfactions, that they repress memories of events they consider shameful, ~~and~~ that they frequently attribute feelings to others that these others do not seem to have, and that they have an almost incredible degree of suggestibility in regard to an opinion of the majority of their fellows or of a presumed authority figure.

Granted that all the foregoing major human irrationalities--and many more like them!--exist. On what grounds do I maintain the thesis that, in all probability, they have biological roots and stem from the fundamental nature of humans? On several important grounds which I consider quite convincing (though not completely validating, beyond any shadow of doubt). Let me list them:

1. All the major human irrationalities that I list under the twenty-seven headings above seem to exist, in one form or another, in virtually all humans. Not equally, of course! Some of us, on the whole, behave much less irrationally than others. But go find any--yes, I mean any--individuals who do not fairly frequently in their lives subscribe to all--yes, I mean all--of these major irrationalities. For example, using only ~~the~~ the first ten that apply to personal self-sabotaging, main headings in my list, do any of you know of a single man or woman who has not often slavishly conformed to some asinine social custom, not given himself or herself global, total ratings, not held strong prejudices, not resorted to several kinds of illogical thinking, not fooled himself or herself into believing that his or her strong feelings represented something about objective reality, not acquired and persisted in self-defeating habits, not had any pernicious addictions, remained perfectly free of all ~~neurotic~~ neurotic symptoms, never subscribed to religious dogmas, and never surrendered to any foolish health habits? I practically defy you to come up with a single case!

2. Just about all the major irrationalities that now exist have held rampant sway in virtually all social and cultural groups that we have investigated historically and anthropologically. Although rules, laws,

mores, and standards vary widely from group to group, ~~and~~ gullibility, absolutism, dogmas, religiosity, and demandingness about these standards remains surprisingly similar. Thus, your parents and your culture advise or educate you, in the Western civilized world, to wear one kind of clothes and, in the South Sea Islands, to wear another kind. But where they tend to inform you, "You had better dress in the right or proper way, so that people will accept your behavior and act advantageously toward you," you irrationally escalate this "proper" (and not too irrational) standard into, "I must dress properly, because I absolutely need other people's approval. I can't stand their disapproval and the disadvantages that may thereby accrue to me; and if they do not like my behavior that means they do not like me and that I rate as a completely rotten person!" Although your parents and your teachers may encourage you to think in this absolutistic, self-downing manner, you seem to have the innate human propensity (a) to gullibly take them seriously; (b) to carry on their nonsense for the rest of your life; and (c) to invent it yourself if they happen to provide you with relatively little absolutism.

3. Many of the irrationalities that people ~~from~~ profoundly follow go counter to almost all the teachings of their parents, peers, and mass media. Yet they refuse to give them up! Few parents encourage you to overgeneralize, make anti-empirical statements, or uphold contradictory propositions; yet you tend to do this kind of thing continually. Your educational system strongly encourages you to learn, unlearn, and relearn; yet you have great difficulty doing so in many important respects.

You encounter strong persuasive efforts of others to get you to forego non-productive and self-defeating habits, like overeating and smoking. But you largely tend to resist this constant teaching. You may literally go, at your own choosing, for years of psychotherapy to overcome your anxiety or tendencies toward depression. But look at the relatively little progress you often make!

You may have parents who raise you with extreme scepticism or anti-religious tendencies. Yet, you easily can adopt some extreme religious orthodoxy in your adult years. You learn about the advisability of regularly visiting your ~~dentist~~ physician and your dentist from grade school onward. But does this teaching make you go? Does widespread reading about the facts of life quiet your ~~pol~~ Pollyannaism or utopianism--or rid you of undue pessimism? Thousands of well-documented books and films have clearly exposed the <sup>7</sup>inequities of wars, riots, terrorism, and extreme nationalism. Have they really induced you--and your fellowmen and fellowwomen!--to inalterably oppose these forms of political irrationality?

Virtually no one encourages you to procrastinate and to avoid facing life's realities. Well...? Dangerous excitement-seeking rarely gets you the approval of others. Does that stop you from indulging in it? The vast majority of scientists oppose magical, unverifiable, absolutistic, devout thinking. Do you always heed them? You usually know perfectly well what moral and ethical rules you subscribe to; and almost everyone you know encourages you to subscribe to them. Do you? Low frustration tolerance and shortrange hedonism rarely prove acceptable to your elders, your teachers, your clergymen, and your favorite writers. Does their disapproval stop you from frequently giving in to immediate gratification at the expense of future gains?

Who teaches you to rationalize and reinforces you when you do so? What therapist, friend, or parent goes along with your other kinds of defensiveness? But does their ~~almost~~ almost universal opposition stop you? Do significant others in your life reward you ~~for~~ for demanding perfection of yourself or of them? For whining and wailing that ~~the~~ ~~best~~ conditions must transpire the way you ~~desire~~ want them to turn out?

Certainly, a good many of your main irrationalities have an important cultural component--or at least get significantly encouraged and exacerbated by the social group with which you reside. But a good many seem minimally taught; and many others get severely discouraged. They still ubiquitously flourish!

4. As briefly mentioned before, practically all the irrationalities listed in this article hold true not only for ignorant, stupid, and severely disturbed individuals but also for highly intelligent, educated, and relatively little disturbed persons. Ph.D.'s in physics and psychology, for example, have strong racial and other prejudices, indulge in enormous amounts of wishful thinking, believe that if someone believes something strongly or intensely experiences it, it must have objective ~~reality~~ reality and truth, fall prey to all kinds of pernicious habits (including addictions like alcoholism), foolishly get themselves into debt, devoutly think that they must have others' approval, believe in the power of prayer, and invent rumors about others which they then strongly believe. Unusually bright and well-educated people probably hold fewer or less rigid irrationalities than average members of the populace; but they hardly have a monopoly on rational behavior!

5. So many humans hold highly irrational beliefs and participate in exceptionally self-defeating behaviors so often that we can only with great difficulty uphold the hypothesis that they entirely learn these ways of reacting. Even if we hypothesize that they largely or mainly ~~learn~~ learn how to behave so badly, the obvious question arises: Why do they allow themselves to get taken in so badly by the teachings of their culture, and if they do imbibe these, during their callow youths, why don't they teach themselves how to give up these inanities later? Almost all of us learn many significant political, social, and religious values from our parents and our institutions ~~learn~~ during our childhood, but we often give them up later, after we go to college, read some hard-headed books, or befriend people who subscribe to quite different values. Why don't we do this about many of our most idiotic and impractical views, which clearly do not accord with reality and which obviously do us considerable harm?

Take, for instance, the following ideas, which just a little reflection will show have little sense and which will almost always lead to bad results: (1) "If my sister did me in as a child, all women appear dangerous and I'd better not relate to them intimately." (2) "If I lack competency in an important area, such as academic performance, I rate as a totally worthless individual and deserve no happiness." (3) "Because you have treated me unfairly, as you absolutely must not, you have to change your ways and treat me better in the future." (4) "Since I enjoy smoking very much, I can't give it up; and although others acquire serious disadvantages from continuing it, I can most probably get away with smoking without harming myself." (5) "Because blacks get arrested and convicted for more



crimes than whites, they all rate as an immoral race and I'd better have nothing to do with them." (6) "If biological and hereditary factors play an important part in emotional disturbance, ~~we can do nothing to help~~ we can do nothing to help disturbed people and their plight remains hopeless."

All these irrational statements, and hundreds of similar ones, clearly make little or no sense and wreak immense social and individual harm. Yet we ~~do~~ devoutly believe them in millions of cases; and even if we can show that some significant part of <sup>these beliefs</sup> ~~the beliefs~~ stems from social learning (as <sup>it</sup> ~~it probably~~ ~~does~~ ~~they~~ probably do), why do we so strongly imbibe and so persistently hang on to them? Clearly, it seems to me, because we have a ~~strong~~ powerful biological predisposition to do so.

6. When bright and generally competent people give up many of their irrationalities, they frequently tend to adopt other inanities or to go to opposite irrational extremes. Devout religionists often turn into devout atheists. Political right-wing extremists wind up as left-wing extremists. Individuals who procrastinate mightily may later emerge as compulsive workers. People who surrender one irrational phobia frequently turn up with another equally irrational but quite different phobia. Extremism tends to remain as a natural human trait that takes one foolish form or another.

7. Humans who seem least afflicted by irrational thoughts and behaviors still revert to them, and sometimes seriously so, at certain times. A man who rarely gets angry at others or has temper tantrums may on occasion incense himself so thoroughly that he almost or ~~literally~~ actually murders someone. A woman who fearlessly studies difficult subjects and takes complicated examinations may feel that she can't bear rejection by a job interviewer and may fail to look for a suitable position. A therapist who



objectively and dispassionately teaches his or her clients how to behave more rationally may, if one of them stubbornly resists, act quite irrationally and agitatedly dismiss that person from therapy. In cases like these, unusual environmental conditions often bring out silly behavior by normally sane individuals. But these individuals obviously react to these conditions because they have some basic disposition to go out of their heads under unusual kinds of stress--and that basic disposition probably has innate elements.

8. People highly opposed to various kinds of irrationalities often fall prey to them. Agnostics give in to devout, absolutistic thoughts and feelings. Highly religious individuals act quite immorally. Psychologists who believe that guilt or self-downing has no legitimacy make themselves guilty and self-downing.

9. Knowledge or insight into one's irrational behavior only partially, if at all, helps one change it. ~~and~~ You may know full well about the harmfulness of smoking--and smoke more than ever! You may realize that you hate sex because your parents puritanically taught you to do so; but you may nonetheless keep hating it. You may have clearcut "intellectual" insight into your overweening egotism but have little "emotional" insight into how to change it. This largely arises from the basic human tendency to have two contradictory beliefs at the same time--an "intellectual" one which you lightly and occasionally hold and an "emotional" one which you vigorously and consistently hold, and which you therefore usually tend to act upon. This ~~is~~ tendency to have simultaneous contradictory beliefs again seems part of the human condition.

10. As Freud (1964) and other psychoanalytic writers have pointed

out, people can consciously think and feel one way and unconsciously think, feel, and act another way. Thus, you can consciously resolve to stop over-eating but unconsciously continue ~~overeating in order~~ <sup>To make it</sup> to protect yourself from dating members of the other sex and putting yourself down if you fail with them. Unconscious thoughts and feelings, including certain automatic and unconscious resorting to defense mechanisms (rationalizing, denying, projecting, etc.) seem rooted in biologically based human tendencies.

11. No matter how hard and how long people work to overcome their irrational thoughts and behaviors, they usually find it exceptionally difficult to overcome or eradicate them; and to some degree they always remain exceptionally fallible in this respect (Ellis, 1962; Ellis and Harper, 1975; Hauck, 1973; Maultsby, 1975). We could hypothesize that because they overlearn their self-defeating behaviors at an early age, they therefore find it most difficult to recondition themselves. But it seems simpler and more logical to conclude that their fallibility has an inherent source--and that their early conditionability and proneness to accepting training in dysfunctional behavior itself represents a significant part of their innate fallibility! Certainly, they hardly acquired conditionability solely through having someone condition them!

12. It appears reasonably clear that certain irrational ideas stem from personal, nonlearned (or even anti-learned) experiences; that we inventively, though crazily, invent them in a highly creative manner. Suppose, for instance, you fall in love with someone and you ~~are~~ intensely feel, "know," and state, ~~with your own mind~~ "I know I'll love you forever!"

You certainly didn't learn that knowledge--since you not only read <sup>about</sup> Romeo and Juliet (a fictional pair, of course) but also read lots of other information, such as divorce statistics, which show that people rarely romantically adore each other forever. You consequently ~~selected~~ chose your "knowledge" out of several other bits of data you could have chosen to "know." And you most probably did so because romantic love among humans frequently carries with it the intrinsic illusion that "Because my feeling for you has such authenticity and intensity, I know it will last forever." You, at least for the most part, autistically create the false and irrational "knowledge" that goes with your genuine ~~feelings~~ (and most probably temporary!) feelings.

Again, you may get reared as Jew or a Moslem and may convert yourself to Christianity and conclude, "I feel Jesus as my Savior; and I feel certain that ~~He exists~~ He exists as the Son of God." Did your experience or your environmental upbringing lead to this feeling and belief? Or did you, for various reasons, invent it? The natural tendency of humans seems to consist of frequent dogmatic beliefs that their profound feelings prove ~~that~~ something objectively exists in the universe; and this largely appears an innately based process of illusion.

13. If we look closely at some of the most popular irrational forms of thinking, it appears clear that humans figure them out. They start with a sensible or realistic observation, and they end up with a non sequitur type of conclusion. Thus, you start with, "It would feel enjoyable and I would have advantages if Jane loved me." You then falsely conclude, "Therefore ~~she~~ she has to love me, and I find it awful if she doesn't." If you begin with an even stronger observation, "I would find it exceptionally and uniquely

enjoyable if Jane loved me," you have even more of a tendency to conclude, "Therefore she must!" But no matter how true the first part of your proposition proves, the second part remains a non sequitur, making no sense whatever.

Similarly, you tend to irrationally conclude, "Because I find order desirable, I need certainty." "Because I find failure most undesirable, (1) I must not fail; (2) I did not cause myself ~~to~~ to fail--he made me do it; and (3) Maybe I didn't really fail at all." "Because it would prove very hard for me to give up smoking, I find it too hard; and I can't do it." All these non sequiturs stem from autistic, grandiose thinking--you simply command that what you desire must exist and what you find ~~an~~ obnoxious must not. This kind of autistic thinking largely appears innate.

14. Many types of irrational thinking largely consist of ~~an~~ arrant overgeneralizations; and as Korzybski (1933) and his followers have shown, overgeneralizations seems a normal (though foolish) part of the human condition. Thus, you easily start with a sensible observation, again, "I failed at that test," and then you overgeneralize to, "I will always fail; I have no ability to succeed at it." Or you start with, "They sometimes treat me unjustly," and you overgeneralize to, "they always treat me unjustly, and I can't stand their continual unfair treatment!" Again: this seems the way that normal humans naturally think. Children, as Piaget ~~and~~ <sup>(Piaget & Inhelder, 1974)</sup> and his associates have shown, lack good judgment until the age of seven or eight. Adults frequently lack it forever!

15. Human thinking not only significantly varies in relation to people's intelligence levels but some forms of thinking stem largely from left-brain or ~~right-brain functioning~~ right-brain functioning. Both intelligence and left-brain and right-brain function<sup>ing</sup> have a significant hereditary element and do not arise merely out of learned experiences ~~Sperry~~ (Austin, 1975; Sperry, 1975).

16. Some forms of ~~human~~ irrationality, such as low frustration tolerance or the seeking of the specious rewards of immediate rather than long-term gratification, exist in many lower animals as well as in humans. Ainslie (1975) reviews the literature on specious reward and shows how a decline in the effectiveness of rewards occur in both animals and humans as the rewards get delayed from the ~~able~~ time of choice. Again, a fairly clearcut physiological and hereditary element seems obvious here.

17. Although significantly different irrationalities exist in different cultures, all cultures appear to have significant irrationalities, and many of them probably died out because of these behaviors. People will ~~probably~~ tend to invent and pick up self-defeating ideas everywhere they live, in spite of the wide diversity of their environments.

18. Although enlightened education normally tends to reduce human irrationality, it by no means entirely overcomes human gullibility. As Bok (1975), Jerome (1975), and ~~Sperry~~ Kurtz (1974) indicate, although no scientific data exists favoring astrology and much information shows it to consist of magic and nonsense, the belief of college students in astrology has risen enormously in the last decade.

19. Some evidence exists that people often find it much easier to learn self-defeating than non-defeating behavior. Thus, they very easily overeat ~~but~~ but have great trouble sticking to a sensible diet. They can learn, usually from their foolish peers, to smoke cigarettes; but if other peers or elders try to teach them to give up smoking ~~or~~ or to act more self-disciplinedly, in other ways, they resist this teaching to a faretheewell! They fairly easily pick up prejudices against Blacks, Jews, Catholics, and Orientals; but they rarely heed the teachings of thoroughly tolerant leaders. They quickly condition themselves to feel anxious, depressed, hating, and self-downing; but they take an enormous amount of time and effort getting rid of these disturbed feelings. They don't seem exactly doomed to a lifetime of stupid, foolish, ~~or~~ asinine behavior. But pretty nearly!

#### Conclusion

If we define irrationality as thought, emotion, or behavior that leads to self-defeating or self-destructive consequences or that significantly interferes with the survival and happiness of the organism, we find that literally hundreds of major irrationalities exist in all societies and in virtually all humans in those societies. These irrationalities persist despite peoples' conscious determination to change; many of them oppose almost all the teachings of the individuals who follow them; they persist among highly intelligent, educated, and relatively little disturbed individuals;

when people give them up, they usually replace them with other, sometimes just as extreme though opposite, irrationalities; people who strongly oppose them in principle ~~nevertheless~~ nonetheless perpetuate them in practice; sharp insight into them or their origins hardly removes them; many of them appear to stem from autistic invention; they often seem to flow from deep-seated and almost ineradicable human tendencies toward fallibility, overgeneralization, wishful thinking, gullibility, prejudice, and short-range hedonism; and they appear at least in part tied up with physiological, hereditary, and constitutional processes.

Although we can as yet make no certain or unqualified claim for the biological basis of human irrationality, such a claim now has enough evidence behind it to merit serious consideration. People naturally and easily act rationally and self-fulfillingly--as Friedman (1975), Maslow (1973), Rogers (1973) and many other humanistic psychologists have pointed out. Else they probably would not survive. But they also naturally and easily ~~act against~~ act against their own best interests. To some degree, their early and later environments encourage them to learn self-destructive behaviors. But how can we not conclude that they have powerful innate tendencies to listen to and agree with anti-human and inhumane teachings and--more importantly--to continue ~~to believe~~ devoutly to believe in and to idiotically carry on many of these obviously foolish, scientifically untenable teachings?

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