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**Book review zu: Laughter: A scientific investigation**

Ruch, Willibald

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## Book reviews

Robert R. Provine: *Laughter: A Scientific Investigation*. New York: Viking, 2000. 272 pp. \$24.95.

There are plenty of reasons to take this book seriously. From the outset, the title underscores that the reader may expect a scientific treatment of laughter, and the book cover is also full of praise ranging from a "... masterful job of collecting fascinating anecdotes" (J. W. Kalat) to "groundbreaking science writing straight from the source" (T. W. Deacon). The reader does not need to fear a "humorless academic disquisition", as the book is written with "warmth and the light touch that the subject deserves" (S. Pinker), and with "panache and humor" (V. S. Ramachandran). One also gets profound advice on how to conduct a successful scientific career ("Dig an academic slit trench so deep and so narrow that there's only room for you"), "hard-won insights about where to find laughter" (24), and even self-help ("laughing your way to health", "ten tips for increasing laughter"): all this and more for less than 25 bucks. Dare one ask for more?

The author himself, neurobiologist Robert R. Provine, a Professor of Psychology at the University of Maryland Baltimore County, modestly warns the reader on page 9 to "... [t]reat this book as a held guide to the terra incognita of laughter, a source of tips about where to find laughter, and how to study it, and what it means. You will not find a tidy series of experiments that drive inexorably (and with intellectual flourish) to a Grand Unified Theory of Laughter. The work is, instead, a catch-as-catch-can interdisciplinary work in progress".

The book covers nine chapters spanning about 200 pages. In it Provine strongly advocates a biological approach to laughter and heavily attacks earlier philosophical approaches, finding their study deadening to the

brain, daunting, and “challenging”. He mentions the accounts of Plato, Aristotle, but also Hobbes, Kant, Schopenhauer, Freud, and Bergson. He criticizes their theorizing as being “... really about humor or comedy (i.e., material that stimulates laughter), not laughter itself” (18). Of course, the term “humor” was not in use (at least not in its current meaning) at the time most of these philosophers wrote their works, and therefore I would argue that we can excuse those thinkers from the criticism that they completely failed to address the subject. Much to Provine’s consternation, the “motley horde of philosophers, physicians, nurses, anthropologists, linguists, psychologists, physiologists, English professors, cartoonists, comics, and clowns” (19) (a.k.a. ISHS) who began more intensive research in the 1970s also erroneously studied humor, although (according to him) they actually wanted to learn more about laughter. He states that “most laughter research neglects laughter and its occurrence in everyday life, focusing instead on a variety of corollary issues about humor, personality, social dynamics, and cognition” (19), and lists some early work by Eysenck and Lefcourt. It has surprised me to read this supposed insight in the press, mentioned over and over again, as a central and pioneering achievement of Provine, as if there was little else to report. While Provine is certainly right that we have too few studies of laughter, it is a bit presumptuous to say that linguists or psychologists have all this time been studying jokes or humor in order to “understand laughter” — and just got the approach wrong. Applying the same rhetoric, one could criticize Provine’s work as an attempt to understand how humor works by studying laughter. Humor and laughter are as different from each other as are pain and crying. Studying one doesn’t necessarily lead to much insight into the other and, to me, it seems like dirty academic trench warfare to fault another discipline for being another discipline.

To finally get things straight, however, the reader can be of good hope: Provine’s book is aimed at redressing historical imbalance and confusion by putting the act of laughter front and center. Indeed he writes, “... like good journalists, we start with the “who”, “what”, “when”, and “where” of laughter” (20). This is surprising, as one would expect that a good scientific investigation starts with, or at least includes the “how” of laughter; i.e., the description of the morphology and dynamics of laughter. Darwin’s classic description of the respiratory, facial, and postural components of laughter was already remarkably accurate, and since then many studies have made further contributions to the description. However, Provine chooses to ignore much of this past

research. While one chapter of the book is spent on the acoustics of laughter, the reader looks in vain for information on the other levels of laughter, e.g., the respiratory and laryngeal structures involved in *how* the sound is produced. Provine seems to talk about laughter as a purely acoustic event; however, the sound is modulated by facial movements as well (among other factors), and their consideration would help to illuminate several phenomena which are otherwise left as unexplained curiosities. For example, on page 58 Provine talks about “common” and “forbidden” laugh variants. Sequences like “ha-ho-ha-ho-ha” and “he-ho-he-ho-he” count as “forbidden,” and are thought to be “challenging,” as there are “biological constraints” against the production of such notes, which he fails to describe. Indeed, the production of such sounds requires a rapid alteration of articulation positions involving several articulators, such as the tongue or the larynx, but also the lips. For what is transcribed as an “o” sound we need to round and protrude the lips; for an “a” we don’t. Such a sound pattern may be voluntarily produced as part of speech; however, it is incompatible with the sound pattern emitted during spontaneous laughter, as laughter is considered to be an unarticulated sound utterance (see, e.g., Ruch and Ekman 2001). In fact, recent acoustic analyses show that laughter is indeed an unarticulated sound. Bachorowski et al. (2001) analyzed a very large corpus of laugh sounds and found that laughter is comprised of neutral sounds, and that neither males nor females produced any instances of “tee-hee” or “ho-ho” like sounds. Much more could be said about non-acoustic features of laughter. While Paul Ekman’s distinction between felt and false smiles is referred to, its extension to laughter (e.g., the Duchenne-laugh by Keltner and Bonanno 1997) is not mentioned. Definitely, laughs can be voluntary or contrived (and not only spontaneous) and the facial appearance gives a clue as to how to distinguish among them (Owren and Bachorowski 2001; Ruch and Ekman 2001). By the same token, more information on respiratory and laryngeal involvement in laughter could be given. In fact, even the acoustic variations in laughter are not described extensively; for example, there is no mention of unvoiced laughter, although the latter apparently occurs very often (see studies by Bachorowski and Owren 2001; Grammer and Eibl-Eibelsfeld 1990). Last but not least, Provine fails to address the question of whether there is *one* form of laughter, or whether we need to distinguish different types. In this regard, recent data show that voiced laughter much more readily elicits positive emotion in listeners than does unvoiced laughter (Bachorowski and Owren 2001).

In the “natural history of laughter” Provine presents the outcomes of his own field studies that addressed questions like what is the role of gender? Who laughs more: the speaker or the listener? Where in the flow of speech is laughter located? What do people say before they laugh? This is rounded out by a section on the role of humor and laughter in personal ads (i.e., a replication of well-known studies in humor research). Most of the findings seem to come from one large-scale study. “The fruit of our yearlong eavesdropping mission was 1,200 laugh episodes that were sorted by speaker and audience, gender and pre-laugh comment. These hard data forced me to attend to new laugh phenomena, and prompted my reluctant metamorphosis from neuroscientist into social psychologist” (27). He reports that those careful observations of ongoing behavior led to “startling and often counterintuitive insights into the nature and neurological control of laughter”. One finding in particular is especially relevant for humor research and theorizing. Provine reports that his assistants considered only between 10 and 20 percent of the pre-laugh comments to be humorous. Compared to jokes, “people laugh much more often in response to innocuous lines as ‘I’ll see you guys later’ or ‘are you sure?’” (40). From findings like this it is deduced that “laughter is mostly a tool in social relationships rather than a simple response to humor”. While I don’t see the value in *comparing* what laughter is *more* — a tool in social relationships (which it undoubtedly is), or a common response to humor (why can’t it be both — and more so even?), the data presented are not fully compelling as they only tell half the story. To draw meaningful conclusions one would need a complete two-way contingency table. It is not sufficient to know that laughter may be preceded by the statement “I’ll see you guys later”, but one would need to know how often this statement is followed by “laughter” and by “no laughter”. Likewise, we would need to know how often a joke is followed by “laughter” or “no laughter”. The comparison of these frequencies would be telling. My prediction would be that while both humor and innocuous statements do not lead to laughter very often (i.e., “no laughter” is more frequent a response than “laughter” is) the relative frequency will be higher for humorous than non-humorous statements. In other words, an analysis of 1,200 pre-laugh comments cannot prove much in principle as it provides only truncated information, namely how often laughs are preceded by humorous and non-humorous statements, and the standard necessary to compare this data to is missing. For example, it is easy to argue that the failure to find laughter following jokes might result

from the fact that Provine simply did not observe many people telling jokes, precluding the possibility that many of the laughs could be preceded by something humorous. Besides this flaw in the research design, it is of course difficult to evaluate findings if one does not find information to answer such basic questions as: who coded the data? Was there a double-check in the codings, or were segments coded only by one person? If so — what was the reliability of coding? Were all relevant cues for a humorous communication coded (tone of voice etc.)? What went on in other (non-verbal) communication channels (behavioral, facial)? Were there “play-signals” that make a serious statement funny?

Others of the initially “counterintuitive findings” have been partly clarified in more recent research. For example, the “punctuation effect”, a strong and orderly relationship between laughter and speech, was originally derived from the observation that in the 1,200 analyzed protocols the laughter of speakers almost always followed complete statements or questions. In only 0.1 percent of the coded events did the speakers’ laughter interrupt phrases. However, more recent, controlled research by Nwokah et al. (1999) has shown that laughter is indeed interspersed through speech and less clearly “punctuates” speech than is claimed by Provine’s original study. Again, one would need information on the reliability of the coding (for example, how many events of speech interspersed laughter would be missed simply because the coders could not identify what was said?) and thus further research is required on this and the other topics. Other findings in this section are, for example, that females are the leading laughers while males are the best laugh getters, or, that speakers tend to laugh more than their audiences.

In a separate chapter, Provine describes how he and his undergraduate assistant “cracked the laugh code” — the endeavor central to his book. In their study laughter was often elicited in response to the request, “I am studying laughter. Will you laugh for me?” The analysis of 51 laugh recordings gives what Provine believes to be the “distinct acoustic signature of laughter” (57), a sequence of evenly spaced (at intervals of 210 ms) short (75 ms) vowel-like laugh-notes. Laughs may typically proceed with a decrescendo (a gradual reduction of loudness as the laugh progresses). Recent work by Bachorowski and colleagues, however, cannot confirm the call/syllable duration to intercall interval, and they challenge the assumption that laughter is “stereotypic” vocalization altogether and instead emphasize its variability. As an aside, it should be mentioned that even without the failure to replicate Provine’s simple

formula it is difficult to maintain the view that he “cracked the laugh code”. His findings could only be regarded as pioneering if one neglects all the research published before him. Already in 1899 Boeke reported that the duration of pause between laugh “syllables” exceeds the duration of the syllables (and the ratio is similar to what Provine reports). Using a device constructed by Thomas A. Edison he recorded his own laughter and anticipated many of the later findings, such as the fundamental frequency being higher and more variable during laughter than during speech. In Germany, Habermann (1955) wrote a book about his studies of laugh acoustics, but also easily accessible English sources are surprisingly not discussed by Provine. A quick look into my files showed me that there were, for example, three journal articles by Mowrer and collaborators (e.g., Mowrer et al. 1987) predating Provine’s study (one of which was published in *HUMOR*), but also book chapters (e.g., Mair and Kirkland 1977, and two by Papousek and collaborators 1986, 1987). Also some of the publications by experts in acoustics that appeared after Provine’s journal article don’t get mentioned in the book (Nwokah et al. 1993; Rothgänger et al. 1998). In his defense one can add that Provine indirectly acknowledges the existence of those articles, in as much as in a note on page 220 he refers to an unpublished report by Bachorowski et al. for a review of the “confusing and often inconsistent earlier descriptions of laughter”. The remainder of the chapter gives an interesting account of laugh notation and an overview of operas in which laughter occurs.

Further chapters relate to laughter in chimpanzees and tickling. There Provine compares human and chimpanzee laughter, presents some speculation as to why chimps can’t talk, and gives examples of humor among chimpanzees (much in the footsteps of McGhee 1979). Here the reader will note the lack of references to the important studies by De Waal, and Signe Preuschoft and van Hooff. The classic work by van Hooff (1972) gets mentioned but it is buried in a footnote. The chapter on tickling relationships summarizes studies on questions like what areas of the body are sensitive to tickle, the role of the brain, and whether or not other animals can be tickled. The chapters on contagious laughter and the brain, pathological laughter and health aspects round off the scope of the book. In the first of these he reports on the literature on laugh epidemics and laugh tracks, and about his experiment with a “laugh box”. The latter two chapters basically are reviews of the well-known phenomena of laughter pathologies and of the literature on potential health aspects of laughter (see Martin 2001).

Throughout the book Provine criticizes social scientists and praises neurosciences. While admittedly the latter have the potential to illuminate a variety of important questions, bashing the contributions of the non-neural sciences seems rather unnecessary. Social scientists, he observes, have created a “blizzard of sometimes baroque theorizing” about a variety of higher-order social processes put forward to account for the contagiousness of laughter. He does not seem to be satisfied by those explanations but favors a neurobiological explanation, which is added at the end of a 23-page chapter on “contagious laughter and the brain.” What is added in these few lines? We learn there is an “auditory feature detector”, which is a “neurological detector that responds specifically to the sound of laughter”. There is also a “laugh generator”, which, well, generates laughter, or to quote precisely, that, once activated by the “feature detector”, “produces the stereotyped movements of the thorax, larynx, and vocal track that create the sound of laughter” (150). Well, I am pretty sure that neuroscience remains below its potential here and hopefully will soon tell us more than laughter is detected by a laugh detector which activates a laugh generator whose function it is to generate laughter.

Apparently, not all laughs are contagious (see Smoski and Bachorowski, in press), so when does the so-called laugh generator fire and when not? As a proof that laughter is a sufficient stimulus for laughter, Provine presents a study in which he confronted three classes of students with a “laugh box”. This box was activated 10 times to emit canned laughter for about 19 seconds, each trial starting at an interval of one minute, and the 126 students noted whether they laughed and/or smiled. While about half of them laughed at the first presentation, one cannot really consider this a proof of contagiousness of laughter for several reasons. First, more students (90 percent) smiled than laughed, and hence one might only say laughter is a sufficient stimulus for *smiling* (not laughing). Furthermore, there might be other mechanisms working than sheer contagiousness; showing such a box without explanations is incongruous, as typically is the artificial sound of laugh boxes. Also, Provine reported to have been nervous when presenting the box, allowing for other motivations on the part of the laughers among his audience. Furthermore, the effectiveness of the laugh box steeply declined, and 75 percent of his students found the laugh played from the laugh box “obnoxious” after the tenth trial, while only three laughed. A similar result would be found if jokes were presented repeatedly. For

contagiousness, one would expect that the rate of laughter would even *increase* initially, especially as the laughter of other students comes into play as well, in addition to the laugh from the box. This seems especially likely when we consider Provine's report that a contagious laughter in an African school led to a long lasting (16 days!) "laugh epidemic". So it is doubtful whether Provine's demonstration is either internally or externally valid. One also needs to add that smiling and laughter were self-assessed (not objectively recorded), drawing the students' attention to the aim of the experiment and increasing self-awareness among the participants. Please bring back the social scientists!

Browsing through the 16 page reference section, one discovers few articles one has not read before, but misses many potentially valuable entries. In fact, one would wish more relevant articles to be covered. This is indeed the biggest problem with *Laughter: A Scientific Investigation*. It may serve as a valuable source for getting a first quick sampling of laughter-related research, especially for those with a non-academic interest. Many might even enjoy the various attempts at writing humorously. However, it is not suitable as a scientific reference book or introduction to the field for investigators for at least two reasons. First, in several areas it does not give an adequate representation of the state of the art research in the field. The presentation is incomplete, biased, and in some instances simply wrong. Secondly and more importantly, future publications relying on this book as a primary source might inadvertently contribute to rewriting the history of laughter research. Those readers who are not willing to read the primary sources given by the author might think that scientific research on laughter started and reached its only all time peak with Provine. We may see a lot of articles submitted to journals that will take this book as the historical starting point. Whether this skewed view is propagated or not will depend on whether critical reviewers evaluate its validity.

Provine's activities helped to make the public interested in laughter, and his claims have in part served to spur more controlled examinations of laughter. What else good this will do for our understanding of laughter remains to be seen. All in all, *Laughter: A Scientific Investigation* is primarily a tribute to Provine's own work. The book suffers from an incomplete consideration of essential prior and current research, and the lack of rigor in research design and analysis of the studies reported leading to impressionistic and overgeneralized statements. The reader's initial enthusiasm fades quickly because the book fails to provide a

comprehensive account of scientific research on laughter, and what is announced as “groundbreaking science” turns out to be as set of loosely connected studies of marginal validity. I lukewarmly encourage scholars of humor and laughter to peruse this book if they come across it in a library. It is not uncommon these days that research areas that have come of age or have experienced scientific breakthroughs are presented to laypersons in an easily digestible form, often by the champions in the field. But to me, this book seems to have taken a short cut, and underestimates the scientific wisdom of both investigators and interested laypersons alike. In my opinion it belongs to those books, rather common in the post-modern age, that present ways of looking at perennial human issues (such as nutrition, sex, sleep, etc.) and offer “new and easy” answers “that have evaded academic scientists up to now”. As an example of academic fast-food, *Laughter: A Scientific Investigation* is pretty good.

Queen’s University, Belfast

WILLIBALD RUCH

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Greg Dean: *Step by Step to Standup Comedy*. Portsmouth, NH: Heinemann, 2000. 191 pp. \$18.95.

How-to books on being a stand-up comedian are similar in nature, I would suggest, with how-to books on Tai Chi, Flamenco dancing and brain surgery. In short, they try to do something that really cannot be

done in a book. In part, that's because of the complicated nature of the subjects they deal with, and because they deal with performances, which are tied to the personality of the performer and thus very hard to generalize about in a book.

Greg Dean, a stand-up comedian and author makes a valiant attempt to explain the art of stand-up comedy to his readers. He has had lots of experience and thus is able to offer some excellent advice to those interested in being stand-up comedians. His ideas about how to create humor are a different matter. The problem is that Dean elaborates a very complicated methodology for generating jokes that readers may find difficult to follow. The "Step by Step" part of his title is well chosen.

He starts by taking a hint from Victor Raskin and informing us that a joke requires two story lines: the first leads us to suspect something (what he calls a target assumption) and the second story is compatible with the first story but also different from what we expect. In between the target assumption and the reinterpretation is a connector, a linking mechanism.

In the second chapter, he offers what he calls a joke prospector, "an original joke writing system that takes you from a joke topic to a completed joke" (15). This joke prospector, in turn, has two phases: the *joke map* and the *joke mine*. In essence what happens in the joke map is that you choose some general topic (he uses the post office) and then do some brainstorming and come up with associations connected to the topic (lines, boxes, uniforms, etc.). Once you have your list, you narrow the general idea down to something smaller, what he describes as the *punch-premise*, "a negative opinion about a smaller aspect" of the topic. Once this is done, you use the *joke mine* to create a joke.

Thus, on page 46 Dean offers a joke he has created and explains how it was done:

*I call my mother all the time — but in polite company, I can't tell you what I call her.*

There it is. A joke written without waiting around for the muse, by simply following all the steps of the Joke Prospector from the Joke Map through the Joke Mine.

Creating jokes, Dean suggests, involves finding punch lines, creating setup premises, customizing the jokes and doing other things using his joke maps and joke mines. He has devised an elaborate and complicated

methodology and terminology that can become very confusing. This material on creating jokes takes approximately fifty pages.

The remainder of the book is much more valuable, for here Dean gets into what Steve Allen has described in his foreword to the book as the “nuts-and-bolts” of performing comedy. He has a great deal of valuable advice about the nature of stand-up comedy — stick to common knowledge, use rhythms of three, avoid puns, get personal, adapt your jokes to topic events, and so on.

He suggests that comedians put each joke on an index card, or separate line on a computer screen, so they can be organized into categories and combined into a routine. Then he moves on to the points of view of comedians as narrators, as themselves, and as characters whose roles can be taken by the comedian. Here Dean has moved away from an emphasis on jokes to the kind of story-telling one finds in the work of many of our best contemporary comedians. They don’t tell jokes but act out various roles in scenarios they create.

Dean devotes a chapter to using microphones (actually’ an important subject), two chapters to rehearsing and two others to performing, offering suggestions about everything from avoiding stage fright and coping with going blank to handling hecklers and dealing with “bombing,” the comedian’s worst nightmare. He has any number of helpful tips to offer comedians and does what he can to help them avoid blunders.

The question we must ask is whether any book, no matter how well written or full of useful information, can actually help people create comedy and perform it. Or play the violin or dance the Cha-Cha-Cha or sing grand opera. My point is that books can only take you so far. There is a need for teachers, too.

Dean writes, in his introduction, “Do You Have What It Takes to Be a Comedian?” (xiii, xiv):

You may be thinking, “those professional comedians are great!” They are, but there’s no difference between you and them that a little knowledge and experience can’t fix. At one time, they were just like you. Like successful people in any other job, they got where they are through hard work. You however, have the advantage: this indispensable guide, which will take you step-by-step toward a career in stand-up comedy.

Would that it were that simple.

*San Francisco State University*

ARTHUR ASA BERGER

Seth Lerer: *Comedy through the Ages*. Springfield, VA: The Teaching Company, 2000. 24 lectures, 30 minutes each. Audiotape \$129.95, videotapes \$199.95.

This lecture series is arranged chronologically. After two introductory lectures, Lerer gives two lectures each on ancient Greek comedy, Roman comedy, Chaucer and Rabelais, Shakespeare, Moliere, 18th-century comedy, Oscar Wilde and Noel Coward, Beckett, and women in comedy. There are also single lectures on camp, rituals in modern comedy, and ethnicity, along with a conclusion. Accompanying the cassette tapes are two guidebooks containing lecture outlines, biographical notes, a timeline, glossary, and bibliography.

As brief introductions to the topics, Lerer's lectures succeed, and he ties them together by exploring features of Greek Old and New Comedy throughout the history of comedy. Lerer has won a teaching award at Stanford University, and his lecture style is generally engaging. His phrases are sometimes awkward, however, even when written down before the lecture. In his notes to the first lecture, for example, he writes, "This course embodies Aristophanes to Seinfeld, the salon to the saloon, and will include the likes of Francois Rabelais no less than Oscar Wilde." His definition of *grotesque* in the guidebook sounds like an instance of what it is defining: "*Grotesque* refers to the phenomenon of physical deformity and exaggeration, often accompanying carnival, but central, too, to what Bakhtin sees as the rise of European modernity."

When Lerer goes beyond discussing individual comedies to theorizing, he is often unclear or sloppy. He notes that there are connections between comedy, laughter, and humor, but never spells out those connections. *Satire* and *parody* are key terms in the study of comedy, he says, but he never defines them or even distinguishes them.

As theoreticians of the comic, Lerer discusses Freud, Bakhtin, and Sontag, but he presents no clear theory of the comic from any of them. His treatment of Freud's theories of jokes and of the comic do not even mention Freud's central thesis — that laughter is a release of emotional energy rendered superfluous. Susan Sontag's "Notes on Camp" is discussed as if it presented a theory of comedy, which it does not. Lerer's definition of camp as "the self-conscious theatricalization of parody" works well enough for the cases he considers, but it does not cover many instances of camp e.g., collecting *Flintstones* lunchboxes or paint-by-number paintings.

Lerer is at his best, then, when telling the story of Chaucer's *Miller's Tale*, and playing Mrs. Malaprop. When he attempts higher levels of abstraction, his reach exceeds his grasp.

*The College of William and Mary*

JOHN MORREALL

Herbert M. Lefcourt: *Humor: The Psychology of Living Buoyantly*. New York: Kluwer Academic/Plenum Publishers, 2001. 208 pp. \$47.50.

At the culmination of a notable career in academic psychology that has included a number of contributions to humor research, Herb Lefcourt has compiled in this book his thoughts and observations about the "psychology of living buoyantly." This is not a dry, academic tome, but an enthusiastic, exuberant, almost evangelistic paean to the virtues and benefits of humor as a way of life. In addition to reviewing relevant psychological research, Lefcourt illustrates and elaborates his ideas by drawing on a wide range of sources, including anthropological and sociological writings; novels, plays, and movies; humorous anecdotes provided by his former students; and personal reminiscences from his own life as a child, husband, father, grandfather, and dog-owner. The book is also punctuated by a series of delightful cartoons created by his son, Jack Lefcourt, a political cartoonist whose work appears in newspapers across Canada.

In the first half of the book, Lefcourt provides an overview of the role of humor in everyday life; summarizes early conceptions of humor in religion, medicine, philosophy, and psychology; considers evidence for laughter and humor in apes and other non-human species; touches on anthropological accounts of humor in different cultures; and briefly reviews research on how a sense of humor develops during childhood. He then takes a short detour into an exploration of the adverse physiological effects of stress on health and emotion. The remainder of the book explores ways in which humor and laughter may mitigate the effects of stress and enhance psychological and physical health and well-being. These include: (1) humor as an emotion-focused coping strategy, (2) humor as a means of retaining social cohesion and support, and (3) physiological effects of laughter on the autonomic nervous system and immune system.

Lefcourt's eclectic and wide-ranging anecdotal style makes for an enjoyable, amusing, and highly readable book. On the down side, though, this writing style also results in a volume that is somewhat lacking in the

sorts of precise definitions of terms, rigorous and systematic thinking, critical analyses, and comprehensive literature reviews that are typically expected in a scholarly work. In fact, it is not entirely clear who the intended audience of the book is. Although it is one of a series of volumes on topics in social and clinical psychology that appear to be directed primarily toward academics and professionals, this book, with its popular and informal style, seems to be aimed more at the educated lay reader.

A difficulty for anyone seeking to promote humor as a pathway to psychological and physical health is the obvious fact that humor can be unhealthy as well as healthy. Although it can be used to enhance relationships and reduce interpersonal tensions, humor also can be used in ways that are cruel, domineering, and manipulative. It can be a healthy means of gaining perspective on a stressful situation, but it also can be a form of defensive denial to avoid dealing constructively with problems. It can be self-deprecating, but it also can be excessively self-disparaging. One could even make the case that there is nothing inherent in humor that makes it particularly healthy. A scholarly approach to this topic therefore requires precise definitions of terms and careful analyses of the distinctions between healthy and unhealthy forms of humor.

In several sections of the book, Lefcourt acknowledges the potentially destructive and maladaptive uses of humor. Indeed, he provides several interesting examples of apparently pathological humor from the anthropological literature, and even cites one chilling theory that the Holocaust may have been a result of Hitler's perception of being the target of Jewish laughter. He also notes that the humor of professional comedians tends to be "a weapon, a tool with which they lacerate opponents, 'puncture their balloons,' and control their behavior" (87). Throughout much of the book, however, Lefcourt tends to blur the distinctions between healthy and unhealthy forms of humor. He seems to be intent on viewing humor as inherently positive and salutary, rather than presenting a balanced view of both its beneficial and detrimental aspects. Consequently, he does not give much attention to developing a coherent theoretical framework for distinguishing among these contradictory manifestations of humor. Instead, his attempts to deal with this issue tend to be sporadic, inconsistent, and not well elaborated.

For example, at one point he begins to equate "healthy" humor with "genuinely funny" humor. This formulation implies that unhealthy forms

of humor are not really all that amusing, whereas something that is truly knee-slappingly, side-splittingly hilarious must be inherently healthy, benevolent, and non-hostile. The problem with this view is that funniness is a subjective evaluation. To argue that only healthy humor is genuinely funny is like trying to convince a teenager that only Beethoven's symphonies are genuinely enjoyable music. Besides, as every stand-up comedian knows, the jokes that get the most laughs are the ones that contain a tinge of venom. To equate healthy humor with funniness clearly doesn't work, and Lefcourt abandons this approach after a few pages without further comment.

Toward the end of the book, he begins to suggest that the more adaptive forms of humor are those that involve perspective-taking and self-deprecation. However, he does not examine these forms of humor in much detail, nor does he discuss how they might be recognized, operationally defined, or studied empirically. He also explores some intriguing evidence for possible sex differences in the expression of humor, suggesting that the more affiliative and self-deprecating forms of humor typically seen in women may be more conducive to health and well-being than the competitive and aggressive uses of humor commonly found in men. Here we begin to see the outlines of a possible framework for distinguishing healthy and unhealthy forms of humor. However, the full implications are not explored in any depth.

Had he taken a more analytical approach, Lefcourt also might have found some useful conceptual tools for distinguishing healthy and unhealthy forms of humor in the writings of past theorists. Over several centuries, a number of philosophers and psychologists have struggled with these issues. Although he gives a sweeping overview of past humor theories, however, Lefcourt glosses over many of the distinctions made by these theorists, and tends to be a little too dismissive of those who emphasized more destructive aspects of humor. He might have honed his own thinking more sharply if he had grappled more fully with the insights provided by those thinkers of the past whose views differed from his own.

To support his arguments for beneficial effects of humor, Lefcourt provides an extensive (though incomplete) review of the existing empirical research literature. Here we are confronted with a rather confusing array of studies, some of which have provided encouraging evidence of relationships between humor and various aspects of mental and physical health, while others have failed to support these hypotheses, and still

others have even produced findings in the opposite direction, suggesting that humor may have adverse consequences for health and longevity. In reviewing the research, Lefcourt shows a tendency to focus on studies that provide support for his views, while ignoring some other studies with contradictory results. As one example, although he cites a couple of early studies with small sample sizes that showed strong positive correlations between salivary immunoglobulin A levels and scores on the Coping Humor Scale, he ignores a number of more recent studies with larger sample sizes that found no significant correlations between these variables. In addition, whereas he tends to be uncritical of the methodological weaknesses of studies that suggest beneficial effects of humor and laughter on health (e.g., inadequate control groups, weak effect sizes, inflated Type I error rates, small sample sizes, etc.), he often goes to great lengths to find possible reasons for discounting those studies that failed to show such positive effects.

In the end, though, Lefcourt is compelled to acknowledge the confusing nature of the existing empirical research. In the final chapter, he concludes that “all the ... research activity linking humor to health has yet to produce definitive data that would assure us of the value of humor and laughter” (170). In seeking explanations for these unconvincing results, however, he overlooks the fact that most of the research of the past few decades (and here I included my own past research) has failed to make the crucial distinction between healthy and unhealthy forms or expressions of humor. For example, the existing self-report humor measures do not explicitly assess whether subjects who receive high scores (indicating a “good” sense of humor) use humor in benevolent and healthy ways or in maladaptive and unhealthy ways. It is little wonder, then, that the research relating scores on these measures to health-related variables tends to be inconclusive, conflicting, and often non-significant. The methods employed in the research are inherently incapable of providing clear evidence concerning healthy aspects of humor. Rather than advocating the development of more sensitive measures and methodologies, however, Lefcourt ignores this problem, and even implicitly encourages continued use of these measures by reprinting two of them (for which I must admit responsibility) in the back of the book.

From a scholarly perspective, it would have been beneficial if Lefcourt had provided a more objective and critical evaluation of the current state of the research and offered some more specific guidelines for those interested in conducting further research in this area. Although

admittedly this may not have been his goal in writing the book, he might have discussed the conceptual and methodological weaknesses of past research and pointed out potentially worthwhile approaches and questions to explore in the future. For example, the chapter on humor as a means of retaining social cohesion and support is noteworthy for its lack of references to any relevant empirical research. Throughout this chapter, the arguments for humor as a facilitator of social relationships are based entirely on anecdotes and speculation. Surprisingly, however, Lefcourt does not call attention to the lack of empirical research on this interesting hypothesis, nor does he provide any suggestions for directions that future research in this area might take.

As generations of thinkers have shown, humor is a slippery beast to try to pin down, and, to avoid confusion, care must be taken to clarify exactly which aspects of this multifaceted concept one is referring to. Unfortunately, throughout most of this book, it is not clear exactly what Lefcourt means by “humor.” The nearest he gets to a definition is to describe humor as a form of “mind play” (28), but he subsequently uses the word in a variety of ways without taking note of these multiple connotations. His approach generally involves conveying meanings indirectly through anecdotes and literary allusions, rather than providing explicit definitions and analyses of alternate conceptualizations. In this regard, he also ignores much recent theoretical and empirical work that has aimed at clarifying the conceptualization of sense of humor.

In the end, the conception of humor that he seems to be advocating is a light-hearted, cheerful, easy-going approach to life, in which one does not take oneself or one’s problems too seriously. The meaning of “humor” here seems to have more to do with cheerfulness and being “good-humored” than with being funny, witty, or amusing. This approach to humor seems quite consistent with Willibald Ruch’s work on cheerfulness as a temperament-based personality trait, but Lefcourt rather curiously does not make reference to this body of research. One is also left with the question of whether humor, in the traditional meaning of funniness, amusement, comedy, and ludicrousness, is even a necessary component of Lefcourt’s conceptualization of humor as good-natured equanimity and self-deprecation. For example, does one need to be able to create humorous incongruities, engage in witty comments, amuse others, or even laugh oneself, in order to achieve the sort of detached perspective-taking that Lefcourt sees as important in coping with uncontrollable

stress? Ultimately, is he even talking about humor as most people currently use the term? Again, the lack of precise definitions allows the concept to slip from our grasp.

Another question that is not addressed has to do with the direction of causality between this form of humor and health. Does being cheerful and good-humored cause one to have better physical and mental health, or does having better health cause one to be cheerful and good-humored? Lefcourt clearly views humor as having a causal influence on health and well-being, but he does not address the equally plausible possibility that the causal influence goes in the opposite direction.

This book also provides little guidance for those readers who may be seeking ideas about how to improve their sense of humor to gain more of its supposed health benefits. Indeed, it is not clear whether it is even possible for people to change significantly these aspects of their personality. Lefcourt briefly explores some research on programs that attempted to improve people's sense of humor, but notes that these have been generally unsuccessful to date. The "living buoyantly" that Lefcourt extols may be largely a function of fairly stable personality traits (extraversion, cheerfulness, surgency) that result from being lucky enough to be born with the right set of genes or to have grown up in a favorable family environment.

Research on humor, health, and well-being is currently in need of some new direction. Despite widespread popular belief in the benefits of humor for psychological and physical health, the research to date has produced surprisingly weak and inconsistent evidence in support of these claims. However, the past research has been hampered by a variety of conceptual inadequacies and methodological weaknesses. If the current interest in humor and health is to be more than just a passing fad, it will need to be placed on a firmer scientific footing. To do this, researchers will need to develop more sophisticated theoretical formulations and employ more rigorous methodological tools. Despite the admitted inconclusiveness of the existing research, Lefcourt remains enthusiastically optimistic about the health benefits of humor. This book will no doubt be popular among those who share his enthusiasm. Those who wish to conduct sound research in this area will likely also find it interesting, engaging, and informative, but somewhat less satisfying.

*University of Western Ontario*

ROD A. MARTIN

Robert Orben: *Speaker's Handbook of Humor*. Merriam-Webster, 2000. 365 pp. \$14.95.

Robert Orben's contribution to the creation of humor in the 20th century is unique. That becomes evident as you read through this book, a book that draws on over fifty years of a career as a writer and editor of humor.

In the book he combines his experience as a comedy writer (he has produced over 40 books of professional-level comedy material) and that of many years as a speechwriter for leading business executives and political figures (he served as Director of the White House Speechwriting Department under President Gerald Ford).

Perhaps you have to teach a class, present a paper, make a speech but you dread the thought because you can't stand the sound of snoring any longer? Help is available in *Speaker's Handbook of Humor* in major articles such as:

Opener: the First Two Minutes of Your Speech

Stage Fright And How to Deal With It

Stories: Where Do They Come From

Uses And Limits of Humor

Using Humor When You're Afraid To Use Humor

In the book you can find ways to determine what type of humor fits your personality, or lack of one. You are taken step-by-step through a variety of situations, events and occasions. For example, at one time or another many of us get a chance to participate in a roast. If the thought of roasting someone brings on the flop sweat, help is available in the section that contains (1) Preparing the Roast, (2) Delivering the Roast, (3) Serving the Roast, (4) Jokes for the Roast, (5) Responding to the Roast. Thus, you're given a variety of jokes that range from singeing your victim to roasting until well done.

“Is this man a salesman? He could sell microwave ovens to sushi restaurants.”

“He's also the author of a book that has been so helpful to those in academe. It's called HOW TO GET OUT OF TEACHING AND INTO MONEY.”

“It's one thing to be neat, but who has a crease in their socks?”

Orben notes that more men than women participate on roast panels and it is unusual to see a woman roasted. Thus, most of the put-downs in this chapter are aimed at men. He notes that, “The lines can easily be targeted at the opposite sex. However, as with all put-down jokes, caution is advised. Current social mores and personal sensitivities should always be taken into consideration.”

The book contains a wealth of information crammed into the 365 pages of the soft cover book. I see this book as not only being a valuable reference for individuals who want to enhance their speaking style but also as a useful textbook for anyone who teaches communication subjects. Indeed, Orben is right on when he says, “*Speaker’s Handbook of Humor* is a lifetime of experience packed up into an easy-to-use humor tool kit.”

*Art Gliner Center for Humor Studies,  
University of Maryland*

ART GLINER

Robert Provine argues in this book that laughter is mostly about relationships, not jokes; that women laugh more at men than vice versa; that speakers laugh more than their audiences; that tickling is a form of tactile communication, not a reflex; and that laughter explains why chimpanzees cannot talk. Among other topics are a history of canned laughter and a description of the laughing epidemic that brought a district of Tanganyika to a standstill in 1962.Â @inproceedings{Provine2000LaughterAS, title={Laughter: A Scientific Investigation}, author={Robert R. Provine}, year={2000} }. Robert R. Provine. Includes bibliographical references (p. 231-246) and index. Laughter: an introduction -- The road not taken: philosophical and theoretical approaches to laughter -- Natural history of laughter -- Cracking the laugh code: from sound lab to opera studio -- Chimpanzee laughter, speech evolution, and paleohumorology -- Ticklish relationships -- Contagious laughter and the brain -- Abnormal and inappropriate laughter: clinical perspectives -- Laughing. Your way to health. "Whether overheard in a crowded restaurant, as punctuation to the intimate conversation of lovers, or as the noisy guffaws In his excellent book *Laughter at the Foot of the Cross* (1999), M A Screech considered the uses of laughter at certain moments in the Bible. Sometimes these are belly laughs, sometimes chuckles, sometimes the dark laughter of the grotesque - as when Christ is laughed at by spectators as he hangs in agony at Golgotha.Â Perhaps the most interesting chapter in Robert Provine's *Laughter: A Scientific Investigation* deals with exactly such abnormal or inappropriate amusement, citing Titus Andronicus ("Why dost thou laugh? It fits not with this hour") on the return of the eponymous Roman general's own severed hand and the heads of the two sons it was supposed to ransom.