

Theory and Practice of Logic-Based Therapy

Theory and Practice of Logic-Based Therapy:
Integrating Critical Thinking and Philosophy
into Psychotherapy

By

Elliot D. Cohen, PhD

**CAMBRIDGE
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P U B L I S H I N G

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PREFACE

This book represents the latest development of the theory and practice of the philosophical counseling and psychotherapeutic modality called Logic-Based Therapy (LBT). It is intended to provide a practitioners' guide for psychotherapists (e.g., mental health counselors, psychologists, clinical social workers) who want to implement a highly philosophical approach to therapy, as well as for philosophical counselors who seek a systematic and well articulated approach to philosophical counseling.

Part 1 develops the five steps of the LBT process, with careful attention to configuring counselees' behavioral and emotional reasoning. For the latter purpose, it also provides behavioral and emotional reasoning templates, which provide the structural components of many of the self-defeating inferences flagged by an LBT analysis. Emphasis is also placed on the significance of promoting counselee disclosure and the modeling of virtue through counselors' showing of empathy and authenticity in relating to the counselee. In addition, Part 1 provides a separate chapter on the exercise of willpower, developing both Aristotelian (teleological) and Kantian (deontological) methods for helping counselees overcome the inertia of their irrational inclinations.

Part 2 examines each of LBT's eleven Cardinal Fallacies and their relationships, for example, between bandwagon reasoning and the demand for approval. It also includes analyses of key concepts, such as the "must" in the demand for perfection. It further examines the relationship between particular emotions and specific sets of fallacies, for example, guilt in relation to catastrophic thinking and the demand for certainty. Treatments of each Cardinal Fallacy include examples of significant philosophical antidotes for overcoming the fallacy, for example, Nietzsche's idea of self-empowerment to address the self-stultifying demand for approval of others.

Part 3 discusses the major aspects of LBT's "positive psychology"; examines, in turn, each of LBT's transcendent virtues; and shows how these virtues comprise an interconnected network for transcending faulty thinking and cultivating virtuous habits. It includes a separate chapter on the virtues that transcend fallacies rooted in the major premise rules of counselees' practical reasoning, as well as a chapter on the inductive virtues, which transcend inductive fallacies rooted in counselees' empirical minor premises.

This book sums up and expands upon almost three decades of research and development of LBT. It is intended to help facilitate both comprehension and application of its theory. In keeping with LBT's practical bent, insofar as this book assists practitioners in helping their counselees to better manage their life problems and to do and feel better, it will have accomplished its main purpose.

The convergence of LBT with Cognitive-Behavior Therapy (CBT) should be evident to readers who are trained in conventional psychotherapeutic modalities. This convergence is due to the profound influence that the late great Albert Ellis, inventor of CBT, has had on the direction of research and development of LBT. But, as this book shows, there are features of LBT that uniquely mark it out as a unique, highly philosophical modality, such as its use of practical syllogistic logic, its virtue-oriented, Aristotelian nature, and its use of diverse philosophical theories to systematically overcome, transcend, and redirect counselees' Cardinal Fallacies toward their respective virtues.

The theory and practice of LBT will, predictably, continue to mature beyond its current status with the support of those devoted to its advancement, such as my colleague and friend, Dr. Samuel Zinaich, Jr., who has devoted the greater part of his professional life to promoting and fostering the principles and practice of LBT through his scholarly activities and training of new LBT counselors. As new generations of practitioners and underwriters of LBT emerge (in this context I'd especially like to acknowledge my assistant, Marisa Diaz-Waian) I am rationally hopeful that LBT will continue to flourish and gain high prominence in the 21st Century—and beyond.

INTRODUCTION

WHAT IS LOGIC-BASED THERAPY?

Logic-Based Therapy (LBT) is a variant of the theory of psychotherapy known as Rational-Emotive Behavior Therapy (REBT).¹ It is also a leading modality of “philosophical practice” (or “philosophical counseling”). The keynote of the theory is that counselees disturb themselves emotionally and behaviorally by deducing self-defeating, unrealistic conclusions from irrational premises in their practical reasoning. LBT accordingly provides the critical thinking tools for constructing counselees’ faulty reasoning; identifying and refuting its irrational premises; and constructing philosophically enlightened antidotes to these premises, guided by a corresponding set of “transcendent virtues” such as respect (of self, other, and the world), metaphysical security, courage, and temperance. Like its psychotherapeutic parent, REBT, it also emphasizes making behavioral changes in order to overcome irrational tendencies and cultivate virtuous habits.

The theory and practice of LBT has been steadily developing ever since I began work on it in the mid-1980’s. Today, it has a worldwide following, from East to West, by both mental health counselors (especially cognitive-behaviorists) and philosophical counselors. Books and articles on LBT have been translated into a number of languages including Italian, German, Chinese, and Korean. Research, development, and training in LBT are ongoing through the *Institute of Critical Thinking: National Center for Logic-Based Therapy*,² which I founded in 1985.

The theory began with the idea that many debilitating and self-defeating emotional and behavioral problems may largely be the result of bad logic. I wondered how many marriages went awry from the commission of faulty thinking errors; how many familial dysfunctions amid self-defeating bouts with anxiety, depression, anger and guilt were fueled by conclusions that could never pass philosophical muster. Yet the treatment of behavioral and emotional problems was exclusively the province of the psychologist, not the philosopher. At the same time, training in logic and philosophical analysis was not typically part of the training of psychologists.

Notwithstanding the conventional wisdom of the time, which held that philosophers do not venture outside the classroom to set up clinical practices, I set out, under the supervision of a licensed clinical psychologist, to test my hypothesis by treating counselees with logic and philosophy. In so doing, I found people torturing themselves through the commission of reasoning errors that could have been flagged by students of philosophy 101.

Prior to starting my clinical work, I had become aware of a modality of cognitive-behavioral psychotherapy that started with a similar hypothesis as my own, that is, that behavioral and emotional problems are rooted in irrational thinking. The theory in question was (then) known as Rational-Emotive Therapy (RET),³ which had been developed by psychologist Albert Ellis beginning more than three decades before my own work began. In 1985, I became certified in RET under Dr. Ellis. This marked the beginning of a close professional relationship and friendship I had with him, which lasted more than two decades until his death in August 2007.

As such, from its inception, LBT was developed in the light of REBT and, consistent with Dr. Ellis' own teachings and theorizing, rejected the traditional dichotomization of philosophy and psychotherapy. Nevertheless, there are still some philosophical practitioners who maintain that philosophical and psychological counseling are distinct fields.⁴ However, this view fails to fully appreciate the reciprocal, substantive, intrinsic relationship between philosophical and psychological counseling.

The bifurcation between philosophical counseling and psychotherapy appears to trade on the mistaken assumption that, because philosophy and psychology are themselves independent fields, that philosophical counseling must also be independent. This is a fallacy of composition, however. Philosophy is an aspect of philosophical counseling but it is not itself philosophical counseling. What's true of the part is not necessarily true of the whole. Philosophy is an input into philosophical counseling. The latter is a hybrid discipline, a form of counseling that uses philosophical methods and theories. It is not "pure" philosophy, but instead "applied" philosophy. In its application it becomes psychological. It is philosophical psychological therapy, not just philosophy.

A viable *psychotherapy* must address the wide range of emotional and behavioral problems with which humans grapple. It must be grounded in a comprehensive theory that systematically explains the connections between cognition, emotion, and behavior; it must provide a set of tools—techniques, skills, etc.—that permits application of the theory; and it must be validated empirically. The history of clinical psychology can boast of its strides in this realm, whereas philosophy in the form of philosophical

counseling has only begun to test these waters in any systematic way. How haughty is it to suppose that philosophers need not call upon the wisdom of psychology while claiming to apply the “wisdom of the ages.”

On the other hand, it is equally unrealistic to deny the philosophical roots of psychology and psychotherapy. To give just some historically significant examples, Plato’s tripartite division of the soul provided fodder for Freud’s famous distinction between Id, Ego and Superego.

Freud’s view regarding human behaviour (i.e., that there were never any accidents) reflected his thorough commitment to the philosophical theory of determinism (the view that all human behavior can be explained scientifically). Within this philosophical framework, Freud launched his psychoanalytic theory, which made unconscious motivation the source of psychological maladjustment, and which, in turn, provided a litany of psychoanalytic tools to apply the theory, including ego defense mechanisms (especially repression), transference, counter-transference, resistance, dream interpretation, and free association.

In concert with Freud’s deterministic philosophy, the classical behaviorists (notably B. F. Skinner) proclaimed that human subjectivity—thoughts, desires, hopes, etc.—was merely a by-product of biological processes, which had no efficacy in determining human behavior. Instead this theory sought to explain human behavior as an effect of the environment. Relegating free will and human responsibility to myths, it defended a science of behavior control as a practical and prudent goal. Various techniques for “conditioning” behavior were accordingly devised in an effort to apply the theory.

Person-Centered Therapy began with the “humanistic” philosophical assumption that there was a forward-moving, positive, human nature that tended toward actualization unless thwarted by inadequate relationships with significant others and peers. The theory accordingly set out to define the attitudinal conditions that therapists needed to bring to the therapeutic relationship in order to help unleash this positive potential in their clients.

Negating both behavioral and humanistic assumptions, Existential Therapy declared that there was no human nature whatsoever and that human beings instead defined their own nature through their own freely chosen courses of action. Accordingly, this form of therapy sought to encourage clients to stand up to their anxieties about making choices, to live authentically without hiding behind deterministic philosophies, and to take responsibility for their lives and what they made of themselves.

Cognitive-behavioral approaches, including Transactional Analysis, Cognitive-Behavior Therapy (CBT) and Rational-Emotive Behavior Therapy (REBT), among others, brought forth a mixed bag of

philosophical assumptions. These theories stressed the importance of human subjectivity (cognition) in interpreting reality and in responding to it. Borrowing from ancient Stoic philosophy, especially that of Epictetus, it declared that it was not events in people's lives that upset them but rather their interpretation of them. As in Existential Therapy, human beings were perceived as having the ability to define themselves through their actions, but they were also creatures with certain biological natures that largely defined their behavioral and emotional tendencies. Like Existential Therapy, human beings retained the power to exercise free will, make choices, and to take responsibility in controlling emotions and actions in the face of life exigencies. Along with behaviorists, these theories maintained the efficacy of a set of behavioral techniques ranging from role-playing to various forms of "operant" conditioning in helping to reinforce rational choices and in overcoming irrational tendencies.

The bifurcation of philosophical from psychological practice therefore overlooks their complimentary roles. On the one hand, philosophical practice can be informed psychologically by its incorporation of the tools and distinctions that psychological practitioners have devised and tested. For example, LBT accepts the ideas of providing behavioral assignments, rational-emotive imagery, and bibliotherapy, which are commonly utilized in other cognitive-behavior psychotherapeutic approaches.⁵ And it accepts the Person-Centered ideas that counselors should be empathetic, unconditionally positive regarding, and congruent.⁶ In fact, LBT embraces empathy as one of its "transcendent virtues."⁷ Philosophers who attempt to carve out their own professional turf without seeking the aid of their psychological brothers and sisters are likely to re-invent the wheel and to slow the progress of philosophical counseling.

On the other hand, philosophical practitioners who have taken the work of psychological practitioners seriously, and have accepted their complementary natures, may have a good deal to add to psychological practice in the way of making it even more philosophical than it already is. This is where LBT makes its important contributions, not only to philosophical practice, but also to psychotherapy.

LBT enhances cognitive-behavioral psychotherapy with a more comprehensive, finely tuned set of informal fallacies, in its taxonomy of Cardinal Fallacies (from jumping on the bandwagon to post hoc reasoning), which undergird many behavioral and emotional problems, from anxiety and depression to self-stultifying life decisions and dysfunctional relationships.

LBT counselors also make abundant and systematic use of the formal methods of philosophical thinking—examination of counselees'

arguments, analysis of key concepts, examination of underlying assumptions, etc. What marks these activities out as distinctively philosophical is that they focus primarily on the *justification* of beliefs as distinct from their causal etiology. As will be discussed in the next chapter, these methods of “critical thinking” provide standards of rational inference and decision-making. A person who makes practical decisions based on vague concepts, unjustified assumptions, inconsistencies, and lack of evidence is likely to make regrettable decisions and experience behavioral and emotional discomfort. This is as true in ordinary life as it is in scientific research. The history of human failures in virtually all spheres of inquiry and action are testimonial to this fact.

LBT also systematically utilizes the wisdom of the ages imbedded in the great philosophers (e.g., Socrates, Plato, Aristotle, Epicurus, St. Thomas Aquinas, Descartes, Locke, Hume, Kant, Nietzsche, Heidegger, Sartre, Schopenhauer, to name just a few) to construct potent “antidotes” to each of the Cardinal Fallacies. This goes beyond consistently applying a psychological modality or tool based on a single philosophical theory. For example, while REBT adheres to Epictetus’ teachings by expecting counselees to distinguish between their irrational belief about an event (e.g., the thought that what happened was terrible, horrible, and awful) and the event itself (e.g., getting divorced), LBT brings many other philosophical ideas to bear on the counselee’s circumstances. Moreover, as developed in this book, LBT is the only philosophical form of therapy that systematically uses different philosophical theories as rational antidotes to overcome different faulty thinking errors.

Further, in contrast to traditional modalities of cognitive-behavioral psychotherapy, LBT integrates a theory of “transcendent virtues,” which it utilizes to give counselees positive direction beyond merely overcoming particular faulty thinking errors. In devising this theory, LBT incorporates many ideas from Aristotle’s theory of virtues such as his analysis of prudential reasoning and his theory of incontinence.

Finally, LBT systematically unifies the aforementioned components into a five-step process,⁸ which LBT counselors can use to help their counselees address their problems of living. Beginning with the first chapter, this book develops LBT’s five-steps and shows how it can be applied in a clinical context. It should therefore give guidance to both psychotherapists and philosophical counselors who wish to use LBT in their clinical practices.

Notes

¹ I have in fact elsewhere called it “The New Rational Therapy.” See Elliot D. Cohen, *The New Rational Therapy* (New York: Rowman & Littlefield, 2007).

² See the website of the *Institute of Critical Thinking: National Center for Logic-Based Therapy*, at www.instituteofcriticalthinking.com.

³ Subsequently changed to Rational-Emotive Behavior Therapy (REBT) in 1993.

⁴ See, for example, Gerd B. Achenbach, *Philosophy, Philosophical Practice, and Psychotherapy*,” in *Essays on Philosophical Counseling*, ed. Ran Lahav and Maria Da Venza Tillmanns (Lanham, MD: University Press of America, 1995), 63-74.

⁵ See Chapter 2, this book.

⁶ See Chapter 2, this book.

⁷ See Chapter 11, this book.

⁸ See, especially, Chapter 2, this book.

PART I

THEORY AND PRACTICE OF LBT

CHAPTER ONE

LBT BASICS

As discussed in the ‘Introduction,’ Logic-Based Therapy (LBT) is a relatively new psycho-logical counseling modality that uses philosophical and logical methods and theories. It is, in important respects, more “philosophical” and “logical” than any other cognitive-behavior therapy, including its ancestral theory, Rational-Emotive Behavior Therapy (REBT). This chapter succinctly describes some of LBT’s fundamental logical and philosophical aspects, especially as they compare to REBT.

REBT’s ABC Theory

A key distinction between REBT and LBT lies in LBT’s logical recasting of the “ABC theory.”¹ According to the classical REBT formulation of this theory, there are three “psychological points”:²

- A: Activating event
- B: Belief system
- C: Behavioral and emotional consequence

These respective points can be illustrated by the case of John who messes up on the job, gets fired as a result, and subsequently becomes depressed:

- A: Getting fired as a result of messing up
- B: I am a failure
- C: Depression

At point A it happens that John gets fired as a result of messing up; at point B he tells himself that he is a worthless, failure for having messed up and gotten fired; and at point C John becomes depressed. As such, it is *not* the given activating event (A) by itself but rather this event plus John’s strong negative rating of himself (B) that *causes* him to become depressed (C).

Notice that the relation between (A&B) and C is that of cause-and-effect. (A&B) causes C. The theory therefore looks for the causal laws or connections between certain beliefs and events, on the one hand, and certain behavioral and emotional consequences, on the other. This causal interpretation contrasts the *logical* approach taken by LBT.

The Logic of Logic-Based Therapy

In contrast, LBT uses a type of deductive logic known as the practical syllogism to convert the ABC theory to a mode of inference from premises to conclusions. In so doing, it speaks in terms of *reasoning* rather than in terms of causality. All reasoning contains premises and a conclusion. A premise is a statement that is supposed to *justify* (or provide evidence for) a further statement. This further statement is called the conclusion. When someone supports a conclusion with a premise, this person can be said to be *arguing* for the conclusion, and the ensuing reasoning can also be called a (logical) argument. Thus, LBT recasts the ABC theory of REBT into a logical argument.

A deductive argument is one whereby the conclusion necessarily follows from the premise/s. For example:

If you are a human, then you are mortal
You are a human
So, you are mortal

In this argument, the conclusion is necessitated by the premises—if the premises are true then the conclusion must also be true.³ This argument is also called a syllogism, which is a deductive argument having two premises. Note that the premises of the above argument describe or report states of affairs—that you are human, and that you are mortal.

In contrast, a *practical* syllogism is a deductive argument that has as its first (“major”) premise a general statement that prescribes or rates something. For example:

If you are human, then you are a fallible, messed up creature
You are human
So, you are a fallible messed up creature.

Note that the first premise (the “if—then” statement) does not simply describe or report a states of affairs but instead rates human beings—as messed up creatures. LBT refers to this rating premise as a (major premise) *rule*. In contrast, note that the second premise—that you are

human—does report or describe a state of affairs, namely that you are human. LBT calls this descriptive premise a (minor premise) *report*. Note also that the *conclusion* of this practical syllogism is prescriptive, that is, it rates something. In fact, the conclusion is the rating of the “then” component of the rule that is detached from the “if” clause. It is therefore an actual (not just a conditional) rating.

In the aforementioned terms, LBT converts REBT from a causal model to a logical one. For example, consider the case of John discussed in the previous section. John might be reasoning to himself: “I couldn’t even keep my job. I’m such a failure.” According to the LBT theory, John’s reasoning can be syllogistically recast as follows:

(Major Premise Rule) If I couldn’t even keep my job, then I’m a failure.

(Report) I couldn’t even keep my job.

(Conclusion) I’m a failure.

In this manner, LBT is able to assess the rationality or justifiability of a counselee’s reasoning.⁴ In contrast, REBT’s causal approach, which speaks in terms of events, beliefs, and consequences, rather than in terms of premises and conclusions, is not suited for assessing rationality. This is because people do not reason from events and beliefs to consequences. This is the language of causal assessment, not of logic-based assessment. Causal assessment refers to explanation as *distinct* from justification. Thus we can certainly explain why John became depressed by explaining how John thought himself worthless after having messed up and lost his job. But this is not about the logic of John’s reason; it is about causality.

LBT is therefore unlike REBT insofar as it provides a theory of belief justification, not one about explanatory causation. The advantage of such a redirection of the theory in terms of logic is that it opens up the possibility to apply standards and principles of logic and logical analysis toward helping counselees make better practical decisions.

According to LBT people *decide* to be depressed, anxious, etc. by faultily deducing self-destructive conclusions from premises. Decisions are made by reasoning from premises to conclusions. Conclusions are inferred, not caused; and the aim of LBT is to help promote better decisions by getting rid of faulty logic and replacing it with sound reasoning.

LBT’s Definition of Emotion

According to REBT, an emotion includes: “(1) a certain kind of forceful thinking—a kind strongly slanted or biased by previous

perceptions or experiences; (2) intense bodily responses, such as feelings of pleasure or nausea; and (3) tendencies toward positive or negative action in regard to the events that seem to cause the strong thinking and its emotional concomitants.”⁵

While LBT also accepts this multi-pronged concept of an emotion, it uses its logic-based conversion of the ABC Theory to define the cognitive component (component 1) of human emotion. According to LBT, this aspect of emotion can be defined in terms of two dimensions of emotion:

A: The rating

B: The intentional object of the emotion

The rating is the prescriptive, evaluative part of the emotional cognition. For example, in the previous case of John, the rating is of himself as being a “worthless failure.” All emotions include a (negative or positive) rating dimension. Such a cognitive dimension of emotions is prescriptive because it implies an “ought” or “ought not.” For example, if John is a failure then he is not as he *should* be.

The intentional object of the emotion is the object to which the emotion refers. LBT holds that all states of consciousness, including emotions, refer to objects outside themselves. For example, John was depressed about *his not being able to keep a job*.

Intentional objects may be either existent or non-existent. For example, I may be afraid of ghosts even if ghosts do not exist. Even though the intentional object might be nonexistent, the fear itself can be quite real. LBT holds that self-destructive emotions quite often refer to non-existent objects. In a sense, therefore, human beings often upset themselves over (literally) nothing. Thus, in John’s case, he is upsetting himself over his not being *able* to keep *any* job, which cannot be reasonably concluded from the facts that he messed up on his present job and got fired. Intentional objects can always be expressed as propositions or statements. For example, more fully expressed, my fear of ghosts means fear *that* a ghost may harm me.

Emotions can also be identified in terms of their particular ratings and intentional objects. Thus, as Robert Solomon astutely maintained, “the specific object is what defines the emotion.”⁶ For example, some emotions, such as moral indignation and romantic love, he says, are focused primarily on human beings, whereas fear and sadness are not necessarily about human beings. And, “the heart of every emotion is its value judgments, its appraisals of gain and loss, its indictments of offenses, and its praise of virtue, its often Manichean judgments of “good” and “evil,” “right” and “wrong.””⁷

Such characterizations of emotions in terms of their specific objects and ratings (“value judgments”) can accordingly yield definitions of distinct emotions. Table 2-1 provides definitions of some of the most destructive emotions in terms of these two dimensions.

The definitions in Table 2-1 provide “cognitive” definitions because they proceed purely in terms of the cognitions involved in the respective emotions. These cognitions “define” the emotion inasmuch as they can be used to identify the emotion in question. Thus when a counselee is negatively rating a given person’s having something that she lacks, then the counselee can be said to be jealous of this person.

However, as mentioned above, emotions are themselves more than a set of cognitions. That is, they also involve non-cognitive elements, namely behavioral tendencies and physiological changes. For example, a counselee who is angry will not only be negatively rating the person or what they are doing; she will also have tendencies to *act* in certain ways toward this individual, for example, ignore, act curtly toward, or verbally or physically attack the person.⁸ In addition, physiological changes associated with anger include increased heart rate, respiration, and endocrine activity. These physiological changes may also be perceived, for example as pounding in the chest, a lump in the throat, fluttering, and other bodily sensations. This set of bodily sensations, physiological changes, behavioral tendencies, and cognitive changes form a causally interactional network and can lead to emotional looping. For example, the cognitive changes (“He’s a rotten SOB”) can engage the sympathetic nervous system (“fight or flight” response), which, in turn, can impact cognition (“He needs to pay”), intensify physiological changes, and thus lead to further behavioral changes (such as physically assaulting him). The gestalt of this network of interactional changes is what we would identify as the emotional experience.⁹

Table 2-1. Cognitive Definitions of Some Emotions using the ‘E = O + R’ Formula

Emotion	Intentional Object	Rating
Anger	An action	Strong negative rating of the action or the person who performed it.
Guilt	A moral principle, one perceives oneself to have violated	Strong condemnation of the perceived violation or oneself.

Depression	An event or state of affairs	Strong negative rating of this event or state of affairs on the basis of which one bleakly perceive one's own existence.
Anxiety	A future event or possible future event having certain forecasted consequences	Strong negative rating of forecasted consequences on the basis of which one perceives need to ruminate about them.
Shame	An action or state of oneself	Perception that others are strongly, negatively morally rating oneself, or one's action or state. One perceives this social rating to be extremely undesirable and as a reason to strongly, negatively morally rate oneself, or one's action or state.
Grief	The loss of someone (a person or animal) one cherishes	One bleakly perceives one's own existence on the basis of the loss.
Anxiety	A future event or possible future event having certain forecasted consequences	Strong negative rating of forecasted consequences on the basis of which one perceives need to ruminate about them.
Jealousy	A person or state of a person, who has something that one wants but lacks	Negative rating of the person's having that which one lack.
Pity	A person (or animal) who is suffering in some particular way	Strong negative rating of this suffering and wish that something be done to stop it.

Emotional Reasoning

In the above manner, an emotion (E) can be defined by its rating (R) and its object (O), thus yielding the following formula:

$$E = (O + R)$$

LBT holds that *emotional reasoning* can itself be constructed out of an emotion's intentional object (O) and rating (R) as expressed in the above formula. More exactly, the *standard form* of emotional reasoning is that of a deductive inference known as *modus ponens*, which can be stated in terms of the intentional object (O) and rating (R) of an emotion:

(Rule) If O then R
 (Report) O
 (Conclusion) R

This is the form of the practical syllogism discussed above according to which the *rule* is a conditional statement that links the intentional object (O) to the rating (R). The *report* is accordingly the intentional object (O) itself; and the conclusion consists in the rating (R) detached from the object (O). For example, in the case of John, the emotional reasoning that comprises the cognitive component of his depression is:

Rule: If I can't keep a job (O) then I'm a failure (R)
 Report: I can't keep a job (O).
 Conclusion: I'm a failure (R)

Thus, by finding the O and the R of a counselee's emotion, it is possible to construct the standard form of the counselee's emotional reasoning and, therefore, once formulated, to analyze the syllogism for its soundness.

Emotional Reasoning Templates

As developed in Chapter 3, it is possible to construct Emotional Reasoning Templates (ERT) that follow the standard form of emotional reasoning but which allow the form to be made more explicit. For example, the ERT for the above syllogism would be as follows:

1. If [enter perceived personal defect] then I am [enter personal self-devaluation].
2. [Enter perceived personal defect].
3. Therefore, I am _____.

Accordingly, a counselee's emotional reasoning can be generated from the ERT by filling in the blanks with the given O + R details. For example, to generate the aforementioned emotional reasoning, the perceived personal defect would be "I can't keep a job" and the personal self-devaluation would be "a failure." As such, ERTs can be created for commonly occurring patterns of reasoning, for example, one that commits the fallacy of self-damnation, as in the example just provided. As discussed in chapter 3, LBT can use various ERTs to help counselees identify and specify the components of their emotional reasoning.

Behavioral Reasoning

Further, LBT holds that there is a logical relation between people's behavioral tendencies and their emotional reasoning as described above. Thus, the above conclusion (R) is behaviorally prescriptive. For example, if John concludes that he is a failure, he will tend to *act* as such. What sort of destructive ("failure") actions John performs itself depends on deductions from further behavioral rules John has adopted, which prescribe such actions.

For John, these actions might include refusing to get out of bed and get dressed; getting drunk; cursing and screaming; and attempting suicide. For example, he might make the following deduction from a behavioral rule (BR) and rating (R):

(Behavioral Rule) If I am a failure then I should end my life.

(Rating) I'm a failure.

(Conclusion) I *should* end my life.

Note that the conclusion prescribes committing suicide—it says "should." This "should" is logically (or quasi-logically) related to the act of committing suicide since, if John truly accepts this conclusion, and nothing stops him from attempting this action (including other persons as well as any other conclusions John himself reaches), he will, in fact, perform this *action*. Such a close connection between practical syllogisms and human action has led Aristotle, the first philosopher to analyze the practical syllogism, to conclude that the conclusion of such reasoning is not itself another statement but instead an action.¹⁰

Nonetheless, LBT distinguishes between actions that are conclusions (in the above sense) of practical syllogisms, and other behavior that is more properly considered a *causal consequence*. According to LBT only *deliberate (intentional) actions* are logical corollaries of the premises of practical reasoning.

Not all behavior is deliberate, however. For example, while remaining in one's bed all day without getting dressed or attempting suicide is deliberate, crying or trembling is not. Such overt non-deliberative behavior is not considered an *action* in LBT. These forms of behavior as well as the internal behavioral (physiological) changes that accompany emotions—such as increases/decreases in respiration, cardiac function, endocrine activity, and other autonomic, sympathetic, parasympathetic nervous system functions—are also not considered actions by LBT. While this does not mean that such non-deliberate bodily changes cannot be directly monitored and changed through cognitive interventions (such as biofeedback), these are not the primary, direct focus of LBT. Rather LBT addresses these indirectly by helping counselees to work on changing their emotional reasoning and deliberate behavior (actions).

Behavioral Reasoning Templates

As in the case of emotional reasoning, there is also a standard form of behavioral reasoning, which takes the form:

If J then P

J

So, P

Where:

J = behavioral justification

P = behavioral prescription

The behavioral Justification (J) is an event, state of affairs, or evaluation perceived to be a reason or justification for certain behavior. The behavioral prescription in turn prescribes this behavior, and it, impliedly or expressly, contains a prescriptive term such as “ought” or “should.”

Analogous to ERTs, behavioral reasoning templates (BRTs) can also be constructed using the given J+P information. For example, the following is a BRT:

(Behavioral Rule) If I am/have [enter perceived personal defect] then I should

[enter prescribed behavior].

(Justification) I am/have [enter perceived personal defect]

(Behavioral Prescription) So, I should ____.

For example, where the perceived personal defect is that of being a failure and the prescribed behavior is ending my life, then the following behavioral reasoning can be generated from the BRT in question:

(Behavioral Rule) If I am a failure then I should end my life.

(Justification) I am a failure.

(Behavioral Prescription) So, I *should* end my life.

As will become apparent, BRTs can be useful for LBT counselors in helping their counselees to clearly specify their behavioral reasoning.¹¹

LBT's Theory of Suppression

In life contexts, people rarely if ever order or “set up” their practical reasoning in standard form, that is, with all premises and their conclusion explicitly stated and filled out. Rather, there is usually some part/s that is *suppressed*, that is, merely assumed. Contrary to Freud, LBT holds that many, if not most, of our destructive, self-defeating thoughts are *suppressed* rather than *repressed*—hidden somewhere in the unconsciousness pit.¹² Following the ancient philosopher Aristotle, logicians typically refer to reasoning with suppressed premises as *enthymematic arguments*, or for short, *enthymemes*.

For example, recall John's argument, “I couldn't even keep my job; I'm such a failure,” which more formally could be represented as:

(Report) I couldn't even keep my job

(Conclusion) I'm a failure

Here, the major premise rule is suppressed. When this premise is added the reasoning is again as follows:

(Major Premise Rule) If I can't keep a job, then I'm a failure

(Report) I can't keep a job

(Conclusion) I'm a failure

Once John's enthymematic reasoning is filled out, its faulty premises can be exposed. Indeed, according to LBT, the irrational ideas imbedded in counselees' reasoning are typically hidden away in suppressed premises. For example, John's major premise rule irrationally damns himself for having lost his job. Further, once the missing premises are exposed, it is then possible to explore the grounds of the exposed premises, which, in turn, can generate multi-tiered syllogistic chains. Some common templates for such multi-tiered reasoning are examined in Chapter 3.

LBT's Process of Refutation

Once LBT has elicited a counselee's suppressed premises, it is in a position to expose and refute any irrational ideas or "fallacies" they contain. This is called refutation, that is, showing that a premise is irrational or unjustified. This may be achieved in several different ways, namely, showing that: (1) the premise entails a false or absurd statement; (2) accepting it involves an inconsistency or double standard; (3) there is empirical evidence that disconfirms it; and/or (4) there are counter-examples to it.¹³ For example, an LBT counselor could help John refute his global self-damnation by helping him to generate counter-examples to it:

Counselor: You say that you are a failure if you couldn't keep your job. Are you saying that this makes you a *total* failure?

Counselee: Yes, I'm a total failure.

Counselor: Is there anything that you can do satisfactorily?

John: Yes, I am quite good at tennis.

Counselor: So, that means that there is something that you have not failed at, so how can you say that you are a total failure?

LBT's Catalog of Fallacies

Through such techniques of refutation, LBT is able to expose the *fallacies* inherent in counselee's reasoning. LBT's definition of a fallacy is an operational one, that is, one given in terms of the effect the commission of fallacies has on human existence. According to LBT, a fallacy is a mistake in reasoning that tends to frustrate personal and interpersonal happiness.¹⁴

LBT holds that these fallacies infect the premises of people's practical reasoning and lead them to deduce destructive conclusions. Here are eleven of the most commonplace and destructive fallacies LBT identifies:

Fallacies of Behavioral and Emotional Rules

1. **Demanding Perfection:** Commanding, demanding, and dictating the terms of external reality based on premises about one's own subjective desires or preferences.
2. **Bandwagon Reasoning:** Blind, inauthentic conformity of belief and/or action largely deduced from the demand for approval of others.
3. **The-World-Revolves-Around-Me Thinking:** Thinking that one's own beliefs, values, desires, and preferences are the only true, right, or acceptable ones and that, therefore, everyone else must accept them.
4. **Catastrophic Reasoning:** Reasoning from bad to *worst*.

5. **Damnation:** Devaluation of self, others, and the universe.
6. ***Can't*stipation:** Obstructing one's creative potential by holding in and refusing to excrete one's emotional, behavioral, or volitional *can't*.
7. **Dutiful Worrying:** Dutifully and obsessively disturbing oneself and significant others.
8. **Manipulation:** Using force, intimidation, threats, deception, chicanery, or other manner of control, instead of rational argument, in order to get a person/s to act, think, or feel in a certain way.

Fallacies of Reporting

9. **Oversimplifying Reality:** Overgeneralizing, pigeonholing, and stereotyping.
10. **Distorting Probabilities:** Making predictions about the future that are not probable relative to the evidence at hand.
11. **Blind Conjecture:** Advancing explanations, causal judgments, and contrary-to-fact claims about the world based on fear, guilt, superstition, magical thinking, fanaticism, or other anti-scientific grounds.

The first eight of these fallacies—labeled “Fallacies of Behavioral and Emotional Rules”—typically occur in rule-premises of practical syllogisms. The last three—“fallacies of reporting”—can most often be found in the report filed under a rule. All of the Fallacies of Behavioral and Emotional Rules involve extreme thinking. For example, demanding perfection goes to the unrealistic extreme of demanding a flawless or near flawless universe; (global) damnation paints the entire universe black; and awfulizing goes to the pessimistic extreme of thinking the worst. Each of the eleven fallacies defined above are discussed in greater detail in Chapter 3.

LBT's Positive Psychology

In addition, LBT holds that each of these eleven “Cardinal Fallacies” has a corresponding “transcendent virtue” that trumps it.¹⁵

These virtues are “virtues” because they involve dispositions of character acquired through practice. The first eight virtues in Table 2-2 are “behavioral and emotional virtues” because they figure in the prescriptive, behavioral or emotional rules of a counselee's practical reasoning. The last three, in the shaded region, are the “inductive virtues.” They figure in collecting and reporting perceived facts contained in the minor premise reports of counselees' practical reasoning. All eleven virtues are “transcendent” because they constitute higher human capabilities that transcend their respective fallacies. As discussed in Chapter 10, they provide the ends or goals toward which to strive in attaining happiness.

While classical REBT has tended to concentrate on the negative aspect of avoiding fallacies (what *not* to do), LBT also provides a *positive psychology*, that is, a set of positive values to which to aspire in overcoming fallacies. Each of these transcendent virtues is discussed in Chapters 11 and 12.

Table 2-2. Cardinal Fallacies and their Respective Transcendent Virtues

Cardinal Fallacy	Transcendent Virtue
Demanding Perfection	Metaphysical security (security about reality)
Jumping on the Bandwagon	Authenticity (being your own person)
The World-Revolves-Around-Me	Empathy (connecting with others)
Catastrophic Reasoning	Courage (in the face of evil)
Damnation (of self, others, and the universe)	Respect (for self, others, and the universe)
<i>Can't</i> stipation	Temperance (self-control)
Dutiful Worrying	Prudence (in addressing moral problems)
Manipulation	Empowerment (of others)
Oversimplifying Reality	Objectivity (in making unbiased discernments in practical affairs)
Distorting Probabilities	Foresightedness (in assessing probabilities)
Blind Conjecture	Scientificity (in providing explanations)

The attainment of these transcendent virtues has been the province of many of the theories of philosophy, both Eastern and Western, as advanced throughout the ages. For example, the great Greek thinker Aristotle

devoted his ethics to discussing the cultivation of such virtues as courage and temperance in the face of great adversity or temptation. And Immanuel Kant in the Eighteenth Century made the cornerstone of his ethics the concept of respect. The ancient Stoic thinkers such as Epictetus admonished us against demanding perfection by trying to control things that just aren't in our power to control. They offered us deep insights as to how to cultivate tolerance for the uncertainty of the universe and how to live contentedly with less of the lavish things that are beyond one's means. These and many more theories and insights of these great philosophers can provide constructive antidotes for overcoming the Cardinal Fallacies. LBT uses these philosophies to help people attain greater happiness in their daily lives.

LBT's Concept of Willpower

LBT holds that human beings have an inherent power of will that can be used to overcome fallacies in one's emotional reasoning and to aspire to and cultivate the transcendent virtues. By willpower, LBT means either: "(a) the power or ability to refrain from doing something (either before you do it, or while in the midst of doing it) even though you are strongly inclined to do it; or (b) the power or ability to continue doing something even though we are strongly inclined not to."¹⁶

As discussed in Chapter 8, many behavioral and emotional problems stem from self-*can't*stipation—telling oneself one *can't* control one's emotions, change one's behavior, or tolerate frustrating or challenging situations. While LBT does not attempt to resolve the free-will-determinism debate, it holds that human beings' use of *can't* in many cases is unrealistic and anti-empirical.¹⁷ Human beings *have*, as a matter of fact, overcome self-destructive behavioral and emotional reasoning by exercising their willpower as defined above. This proves therefore that they *can* do so.

As carefully examined in Chapter 4, LBT emphasizes the human ability to overcome cognitive dissonance. A person is in a state of cognitive dissonance when he or she simultaneously holds two or more conflicting practical syllogisms, one rational and the other irrational. For example, John would be in a state of cognitive dissonance if he simultaneously held the following two practical syllogisms:

Syllogism 1:

(Rule) If I can't keep a job then I'm a failure.

(Report) I can't keep a job.

(Conclusion) I'm a failure.

Syllogism 2:

(Rule) If I messed up and got fired, then I should learn from my mistake and do better next time.

(Report) I messed up and got fired.

(Conclusion) I should learn from my mistake and do better next time.

Since the conclusion of Syllogism 1 entails that John is incapable of constructive change (it relegates him to a complete failure), it conflicts (is inconsistent with) the conclusion of Syllogism 2, which is constructive.

LBT holds that cognitive dissonance is usually an important step in making constructive change because it marks the beginning of correcting and overcoming one's irrational thinking with rational thinking. Overcoming irrational thinking and bringing one's behavior and emotions in line with one's rational thinking requires willpower. LBT holds that such willpower can be cultivated through exercise and practice including classical forms of behavioral homework assignments. For example, in the above case, John could resist the inertia of his irrational syllogism by forcing himself to vigilantly pursue employment and then working hard to improve his on-the-job performance. Whether this is behavioral conditioning rooted in determinism (the theory that all human behavior is caused) or instead the autonomous exercise of free will in a deep metaphysical sense is not an issue LBT attempts to adjudicate. On a practical, confirmable level, human beings can, and do, exercise such rational control regardless of any deeper scientific or philosophical explanation.

The next chapter of this book will discuss the manner in which a logic-based approach can, indeed, be used to help counselees gain greater rational control over their behavior and emotions. In particular it will provide, discuss, and illustrate the five steps of the LBT process.

Notes

¹ Elliot D. Cohen, "The Use of Syllogism in Rational-Emotive Therapy," *Journal of Counseling & Development*, Vol. 66, No. 1 (1987): 37-39.

² Albert Ellis and Michael E. Bernard, "What is Rational-Emotive Therapy (RET)?" in *RET: Handbook of Rational-Emotive Therapy*, Vol. 2, ed. Albert Ellis and Russell Grieger (New York: Spring Publishing Co., 1986), 11-17.

³ This is in contrast to "inductive" arguments where the conclusion is merely made probable by the evidence supplied by the premises. For example, the following is an inductive argument:

The car won't start.

The fuel gage is on empty.