



Introduction to the Psychology of Humor

We all know what it is like to experience humor. Someone tells a joke, relates an amusing personal anecdote, makes a witty comment or an inadvertent slip of the tongue, and we are suddenly struck by how funny it is. Depending on how amusing we perceive the stimulus to be, it might cause us to smile, to chuckle, or to burst out in peals of convulsive laughter. Our response is accompanied by pleasant feelings of emotional well-being and mirth. Most of us have this sort of experience many times during the course of a typical day.

Because humor is so familiar and is such an enjoyable and playful activity, many people might think they already understand it and do not need research in psychology to explain it. However, the empirical study of humor holds many interesting surprises. Although it is essentially a type of mental play involving a lighthearted, nonserious attitude toward ideas and events, humor serves a number of “serious” social, emotional, and cognitive functions, making it a fascinating and rewarding topic of scientific investigation.

The topic of humor raises a host of intriguing questions of relevance to all areas of psychology. What are the mental processes involved in “getting a joke” or perceiving something to be funny? How is humor processed in the brain, and what effect does it have on our bodies? What is laughter and why do we laugh in response to humorous things? Why is humor so enjoyable? What role does humor play in our interactions with other people? What is a sense of humor and how does it develop in children? Is a good sense of humor beneficial for mental and physical health?

As is evident from these and other related questions, humor touches on all branches of academic psychology (R. A. Martin, 2000). Researchers in the area of cognitive psychology may be interested in the mental processes involved in the perception, comprehension, appreciation, and creation of humor. The interpersonal functions of humor in dyadic interactions and group dynamics are of relevance to social psychology. Developmental psychologists may focus on the way humor and laughter develop from infancy into childhood and throughout the lifespan. Personality researchers might examine individual differences in sense of humor and their relation to other traits and behaviors. Biological psychology can shed light on the physiological bases of laughter and the brain regions underlying the comprehension and appreciation of humor. The role of humor in mental and physical health, as well as its potential applications in psychotherapy, education, and the workplace, are of interest to applied branches of psychology such as clinical, health, educational, and industrial-organizational psychology. Thus, researchers from every branch of the discipline have potentially interesting contributions to make to the study of humor. Indeed, a complete understanding of the psychology of humor requires an integration of findings from all these areas.

Despite the obvious importance of humor in many different areas of human experience and its relevance to all branches of psychology, mainstream psychology has paid surprisingly little attention to this subject up to now. Humor research typically receives scant mention, if any at all, in undergraduate psychology texts or scholarly books. Nonetheless, there has been a steady accumulation of research on the topic over the years, producing a sizable body of knowledge. The overall aim of this book is therefore to introduce students and academics in psychology, as well as scholars and professional practitioners from other fields, to the existing research literature, and to point out interesting avenues for further study in this fascinating topic area.

In this chapter, I will begin by summarizing evidence of the universality and evolutionary origins of humor and laughter in humans. I will then explore the question of what humor is, discussing four essential elements of the humor process and the relevance of each to an integrative psychology of humor. This will be followed by a survey of the many different forms of humor that we encounter during our daily lives, and an examination of the psychological functions of humor and laughter. Next, I will summarize the history of the concept of humor, examining the way popular conceptions and assumptions about humor and laughter have changed dramatically over the centuries. Finally, I will discuss the psychological approach to humor and then present an overview of the rest of this book.

THE UNIVERSALITY OF HUMOR AND LAUGHTER

Humor and laughter are a universal aspect of human experience, occurring in all cultures and virtually all individuals throughout the world (Apte, 1985; Lefcourt, 2001). Laughter is a distinctive, stereotyped pattern of vocalization that is easily rec-

ognized and quite unmistakable (Provine and Yong, 1991). Although different cultures have their own norms concerning the suitable subject matter of humor and the types of situations in which laughter is considered appropriate, the sounds of laughter are indistinguishable from one culture to another. Developmentally, laughter is one of the first social vocalizations (after crying) emitted by human infants (McGhee, 1979). Infants begin to laugh in response to the actions of other people at about four months of age, and cases of gelastic (i.e., laughter-producing) epilepsy in newborns indicate that the brain mechanisms for laughter are already present at birth (Sher and Brown, 1976). The innateness of laughter is further demonstrated by the fact that even children born deaf and blind have been reported to laugh appropriately without ever having perceived the laughter of others (Provine, 2000). Indeed, there is evidence of specialized brain circuits for humor and laughter in humans, which researchers are beginning to identify by means of neural imaging studies. Thus, being able to enjoy humor and express it through laughter seems to be an essential part of what it means to be human.

Interestingly, though, humans are not the only animal that laughs. Primatologists have studied in some detail a form of laughter emitted by young chimpanzees, which was first described by Charles Darwin (1872). Similar types of laughter have also been observed in other apes, including bonobos, orangutans, and gorillas (Preuschoft and van Hooff, 1997; van Hooff and Preuschoft, 2003). Ape laughter is described as a staccato, throaty, panting vocalization that accompanies the *relaxed open-mouth* or “play face,” and is emitted during playful rough-and-tumble social activities such as wrestling, tickling, and chasing games (see Figure 1). Although it sounds somewhat different from human laughter, it is quite recognizable as such, occurring in similar social contexts as laughter in human infants and young children. Indeed, there is good reason to believe that human and chimpanzee laughter have the same evolutionary origins and many of the same functions.

In addition to laughter, there is evidence that apes may even have the capacity for a rudimentary sense of humor. Chimpanzees and gorillas that have been taught to communicate by means of sign language have been observed to use language in playful ways that are very reminiscent of humor, such as punning, humorous insults, and incongruous word use (Gamble, 2001). Interestingly, these humorous uses of linguistic signs are sometimes also accompanied by laughter and the play face, indicating a close link between humor, play, and laughter even in apes.

All of these lines of evidence suggest that humor and laughter in humans are a product of natural selection (Gervais and Wilson, 2005). Laughter appears to have originated in social play and to be derived from primate play signals. It is viewed by evolutionary researchers as part of the nonverbal “gesture-call” system, which has a long evolutionary history, predating the development of language (Burling, 1993). With the evolution of greater intellectual and linguistic abilities, humans have adapted the laughter-generating play activities of their primate ancestors to the mental play with words and ideas that we now call humor (Caron, 2002). Thus, although they usually do not chase and tickle one another in rough-and-tumble play, human adults, by means of humor, continue to engage in frequent social play. These evolutionary



FIGURE 1 The chimpanzee play face. The characteristic “play face” (open mouth, upper teeth covered, lower teeth exposed) accompanies panting laughter. © Getty Images/PhotoDisc

origins of humor and laughter suggest that they likely have important social-emotional functions that have contributed to our survival as a species.

Although humor has a biological basis rooted in our genes, it is also evident that cultural norms and learning play an important role in determining how it is used in social interactions, and what topics are considered appropriate for it. In addition, although all forms of humor seem to originate in a basic play structure, the complexity of human language and imagination enables us to create humor in a seemingly endless variety of forms. As human language, culture, and technology have evolved, we have developed new methods and styles of communicating it, from spontaneous interpersonal joking and banter to oral storytelling traditions, comedic drama and humorous literature, comedy films, radio and television shows, and jokes and cartoons disseminated over the Internet.

Besides being a form of playful fun and entertainment, humor has taken on a wide range of social functions over the course of human biological and cultural evolution. Many of these interpersonal functions are contradictory and paradoxical. Humor can

be a method of enhancing social cohesion within an in-group, but it can also be a way of excluding individuals from an out-group. It can be a means of reducing but also reinforcing status differences among people, expressing agreement and sociability but also disagreement and aggression, facilitating cooperation as well as resistance, and strengthening solidarity and connectedness or undermining power and status. Thus, while originating in social play, humor has evolved in humans as a universal mode of communication and social influence with a variety of functions.

WHAT IS HUMOR?

The Oxford English Dictionary defines humor as “that quality of action, speech, or writing which excites amusement; oddity, jocularity, facetiousness, comicality, fun.” It goes on to say that humor is also “the faculty of perceiving what is ludicrous or amusing, or of expressing it in speech, writing, or other composition; jocose imagination or treatment of a subject” (Simpson and Weiner, 1989, p. 486). It is evident from these definitions that humor is a broad term that refers to anything that people say or do that is perceived as funny and tends to make others laugh, as well as the mental processes that go into both creating and perceiving such an amusing stimulus, and also the affective response involved in the enjoyment of it.

From a psychological perspective, the humor process can be divided into four essential components: (1) a social context, (2) a cognitive-perceptual process, (3) an emotional response, and (4) the vocal-behavioral expression of laughter.

The Social Context of Humor

Humor is fundamentally a social phenomenon. We laugh and joke much more frequently when we are with other people than when we are by ourselves (R. A. Martin and Kuiper, 1999; Provine and Fischer, 1989). People do occasionally laugh when they are alone, such as while watching a comedy show on television, reading a humorous book, or remembering a funny personal experience. However, these instances of laughter can usually be seen as “pseudo-social” in nature, because one is still responding to the characters in the television program or the author of the book, or reliving in memory an event that involved other people.

Humor can (and frequently does) occur in virtually any social situation. It can occur between spouses who have lived together for fifty years or between strangers waiting at a bus stop. It can take place in the conversation of a group of close friends casually sitting around a table in a coffee shop, or in the interactions of a group of business people participating in formal negotiations. It can be used by public speakers, such as politicians or religious leaders, addressing large audiences either in person or via the media.

The social context of humor is one of play. Indeed, humor is essentially a way for people to interact in a playful manner. As I have already noted, research on laughter in chimpanzees and other apes indicates that laughter originates in social play (van

Hooff and Preuschoft, 2003). In humans, our ability to create humor to amuse one another and evoke laughter appears to have evolved as a means of providing us with extended opportunities for play. Play seems to serve important social, emotional, and cognitive functions (Bateson, 2005). Indeed, all mammals engage in play as juveniles, but, unlike most other animals, humans continue to play throughout their lives, most notably through humor.

When they engage in play, people take a nonserious attitude toward the things they are saying or doing, and they carry out these activities for their own sake—for the fun of it—rather than having a more important goal in mind. Psychologist Michael Apter (1991) has referred to the playful state of mind associated with humor as the *paratelic* mode, which he distinguishes from the more serious, goal-directed *telic* mode (from Greek *telos* = goal). According to Apter, we switch back and forth between these serious and playful states of mind many times during the course of a typical day. The humorous, playful mode of functioning can occur for brief moments or for extended periods of time. In a business meeting, for example, someone may make a humorous quip that causes the group to laugh and enter the playful paratelic frame of mind for a brief moment, before resuming their more serious telic mode of discourse. In more casual settings, when people are feeling relaxed and uninhibited, they may engage in playful and humorous storytelling and joke swapping for several hours at a time.

Cognitive-Perceptual Processes in Humor

Besides occurring in a social context, humor is characterized by particular sorts of cognitions. To produce humor, an individual needs to mentally process information coming from the environment or from memory, playing with ideas, words, or actions in a creative way, and thereby generating a witty verbal utterance or a comical nonverbal action that is perceived by others to be funny. In the reception of humor, we take in information (something someone says or does, or something we read) through our eyes and ears, process the meaning of this information, and appraise it as nonserious, playful, and humorous.

What are the characteristics of a stimulus that cause us to perceive it to be funny? As we will see in the next two chapters, this question has been a topic of much scholarly debate and research for centuries (see also Roedelein, 2002). Most investigators would agree, however, that humor involves an idea, image, text, or event that is in some sense incongruous, odd, unusual, unexpected, surprising, or out of the ordinary. In addition, there needs to be some aspect that causes us to appraise the stimulus as nonserious or unimportant, putting us into a playful frame of mind at least momentarily. Thus, the essence of humor seems to be incongruity, unexpectedness, and playfulness, which evolutionary theorists Matthew Gervais and David Wilson (2005) referred to as “nonserious social incongruity.” This constellation of cognitive elements appears to characterize all forms of humor, including jokes, teasing, and witty banter, unintentional types of humor such as amusing slips of the tongue or the proverbial person slipping on the banana peel, the laughter-eliciting peek-a-boo games and

rough-and-tumble play of children, and even the humor of chimpanzees and gorillas (Wyer and Collins, 1992).

Arthur Koestler (1964) coined the term *bisociation* to refer to the mental process involved in perceiving humorous incongruity. According to Koestler, bisociation occurs when a situation, event, or idea is simultaneously perceived from the perspective of two self-consistent but normally unrelated and even incompatible frames of reference. Thus, a single event “is made to vibrate simultaneously on two different wavelengths, as it were” (p. 35). A simple example is a pun, in which two different meanings of a word or phrase are brought together simultaneously (e.g., Two cannibals are eating a clown. One says to the other, “Does this taste funny to you?”). According to Koestler, this same process underlies all types of humor.

Michael Apter (1982) used the concept of *synergy* to describe this cognitive process, in which two contradictory images or conceptions of the same object are held in one’s mind at the same time. In the playful paratelic state, according to Apter, synergies are enjoyable and emotionally arousing, producing the pleasurable sensation of having one’s thoughts oscillate back and forth between two incompatible interpretations of a concept. Thus, in humor, we playfully manipulate ideas and activities so that they are simultaneously perceived in opposite ways, such as real and not real, important and trivial, threatening and safe. As we will see in later chapters, a great deal of theoretical discussion and research in the psychology of humor has focused on exploring in greater detail the cognitive processes underlying the perception and appreciation of humor.

Emotional Aspects of Humor

Our response to humor is not just an intellectual one. The perception of humor invariably also evokes a pleasant emotional response, at least to some degree. Psychological studies have shown that exposure to humorous stimuli produces an increase in positive affect and mood (Szabo, 2003). The emotional nature of humor is also clearly demonstrated by recent brain imaging research showing that exposure to humorous cartoons activates the well-known reward network in the limbic system of the brain (Mobbs et al., 2003). The funnier a particular cartoon is rated by a participant, the more strongly these parts of the brain are activated. From other research, we know that these same brain circuits underlie pleasurable emotional states associated with a variety of enjoyable activities including eating, listening to enjoyable music, sexual activity, and even ingestion of mood-altering drugs. This explains why humor is so enjoyable and why people go to such lengths to experience it as often as they can: whenever we laugh at something funny, we are experiencing an emotional high that is rooted in the biochemistry of our brains.

It can therefore be argued that humor is essentially an emotion that is elicited by the particular types of cognitive processes discussed in the previous section. Just as other emotions like joy, jealousy, or fear occur in response to specific types of appraisals of the social and physical environment (Lazarus, 1991), so humor comprises an emotional response that is elicited by a particular set of appraisals, namely the

perception that an event or situation is incongruously funny or amusing. The pleasant emotion associated with humor, which is familiar to all of us, is a unique feeling of well-being that is described by such terms as *amusement*, *mirth*, *hilarity*, *cheerfulness*, and *merriment*. It is closely related to joy, and contains an element of exultation and a feeling of invincibility, a sense of expansion of the self that the seventeenth-century English philosopher Thomas Hobbes referred to as “sudden glory.”

Surprisingly, although it is a feeling that is familiar to everyone, scholars have not yet settled on an agreed-upon technical term to denote this particular emotion. Researchers have specific terms to denote emotions like joy, love, fear, anxiety, depression, and so forth, but there is no common name for the emotion elicited by humor. This is because it is so closely aligned with laughter that, until recently, theorists and researchers have tended to focus on the more obvious behavior of laughter instead of the emotion that underlies it. Some researchers have used the expressions “humor appreciation” (e.g., Weisfeld, 1993) or “amusement” (e.g., Shiota et al., 2004) to denote this emotion, but these terms seem to be too cognitive and do not fully capture its emotional nature. Psychologist Willibald Ruch (1993) has proposed the word *exhilaration* (related to *hilarity*, from Latin *hilaris* = cheerful) as a technical term for this emotion. While exhilaration, in its common English meaning, contains a sense of excitement in addition to cheerfulness, Ruch suggested that this use of the term would de-emphasize the excitement component, underscoring instead the emotional quality of cheerfulness, amusement, and funniness. However, this term does not seem to have caught on with researchers, who likely have difficulty shedding the connotation of excitement.

To denote this emotion, we need a term that is clearly emotion-related and is associated with humor and laughter but without being synonymous with either one, and which can have a range of intensities. In my view, the word *mirth* works very well for this purpose. *The Oxford English Dictionary* defines mirth as “pleasurable feeling, . . . joy, happiness; gaiety of mind, as manifested in jest and laughter; merriment, hilarity” (Simpson and Weiner, 1989, p. 841). This seems to be exactly the required meaning. Some researchers have used the word *mirth* to refer to smiling and laughter, which are facial and vocal expressions of the emotion rather than the emotion itself, and therefore should be kept distinct. In this book, then, I will refer to this emotion as mirth.

Mirth, then, is the distinctive emotion that is elicited by the perception of humor. Like other emotions (e.g., joy, love, sadness, fear), mirth can occur with varying degrees of intensity, ranging from mild feelings of amusement to very high levels of hilarity (Ruch, 1993). Also like other emotions, mirth has physiological as well as experiential components. Along with the distinctive subjective feelings of pleasure, amusement, and cheerfulness, this emotion is accompanied by a range of biochemical changes in the brain, autonomic nervous system, and endocrine system, involving a variety of molecules, including neurotransmitters, hormones, opioids, and neuropeptides (Panksepp, 1993). This neurochemical cocktail has further effects on many parts of the body, including the cardiovascular, musculoskeletal, digestive, and immune systems (W. F. Fry, 1994). The biological concomitants of the emotion of mirth form

the basis of claims that have been made in recent years about potential health benefits of humor and laughter. However, the exact nature of the physiological changes accompanying mirth is not yet well understood, and further research is needed before we can say with confidence whether these effects have significant health benefits (R. A. Martin, 2001, 2002).

The essentially emotional nature of humor is something that many scholars have failed to recognize until quite recently. In the past, most theorists and researchers have viewed it as primarily a cognitive process rather than an emotional one. A great deal of philosophical debate and research effort has been expended on attempts to identify the precise cognitive-perceptual elements that are necessary and sufficient for humor to occur, with little recognition of the fact that what these cognitive appraisals elicit is an emotion. This would be like researchers who study depression or anxiety spending all their time debating about the specific types of events and cognitive appraisals that elicit these mood states without ever noticing their emotional nature. Although much has been learned about the cognitive aspects of humor (and there is still more work to do in this area), theory and research directed at the emotional component of humor has only recently begun. Recent research efforts bridging social and biological psychology hold particular promise for further exciting breakthroughs in this area.

Laughter as an Expression of the Emotion of Mirth

Like other emotions, the mirthful pleasure accompanying humor also has an expressive component, namely laughter and smiling. At low levels of intensity, this emotion is expressed by a faint smile, which turns into a broader grin and then audible chuckling and laughter as the emotional intensity increases. At very high intensities, it is expressed by loud guffaws, often accompanied by a reddening of the face as well as bodily movements such as throwing back the head, rocking the body, slapping one's thighs, and so on. Thus, laughter is essentially a way of expressing or communicating to others the fact that one is experiencing the emotion of mirth, just as frowning, scowling, yelling, and clenching one's fists communicate the emotion of anger. Laughter is therefore fundamentally a social behavior: if there were no other people to communicate to, we would not need laughter. This is no doubt why it is so loud, why it comprises such a distinctive and easily recognized set of sounds, and why it rarely occurs in social isolation.

As we have already seen, the laughter of chimpanzees and other apes is typically accompanied by a characteristic facial expression called the relaxed open-mouth display, or play face, which is also seen in other primates and is shown during play. Many theorists have suggested that the main function of laughter, in humans as well as apes, is to signal to others that one is engaging in play, rather than being serious (e.g., van Hooff, 1972). When chimpanzees are playfully fighting and chasing each other, it is important for them to be able to let each other know that they are just having fun and not seriously intending to harm one another. In humans also, laughter can be a signal of friendliness and playful intentions, indicating that one is in a

nonserious frame of mind. The laughter accompanying friendly teasing, for example, signals that a seemingly insulting message is not to be taken seriously.

More recently, researchers have suggested that the purpose of laughter is not just to communicate that one is in a playful state, but to actually induce this state in others as well (Owren and Bachorowski, 2003; Russell, Bachorowski, and Fernandez-Dols, 2003). According to this view, the peculiar sounds of laughter have a direct effect on the listener, inducing positive emotional arousal that mirrors the emotional state of the laugher, perhaps by activating certain specialized brain circuits (Gervais and Wilson, 2005; Provine, 2000). In this way, laughter may serve an important biosocial function of coupling together the positive emotions of members of a group and thereby coordinating their activities. This would explain why laughter is so contagious; when we hear someone laughing, it is almost impossible not to feel mirthful and begin laughing too. Yet another potential social function of laughter is to motivate others to behave in particular ways (Shiota et al., 2004). For example, laughter can be a method of positively reinforcing others for desirable behavior (“laughing with”), as well as a potent form of punishment directed at undesirable behaviors (“laughing at”).

In summary, the psychological process of humor involves a social context, a cognitive appraisal process comprising the perception of playful incongruity, the emotional response of mirth, and the vocal-behavioral expression of laughter. Neurological studies indicate that these different components of the humor process involve different but interconnected regions of the brain (Wild et al., 2003). The word *humor* is often used in a narrow sense to refer specifically to the cognitive-perceptual component, the mental processes that go into creating or perceiving something funny or amusing. I will also occasionally use it in this narrow sense, since there does not seem to be another word to denote this cognitive process. It is important to bear in mind, though, that in a broader sense, humor refers to all four components, and all of them need to be addressed in an integrative psychology of humor.

THE MANY FORMS OF HUMOR

We have seen that humor is essentially an emotional response of mirth in a social context that is elicited by a perception of playful incongruity and is expressed through smiling and laughter. Although these basic elements are common to all instances of humor, the range of social situations and events that can elicit the humor response is remarkably diverse. During the course of a typical day, we encounter many different forms of humor communicated by different means and for different purposes. Some of this humor comes to us via the mass media. Radio hosts frequently crack jokes and make witty comments; television provides us with a constant diet of humor in the form of sitcoms, blooper shows, stand-up comedy, political satire, and humorous advertisements; and we encounter it also in newspaper comic strips and cartoons, comedy movies, and humorous books. Humor is also often used in speeches, sermons, and lectures by politicians, religious leaders, motivational speakers, and teachers.

However, most of the humor and laughter that we experience in our daily lives arises spontaneously in the course of our normal relations with other people (R. A. Martin and Kuiper, 1999). This sort of interpersonal humor occurs in nearly every type of informal and formal interaction, including conversations between lovers, close friends, fellow students, coworkers, business associates, store clerks and customers, doctors and patients, teachers and students, and even complete strangers standing in line at a bank.

Individuals vary in the degree to which they produce humor in their daily interactions with others. Most of us enjoy the positive emotion of mirth so much that we highly value those individuals who are especially good at making us laugh. These are the people that we often describe as having a “good sense of humor,” and they tend to be particularly sought out as friends and romantic partners. Some people develop such a talent at eliciting mirth in others and making them laugh that they become professional humor producers, entering the ranks of humorous authors, cartoonists, stand-up comedians, comedy writers, and actors. The billions of dollars spent on various forms of comedy each year further attest to the high value placed on the emotional pleasure associated with humor.

The humor that occurs in our everyday social interactions can be divided into three broad categories: (1) jokes, which are prepackaged humorous anecdotes that people memorize and pass on to one another; (2) spontaneous conversational humor, which is created intentionally by individuals during the course of a social interaction, and can be either verbal or nonverbal; and (3) accidental or unintentional humor.

Jokes

During the course of normal conversations, some people like to amuse others by telling jokes, which are short, amusing stories ending in a punch line. These are sometimes also referred to as “canned jokes” to distinguish them from the sorts of informal jesting and witty quips to which the words *joke* and *joking* can also refer. Here is an example of a joke of this sort (from Long and Graesser, 1988, p. 49):

A man goes to a psychiatrist who gives him a battery of tests. Then he announces his findings. “I’m sorry to have to tell you that you are hopelessly insane.” “Hell,” says the client, indignantly, “I want a second opinion.” “Okay,” says the doctor, “You’re ugly too.”

The joke consists of a setup and a punch line. The setup, which includes all but the last sentence, creates in the listener a particular set of expectations about how the situation should be interpreted. The punch line suddenly shifts the meaning in an unexpected and playful way, thus creating the perception of nonserious incongruity that is necessary for humor to occur. In this particular joke, the punch line plays on the meaning of the phrase “second opinion,” shifting the frame of reference from that of a serious, professional doctor-patient relationship to a nonsensical one in which one person is insulting another. The story is clearly playful and nonserious, conveying that the whole thing is meant to be taken as fun. Note, however, that there is also

an aggressive element in this joke (“You’re ugly too”). As we will see, there is much debate about the degree to which aggression is an essential aspect of all jokes (and perhaps even all humor).

In everyday conversation, joke-telling is usually prefaced by verbal or nonverbal cues (e.g., “Did you hear the one about . . .”) or conforms to certain stock formats (e.g., “A man went into a bar . . .”) that indicate to the audience that the story is meant to be humorous and that the listeners are expected to laugh (Cashion, Cody, and Erickson, 1986). Although joke-tellers typically try to draw links between the jokes they tell and the ongoing topic of conversation, a joke is a context-free and self-contained unit of humor that carries within itself all the information needed for it to be understood and enjoyed. It can therefore be told in many different conversational contexts (Long and Graesser, 1988). Riddles are another form of prepackaged humor closely related to jokes, which often involve a play on words and are particularly enjoyed by young children (e.g., Why did the cookie cry? Because his mother was a wafer so long).

Spontaneous Conversational Humor

Canned jokes represent only a small proportion of the humor that we experience in our everyday social interactions. In a daily diary study in which we had adults keep a record of every time they laughed over the course of three days, my colleague Nicholas Kuiper and I found that only about 11 percent of daily laughter occurred in response to jokes. Another 17 percent was elicited by the media, and fully 72 percent arose spontaneously during social interactions, either in response to funny comments that people made or to amusing anecdotes they told about things that had happened to them (R. A. Martin and Kuiper, 1999). This sort of spontaneous conversational humor is more context-dependent than joke-telling, and is therefore often not as funny when recounted afterwards (“You had to be there”). In such conversational humor, nonverbal cues indicating a humorous intent, such as a twinkle in the eye or a particular tone of voice, are often more ambiguous than in joke-telling, so that the listener is often not entirely sure if the speaker is jesting or being serious.

Spontaneous conversational humor takes many different forms, and many different words exist to describe them (e.g., *jest*, *witticism*, *quip*, *wisecrack*, *gag*). Neal Norrick (2003), a linguist who has conducted research on humor occurring in everyday conversation, suggested that, besides the telling of canned jokes, conversational humor may be classified into (1) *anecdotes* (relating an amusing story about oneself or someone else); (2) *wordplay* (creating puns, witty responses, or wisecracks that play on the meaning of words); and (3) *irony* (a statement in which the literal meaning is different from the intended meaning).

A more extensive classification system of spontaneous conversational humor (which they referred to as *wit*), was developed by psychologists Debra Long and Arthur Graesser (1988). To obtain a broad sample of the types of humor occurring in naturalistic conversations, these authors recorded a number of episodes of television talk shows (e.g., *The Tonight Show*) and then analyzed the different types of humor

that arose in the interactions between the hosts and their guests. Audience laughter was used as an indicator of humor. Based on their analyses, these authors identified the following 11 categories, which were distinguished from one another on the basis of their intentions or uses of humor:

1. *Irony*—the speaker expresses a statement in which the literal meaning is opposite to the intended meaning (e.g., saying “What a beautiful day!” when the weather is cold and stormy).
2. *Satire*—aggressive humor that pokes fun at social institutions or social policy.
3. *Sarcasm*—aggressive humor that targets an individual rather than an institution (e.g., At a fashionable dinner, a dignified lady rebuked Winston Churchill: “Sir, you are drunk.” “Yes,” replied Churchill, “and you are ugly. But tomorrow I shall be sober and you shall still be ugly”).
4. *Overstatement and understatement*—changing the meaning of something another person has said by repeating it with a different emphasis (e.g., A guest asks host Johnny Carson, who had been married several times: “Have you ever been married?” A second guest says, “Has he *ever* been married!”).
5. *Self-deprecation*—humorous remarks targeting oneself as the object of humor. This may be done to demonstrate modesty, to put the listener at ease, or to ingratiate oneself with the listener.
6. *Teasing*—humorous remarks directed at the listener’s personal appearance or foibles. Unlike sarcasm, the intention is not to seriously insult or offend.
7. *Replies to rhetorical questions*—because rhetorical questions are not asked with the expectation of a reply, giving an answer to one violates a conversational expectation and surprises the person who posed the question. This can therefore be perceived as funny, and the intention is usually to simply entertain a conversational partner.
8. *Clever replies to serious statements*—clever, incongruous, or nonsensical replies to a statement or question that was meant to be serious. The statement is deliberately misconstrued so that the speaker replies to a meaning other than the intended one.
9. *Double entendres*—a statement or word is deliberately misperceived or misconstrued so as to evoke a dual meaning, which is often sexual in nature.
10. *Transformations of frozen expressions*—transforming well-known sayings, clichés, or adages into novel statements (e.g., complaint of a bald man: “Hair today, gone tomorrow”).
11. *Puns*—humorous use of a word that evokes a second meaning, usually based on a homophone (i.e., a word with a different meaning that sounds the same).

Although these categories are not mutually exclusive and there may be other forms of spontaneous wit that occur in natural conversation but are not observed in television talk shows (Wyer and Collins, 1992), this list does provide a useful starting point for thinking about the many different ways humor may be expressed. Neal Norrick (1984) also discussed what he called *stock conversational witticisms*, which are humorous sayings or expressions that are routinely and recurrently used in

conversation (e.g., “faster than greased lightning,” or “bring that up again and we’ll vote on it” in response to someone belching). Besides these verbal forms of humor, people also often intentionally create humor in social interactions by nonverbal means, such as funny or exaggerated facial expressions, odd ways of walking, bodily gestures, or mannerisms.

Unintentional Humor

In addition to the things people say and do during social interactions with the intention of amusing others, much mirth and laughter also arise from utterances or actions that are not meant to be funny (Wyer and Collins, 1992). English literature professors Alleen Nilsen and Don Nilsen (2000) referred to these as *accidental humor*, which they divided into physical and linguistic forms. Accidental physical humor includes minor mishaps and pratfalls such as the person slipping on a banana peel or spilling a drink on one’s shirt. These sorts of events are funny when they occur in a surprising and incongruous manner and when the person experiencing them is not seriously hurt or badly embarrassed. This type of humor also forms the basis of slapstick and screwball comedy.

Accidental linguistic humor arises from misspellings, mispronunciations, errors in logic, and the kinds of speaker confusions called *Freudian slips*, *malapropisms*, and *spoonerisms*. This type of unintentional humor occurs, for example, in newspaper headlines in which an ambiguity creates a humorous alternative meaning (e.g., “Prostitutes appeal to pope”; “Dr. Ruth talks about sex with newspaper editors”; “Red tape holds up bridge”). Spoonerisms are a speech error in which the initial sounds of two or more words are transposed, creating an unintended and humorous new meaning. They were named after a nineteenth-century British clergyman named William Spooner who frequently made such mistakes in his sermons and speeches (e.g., he is said to have proposed a toast to Queen Victoria, saying “Three cheers for our queer old dean”).

In sum, humor is a ubiquitous type of social interaction that takes many different forms. The conversational types of humor, including joke-telling, spontaneous wit, and unintentional humor, are of particular interest to psychologists. However, until quite recently, most of the psychological research on humor has focused largely on jokes and cartoons (which are essentially visual jokes), and has generally ignored the other types. This is in large part because of the self-contained and context-free nature of jokes and cartoons, which makes them very easy to transport into a laboratory setting. Over the years, a great many studies have been conducted in which participants (usually sitting by themselves in a laboratory) were presented with various types of jokes and cartoons under a variety of experimental conditions and were asked to rate them for funniness. Thus, in humor research, jokes and cartoons have long served as the equivalent of T-mazes or nonsense syllables in other fields, providing experimenters with an independent variable that can help control the input in investigations of this rather nebulous concept.

However, humor in these sorts of studies is removed from its natural social context, and, although these methods have enabled researchers to make many interesting discoveries, they are not as useful for studying the forms and functions of humor as it normally occurs in social interaction. In contrast to studying participants' responses to jokes in a laboratory, it is more difficult to investigate the spontaneous forms of humor that arise in everyday conversations and depend on the social context. For this type of research, investigators may need to go out of the laboratory and study humor as it occurs spontaneously in naturalistic settings, or at least have dyads or groups of people interact with one another in the laboratory.

Besides being the focus of most research, jokes have also served as the prototype of humor in many past theories, which have tended to focus particularly on the cognitive processes underlying the comprehension of these types of humor. Because joke comprehension may be somewhat different from the cognitive processes involved in other forms of humor, these theories were often inadequate for explaining all types of humor. More recently, researchers are beginning to develop theories that account for other sorts of humor occurring in social interaction besides jokes (e.g., Wyer and Collins, 1992). These theories often incorporate the emotional and social aspects of humor as well as the cognitive elements.

PSYCHOLOGICAL FUNCTIONS OF HUMOR

Although it is essentially a form of social play enabling us to have fun and derive emotional pleasure from nonserious incongruities, humor serves a number of important and "serious" psychological functions, which have likely contributed to our survival as a species. Some of the benefits of humor derive from the positive emotion associated with it, and many of these were likely already present in the laughter-evoking rough-and-tumble play activities ("proto-humor") of our early hominid ancestors even before the evolution of language. Other functions seem to have been added on over the course of human evolution through a process known as *co-optation* (Gervais and Wilson, 2005). As humans developed greater cognitive and linguistic abilities, complex patterns of group interaction, and the ability to infer the intentions and mental states of others, humor and laughter, while originating in rough-and-tumble social play, came to be used for additional purposes relating to social communication and influence, tension relief, and coping with adversity.

The psychological functions of humor can be classified into three broad categories: (1) cognitive and social benefits of the positive emotion of mirth, (2) uses of humor for social communication and influence, and (3) tension relief and coping.

Cognitive and Social Functions of the Positive Emotion of Mirth

Human emotions have important adaptive functions. Emotions such as fear and anger, for example, cause individuals to focus their attention on threats in the

environment, mobilize their energies, and motivate them to take action to deal with these threats (Levenson, 1994). However, the functions of positive emotions like mirth and joy are less immediately obvious, since they do not seem to evoke specific action patterns. In the past, psychologists tended to focus primarily on negative emotions like depression, fear, and hostility, and did not give much attention to positive emotions like mirth, joy, happiness, and love. More recently, however, psychologists have begun to investigate positive emotions, and this research is beginning to shed light on their functions.

Alice Isen (2003) summarized a body of experimental research indicating that when people are experiencing positive emotions (including comedy-induced mirth), as compared to neutral or negative emotions, they show improvements in a variety of cognitive abilities and social behaviors. For example, they demonstrate greater cognitive flexibility, enabling them to engage in more creative problem solving; more efficient organization and integration of memory; more effective thinking, planning, and judgment; and higher levels of social responsibility and prosocial behaviors such as helpfulness and generosity (see also Lyubomirsky, King, and Diener, 2005). An experiment by Barbara Fredrickson and Robert Levenson (1998) also demonstrated that the induction of positive emotions, including mirth, helps to reduce physiological arousal caused by negative emotions.

Based on these sorts of findings, Barbara Fredrickson (1998, 2001) has proposed a “broaden-and-build” model of the psychological functions of positive emotions such as mirth. Unlike negative emotions, which tend to narrow one’s focus of attention and motivate one to engage in specific actions, she suggested that positive emotions serve to *broaden* the scope of the individual’s focus of attention, allowing for more creative problem-solving and an increased range of behavioral response options, and they also *build* physical, intellectual, and social resources that are available to the individual for dealing with life’s challenges. She argued that positive emotions such as mirth are evolved adaptations that contribute to both mental and physical health. Recent research by Fredrickson and her colleagues on mirth and other positive emotions has provided further support for these hypotheses (e.g., Fredrickson and Branigan, 2005; Fredrickson et al., 2000).

Michelle Shiota and her colleagues (2004) have also proposed that positive emotions may play an important role in the regulation of interpersonal relationships. These authors pointed out that humans are social animals that require close relationships in order to survive. They suggested that positive emotions play a role in accomplishing three fundamental tasks required for relationships: (1) identifying potential relationship partners, (2) developing, negotiating, and maintaining key relationships, and (3) collective agency (i.e., working together with others to achieve goals that could not be accomplished alone). They suggested that the humor-related positive emotion of mirth is effective for accomplishing all three of these tasks in various types of relationships, including romantic partnerships, friendships, and group relations. For example, the mirth associated with mutual laughter can be a way of identifying members of an in-group, selecting and attracting partners, rewarding cooperative efforts, and enhancing interpersonal bonding and group cohesion.

One way in which humor likely provides important psychological benefits, then, is by inducing a positive emotional state that is typically shared among two or more individuals. The enjoyable subjective feelings accompanying this emotional state provide a strong incentive to seek out opportunities for humor and laughter, which in turn fulfill a number of important cognitive and social functions. Many of these emotion-related benefits were likely already present in the proto-humor of our early hominid ancestors, providing an evolutionary survival advantage.

Social Communication and Influence

As we have seen, humorous interactions between people take a wide variety of forms. When people engage in these sorts of humorous exchanges in their everyday lives, they often have some (perhaps unconscious) purpose or social goal beyond merely providing amusement and entertainment. Even when telling a joke or saying funny things to make others laugh, people also often have the underlying goal of impressing others with their wittiness and gaining attention, prestige, or approval. Sociologist Michael Mulkay (1988) suggested that humor may be viewed as a mode of interpersonal communication that is frequently used to convey implicit messages in an indirect manner and to influence other people in various ways. Because it involves playing with incongruities and contradictory ideas and conveys multiple meanings at once, humor is a particularly useful form of communication in situations in which a more serious and direct mode runs the risk of being too confrontational, potentially embarrassing, or otherwise risky.

For example, if two friends attempt to discuss a difference of opinion in a serious way, they may become embroiled in endless arguments and counterarguments, with an accompanying escalation in feelings of frustration and annoyance. However, by using humor to joke about each other's perspective, they can communicate a sense of acceptance and appreciation of one another while still maintaining and acknowledging their different points of view (Kane, Suls, and Tedeschi, 1977). Similarly, if a conflict between two people escalates to the point where it threatens their relationship, a joking comment from one of them can be a way of de-escalating the conflict while enabling both of them to save face. Thus, humor can be a means of smoothing over conflicts and tensions between people.

On the other hand, humor is also often used to convey critical or disparaging messages that might not be well received if communicated in a more serious manner. In friendly teasing, for example, a message of mild disapproval or censure is communicated using humor (Keltner et al., 2001). This allows the speaker to retract the message if it is not well received by saying "I was only joking." Indeed, since everyone recognizes the ambiguous nature of humor, such a disclaimer is usually not even necessary. Thus, humor is often a way for individuals to "save face" for themselves and others, using it to soften the impact of a message or to "test the water" to see how others will respond.

Some of the social functions of humor can also be quite aggressive, coercive, and manipulative. Although it is a form of play, humor is not necessarily prosocial and

benevolent, and indeed a good deal of humor involves laughing at the behavior and characteristics of individuals who are perceived to be different in some way and therefore incongruous. Over the course of human evolution (much of which involved living in small groups of hunter-gatherers), humor and laughter seem to have been co-opted for the purpose of enhancing group identity by enforcing social norms within the group and excluding members of out-groups, and this function of humor is still very evident today (Alexander, 1986).

Whereas the “face-saving” communicative uses of humor often involve only two people, these more aggressive and even hostile uses typically involve three individuals or groups: the speaker who communicates the humorous message, the listener(s) who laugh at it, and the target(s) who are the “butt” of the humor. The target, who may or may not be physically present, may be a particular individual or a nonspecific member of a disparaged group, such as a particular gender, ethnic, or religious group. The humor may be a spontaneous humorous comment or a canned ethnic or sexist joke. This type of humor enables members of an in-group to enhance their feelings of group identity and cohesiveness while excluding and emphasizing their differences from members of an out-group. These aggressive types of humor are often perceived by participants to be extremely funny and they evoke genuine feelings of mirth and laughter, even though they occur at the expense of others.

The pleasurable emotion of mirth accompanying humor and laughter can therefore be gained at other people’s expense, either by passively deriving amusement from their misfortunes (as described by the interesting German word *schadenfreude*), or by actively seeking to humiliate, embarrass, or ridicule them in some way and thereby enhancing one’s own status relative to theirs. Thus, humor can involve “laughing at” as well as “laughing with.” As we will see, many traditional theories suggest that aggression is actually an essential element of all humor and laughter. Although most theorists today would not take such an extreme view, few would disagree that humor can be used in aggressive and even hostile ways.

Since being the target of others’ laughter is painful and something most people seek to avoid, aggressive forms of humor can also be used as a method of coercing people into conforming to desired behaviors. Within social groups, humor is often used to enforce group norms, either by making fun of the discrepant actions and traits of people who are outside the group or by teasing members within the group when they engage in deviant behavior. Thus, in aggressive types of joking, teasing, ridicule, or sarcasm, humor can be used to exclude individuals from a group, reinforce power and status differences, suppress behavior that does not conform to group norms, and have a coercive influence on others.

In summary, the social play of humor can be used to communicate a variety of messages and to achieve any number of social goals that individuals may have at any particular time, some of which may be congenial and prosocial while others may be more aggressive or coercive. Humor, then, is inherently neither friendly nor aggressive: it is a means of deriving emotional pleasure that can be used for both amiable and antagonistic purposes. This is the paradox of humor. If one’s goal is to strengthen relationships, smooth over conflicts, and build cohesiveness, humor can be useful

for those purposes. On the other hand, if one's goal is to ostracize, humiliate, or manipulate someone, or to build up one's own status at the expense of others, humor can be useful for those purposes as well. Either way, it can evoke genuine feelings of mirth.

Tension Relief and Coping with Adversity

Another function of humor that has often been noted is its role in coping with life stress and adversity (Lefcourt, 2001; Lefcourt and Martin, 1986). Over the course of evolution, humans appear to have co-opted the nonserious play of humor as a means of cognitively managing many of the events and situations that threaten their well-being, by making light of them and turning them into something to be laughed at (Dixon, 1980). Because it inherently involves incongruity and multiple interpretations, humor provides a way for the individual to shift perspective on a stressful situation, reappraising it from a new and less threatening point of view. As a consequence of this humorous reappraisal, the situation becomes less stressful and more manageable (Kuiper, Martin, and Olinger, 1993; R. A. Martin et al., 1993).

The positive emotion of mirth accompanying humor replaces the feeling of anxiety, depression, or anger that would otherwise occur, enabling the person to think more broadly and flexibly and to engage in creative problem solving (Fredrickson, 2001). In addition, this positive emotion may have a physiological benefit of speeding recovery from the cardiovascular effects of any negative stress-related emotions that may have been evoked (Fredrickson and Levenson, 1998). Thus, humor may be viewed as an important emotion regulation mechanism, which can contribute to mental health (Gross and Muñoz, 1995).

Studies of survivors of extreme adversity such as the brutal conditions of concentration camps indicate that humor, in the form of joking about the oppressors as well as the hardships endured, is often an important means of engendering positive emotions; maintaining group cohesion and morale; preserving a sense of mastery, hope, and self-respect; and thereby enabling individuals to survive in seemingly hopeless circumstances (C. V. Ford and Spaulding, 1973; Frankl, 1984; Henman, 2001). Less extreme examples of the liberating potential of humor as a means of triumphing over adversity and refusing to be defeated by the slings and arrows of life can be found in the daily lives of many people. Humor and laughter provide a means for cancer patients to make light of their illness and maintain a spirit of optimism, and jokes about death are a way for people to distance themselves emotionally from thoughts of their own mortality. Thus, by laughing at the fundamental incongruities of life and diminishing threats by turning them into objects of nonserious play, humor is a way of refusing to be overcome by the people and situations, both large and small, that threaten our well-being.

The aggressive aspects of humor discussed earlier also play a role in this coping function. Many of the threats to well-being that humans experience come from other people. By making fun of the stupidity, incompetence, laziness, or other failings of the people who frustrate, irritate, and annoy them and thwart their progress toward

their goals, individuals are able to minimize the feelings of distress that these others might cause, and derive some pleasure at their expense. This use of aggressive humor in coping can be directed toward particular individuals who create difficulties or at nonspecific representatives of broader social groups or power structures that are perceived as irritants. While providing a means of enhancing personal feelings of well-being in the short run, however, such aggressive uses of humor for coping can also alienate others and have an adverse effect on valued relationships in the longer term (R. A. Martin et al., 2003).

Like all forms of humor, the use of humor for coping with adversity usually takes place in a social context. People typically do not begin laughing and cracking jokes about their problems when they are all alone. Instead, coping humor commonly takes the form of joking and laughing with other people, either in the midst of an adverse situation or shortly afterwards. For example, when the events of a particularly stressful day are discussed among a group of close friends later in the evening, difficulties that earlier seemed distressing and overwhelming can be perceived as humorously incongruous and become the basis of a great deal of hilarity and boisterous laughter. The greater the emotional arousal and tension engendered by the stressful events, the greater the pleasure and the louder the laughter when joking about them afterwards.

This tension-releasing function of humor has been noted by many theorists over the years, and some have even suggested that tension relief is a defining characteristic of all humor. Although this view is perhaps overstated, it does reflect one of the important functions of humor and laughter. Thus, it appears that over the course of human evolution, the cognitive play of humor has been adapted as a means of dealing with difficulties and hardships, contributing to the resilience and coping potentials that have enabled humans to survive and thrive.

A BRIEF HISTORY OF HUMOR

Today the word *humor* is an umbrella term with a generally positive, socially desirable connotation, which refers to anything people say or do that is perceived to be funny and evokes mirth and laughter in others. Interestingly, this broad meaning of humor has developed only quite recently. Indeed, the word has a very interesting and complex history, starting out with an entirely different meaning and gradually accumulating new connotations over the centuries. Cultural historian Daniel Wickberg (1998) has provided a detailed and fascinating analysis of the history of this concept, from which I have drawn much of what follows (see also Ruch, 1998a).

Etymology of Humor

Humor began as a Latin word (*humorem*) meaning fluid or liquid. It still retains this meaning in physiology in reference to bodily fluids, such as the aqueous and vitreous humors of the eye. The Greek physician Hippocrates (fourth century B.C.), who

is considered to be the father of medicine, believed that good health depends on the proper balance of four fluids, or “humors,” of the body, namely blood, phlegm, black bile, and yellow bile. Later, the Greek physician Galen (second century A.D.), who lived in Rome, introduced the idea that these four fluids possessed particular psychological qualities, so that an excess of any one of them in an individual created a certain kind of temperament or character. A predominance of blood caused one to have a sanguine or cheerful temperament, too much black bile produced a melancholic or depressive personality, and so on.

Besides being seen as the basis of relatively enduring character traits, fluctuations in these body fluids began also to be viewed as the cause of more temporary mood states. These meanings of humor as an enduring character trait or a temporary mood are still present today when we speak of someone being a “good-humored person” or “in a bad humor.” Thus, having originally referred to a physical substance, humor gradually developed psychological connotations relating to both enduring temperament and temporary mood. Until the sixteenth century, however, it still did not have any connotation of funniness or association with laughter.

In the English language, the word *humor* (which had been borrowed from the French *humeur*) continued to evolve. In the sixteenth century, the idea of humor as an unbalanced temperament or personality trait led to its use to refer to any behavior that deviates from social norms. Thus, a “humor” came to mean an odd, eccentric, or peculiar person (cf. Ben Jonson’s *Every Man Out of His Humour*, 1598, cited by Wickberg, 1998). Because such people were often viewed as ridiculous, or objects of laughter and ridicule, it was a small step from there to the association of humor with funniness and laughter, and its entry into the field of comedy (Ruch, 1998a).

Eventually, the odd or peculiar person who was the object of laughter became known as a “humorist,” whereas a “man of humor” was someone who took pleasure in imitating the peculiarities of a humorist (e.g., Corbyn Morris in *An Essay Toward Fixing the True Standard of Wit, Humour, Raillery, Satire, and Ridicule*, 1744, cited by Wickberg, 1998). Thus, humor came to be seen as a talent involving the ability to make others laugh. It was not until the mid- to late nineteenth century, however, that the term *humorist* took on the modern meaning of someone who creates a product called “humor” in order to amuse others (Wickberg, 1998). Mark Twain is viewed by many scholars as one of the first humorists in this modern sense.

Changing Views of Laughter

At the same time that the meaning of the word *humor* was evolving in the English language, popular conceptions of laughter and the laughable were also changing (Wickberg, 1998). Prior to the eighteenth century, laughter was viewed by most authors almost entirely in negative terms. No distinction was made between “laughing with” and “laughing at,” since all laughter was thought to arise from making fun of someone. Most references to laughter in the Bible, for example, are linked with scorn, derision, mockery, or contempt (Koestler, 1964). The philosophical

conception of laughter as essentially a form of aggression can be traced to Aristotle, who believed that it was always a response to ugliness or deformity in another person, although he thought it would not occur if the object of laughter aroused other strong emotions such as pity or anger. Following in the long tradition of Aristotle, the seventeenth-century English philosopher Thomas Hobbes saw laughter as being based on a feeling of superiority, or “sudden glory,” resulting from some perception of inferiority in another person.

During the eighteenth century, the word *ridicule* (from Latin *ridiculum* = joke and *ridiculus* = laughable) was used in much the same way that we use the word *humor* today, that is, as a generic term for anything that causes laughter and mirth. However, it had a much more negative and aggressive connotation than humor has today. Whereas laughter was a passive response, ridicule was seen as active and aggressive, a form of attack. Throughout Europe during this time, ridicule became a popular debating technique for outwitting and humiliating one’s adversaries by making them laughable to others. It also grew into a socially accepted conversational art form for entertaining others in social gatherings. The person who was adept at generating clever remarks to skewer others and thereby provoke laughter was seen as a particularly desirable dinner guest. Other words that were commonly used during this time along with ridicule were *raillery* and *banter*. While both of these terms referred to aggressive forms of witty repartee used in conversation, banter was seen as a coarser, more impolite, and low-class type of ridicule, whereas raillery was more refined and socially pleasing.

With the growing view of ridicule as a socially acceptable verbal art form and a desirable part of amiable conversation, the idea of laughter as an expression of contempt and scorn gradually gave way to a view of it as a response to cleverness and gamesmanship. The sense of superiority inherent in laughter was now downplayed and seen as secondary, and the intellectual aspects were elevated over the emotional. Laughter was now associated with a game of wits, a way of showing off one’s cleverness by creating intellectual surprise in novel relationships between ideas, rather than an expression of contempt, scorn, superiority, and aggression. By the early nineteenth century, Hobbes’s superiority theory was being replaced by theories that viewed incongruity as the essence of laughter. This theory was epitomized in the statement by William Hazlitt, an English writer of the early nineteenth century, that “the essence of the laughable is the incongruous” (quoted by Wickberg, 1998, p. 56).

This shift away from an essentially aggressive view of laughter was motivated also by a new sensibility among middle-class British society in the eighteenth century that emphasized the importance of benevolence, kindness, civility, and sympathy in people of refinement. As reflected, for example, in the writings of Adam Smith (e.g., *Theory of Moral Sentiments*, 1759, cited by Wickberg, 1998), a new set of humanitarian values elevated emotional discernment above cold rational logic. In keeping with this general outlook, social reformers began to argue in favor of a more humanitarian form of laughter based on sympathy rather than aggression. This led to the need for a new word to describe this benevolent basis of laughter, and *humor* was co-opted to serve this purpose. In contrast, the word *wit* (from Old English *witan* = to know) began to

be used to refer to the more aggressive types of laughter-evoking behaviors that had previously been described by the generic term *ridicule*. Thus, by the early nineteenth century, the umbrella term *ridicule* had been replaced by the two contrasting words *wit* and *humor*.

Wit versus Humor

Both wit and humor were seen as being based on incongruity and were methods of provoking laughter, but they were thought to do so in radically different ways. The distinction between these two concepts was first made in theories of dramatic comedy, where wit was associated with comedy based on intellect, while humor involved comedy based on character (Wickberg, 1998). Over time, wit took on the meaning of the old word *ridicule*, referring to aggressive cleverness and wordplay, whereas humor emphasized sympathy and benevolence, and was seen as a more positive and desirable basis for laughter. Wit was intellectual, sarcastic, and related to antipathy, whereas humor was emotional, congenial, and related to “fellow-feeling.”

The two words also had different social class connotations. Wit was associated with the aristocracy and elitism, whereas humor was a more bourgeois, middle-class concept, associated with universality and democracy. Wit was also considered to be more artificial and something that could be acquired through learning and practice, whereas humor was viewed as more natural and an inborn talent in the individual. Thus, it was generally recognized that laughter could be either aggressive or benevolent, and the modern distinction between “laughing at” and “laughing with” was captured by wit and humor, respectively.

Not surprisingly, humor came to be seen as more socially desirable than wit, and was described by many writers in glowing terms. For example, one nineteenth-century author described humor as “the combination of the laughable with an element of love, tenderness, sympathy, warm-heartedness, or affection” (quoted by Wickberg, 1998, p. 65). The association between humor and democratic values (as opposed to the elitism and snobbery of wit) made humor a very popular concept in the egalitarian culture of the United States, particularly after the Civil War. In his writings on the subject, Sigmund Freud, like most of his contemporaries, also made the distinction between humor as benevolent and psychologically healthy and wit as aggressive and of questionable psychological value (Freud, 1960 [1905]).

Over the course of the twentieth century, however, the distinction between wit and humor gradually disappeared, and *humor* came to predominate as the umbrella term for all things laughable. Humor no longer represented just one (benign) way of eliciting laughter, but it now referred to all sources of laughter, including more aggressive forms that would previously have been described as wit. At the same time, though, the positive and socially desirable connotation of humor was retained, and all laughter therefore came to be seen as essentially benevolent and sympathetic. All the positive characteristics that had previously been ascribed to humor, as a subspecies of the laughable that was distinguished from wit, were now seen as applicable to all laughter-eliciting phenomena, including the more aggressive forms once identified

with wit. Although laughter itself had once been viewed as essentially aggressive, by the early twentieth century, many theorists began to suggest that it almost always contains an element of sympathy. Even those who still subscribed to the superiority theory began to view the aggressive aspects of laughter as tempered in some way by sympathy or playfulness rather than being truly aggressive and malevolent (cf. Gruner, 1997).

Thus, from the seventeenth to the twentieth century, popular conceptions of laughter underwent a remarkable transformation, shifting from the aggressive antipathy of superiority theory, to the neutrality of incongruity theory, to the view that laughter could sometimes be sympathetic, to the notion that sympathy is a necessary condition for laughter (Wickberg, 1998). These changing views were also reflected in the prevailing social norms. As recently as the 1860s, it was considered impolite to laugh in public in the United States. Even in the early twentieth century, some spheres of social activity (e.g., religion, education, and politics) were considered inappropriate for humor and laughter. Today, of course, humor and laughter are not only considered acceptable, but are actively encouraged in virtually all social settings.

Evolution of the Concept of Sense of Humor

Along with changes in the meaning of humor and attitudes toward laughter, the concept of “sense of humor” has also evolved over the past two centuries (Wickberg, 1998). In the eighteenth and early nineteenth centuries, British philosophers developed the notion of various aesthetic and moral “senses,” which were seen as refined sensitivities or abilities to discern or judge the quality of certain things. Thus, they spoke of a sense of beauty, a sense of honor, a sense of decency, moral sense, and common sense. The “sense of the ridiculous” was an early expression to describe sensitivity to laughable things. By the mid-nineteenth century, however, this had been replaced by the “sense of humor.”

Although it began as a purely descriptive term, the sense of humor quickly became a highly valued virtue, taking on the positive connotations that were associated with humor (as opposed to wit) during that time. By the 1870s, the sense of humor acquired the very desirable meaning that it has today, referring to a cardinal virtue. To say that someone had a sense of humor was to say something very positive about his or her character. Indeed, a sense of humor came to be one of the most important characteristics a person could have. On the other hand, to say that someone lacked a sense of humor was seen as one of the worst things that could be said about him or her. No one wanted to admit that they did not have a sense of humor.

Over the course of the twentieth century, the concept of sense of humor continued to be very desirable, but also became increasingly vague and undefined. While it always retained some notion of the ability to make others laugh or the enjoyment of amusement and laughter, it took on the added meaning of a more general set of desirable personality characteristics. What it meant to have a sense of humor came to be defined in large part by what it meant *not* to have one. Saying that someone lacked a sense of humor came to mean that he or she was excessively serious, fanatical, or egotistical, an inflexible, temperamental extremist. The lack of a sense of humor was

viewed as a defining characteristic of some forms of mental illness (particularly schizophrenia), denoting instability and paranoia (Wickberg, 1998).

By the 1930s, a sense of humor was seen by many psychologists as an essential ingredient of mental health. For example, Gordon Allport (1961) associated a sense of humor with self-awareness, insight, and tolerance, and viewed it as a characteristic of the mature or healthy personality. It is important to note, however, that he distinguished between this mature type of humor, which he saw as quite rare, and the less healthy “sense of the comic,” or laughter at absurdities, puns, and the degradation of others, which he saw as much more common. In sum, having a sense of humor became synonymous with being stable and well-adjusted, being able to adapt to stress, being temperate, affable, not prone to anger, and easygoing.

During the twentieth century, the sense of humor also took on sociopolitical connotations and was used for propaganda purposes. In the United States, it came to be seen as a distinctly American virtue, having to do with tolerance and democracy, in contrast to those living in dictatorships, such as the Germans under Nazism or the Russians during the Communist era, who were thought to be devoid of humor. After the tragic events of September 11, 2001, many American commentators expressed the opinion that Al Qaeda terrorists, and perhaps even all Moslems, lacked a sense of humor (despite the fact that videotapes of Osama bin Laden clearly showed him laughing and joking with his comrades).

Whereas too much humor in the nineteenth century was considered a liability in someone wishing to run for office, by the mid-twentieth century a sense of humor became a necessary characteristic in a politician, especially someone aspiring to be president. A popular way for both liberals and conservatives to disparage one another was to claim that they lacked a sense of humor. There has also long been a sexist aspect to the concept, which was viewed as an essentially masculine characteristic. Until quite recently, it was commonly assumed by many writers that women generally lacked a sense of humor (Wickberg, 1998).

The positive qualities associated with the vague concept of sense of humor as a personality trait in turn fed back into popular connotations of humor and laughter more generally. By the end of the twentieth century, humor and laughter were not only seen as essentially benevolent, but as important factors in mental and physical health. This view gained greater prominence following the publication of a book by Norman Cousins (1979), a well-known magazine editor, describing how he supposedly cured himself of a painful and debilitating disease by means of hearty laughter (along with massive doses of vitamin C). This book appeared at a time of growing disenchantment with traditional Western approaches to medicine, and fed into the rising popularity of alternative or complementary medicines.

The idea that humor and laughter are beneficial for one’s health, bolstered also by psychoneuroimmunology research suggesting links between emotions and immunity, led to the growth of a popular “humor and health movement” among many health care providers, including nurses, physicians, occupational therapists, social workers, and others. Hospital clowns and comedy rooms became familiar sights in many hospitals, as humor and laughter came to be viewed as a method of speeding recovery in patients suffering from chronic pain, cancer, and other ailments. These

developments in health care also contributed to increased interest in applications of humor in other domains including business, education, and psychotherapy. Although this humor movement has always been seen as somewhat on the fringes rather than the mainstream, it has attracted considerable attention to potential benefits of humor and laughter in the popular media as well as professional journals.

A very positive view of humor and laughter continues to predominate in our culture today. Although there is some recognition that humor can occasionally be aggressive or inappropriate, this is perceived as an aberration; “normal” humor is sympathetic and benevolent. Aggression-based theories of humor are generally out of favor with contemporary humor scholars, having been replaced by more benign cognition-based incongruity theories. Thus, over the past century, humor has taken on a broad positive connotation. No longer does it merely involve the perception of incongruity, funniness, mirth, and laughter, but it is also very beneficial, desirable, and health-enhancing (for an interesting analysis of humor in contemporary American society, see Lewis, 2006).

This brief overview of the changes in social attitudes and conceptions of humor and laughter over the past few centuries helps us to put our current assumptions and biases into a broader historical perspective. Although humor and laughter are universal in humans and are likely a product of natural selection, the way people use and express them in a given time and place is strongly influenced by cultural norms, beliefs, attitudes, and values. Most people today view humor as essentially positive, benevolent, and desirable, and it is strongly encouraged in most areas of life. It is easy to assume that these attitudes and behavior patterns are universal and have always been present in all cultures. Not so long ago, however, laughter in our own culture was seen as essentially aggressive, malevolent, and undesirable, and too much laughter was frowned upon. The existence of such divergent views over the course of a relatively brief period of history suggests that there is likely an element of truth to both extremes. It is important to recognize that humor can be used in ways that are aggressive as well as sympathetic, and can involve “laughing at” as well as “laughing with.”

If we wish to take a scientific approach to the study of humor, we need to be conscious of the assumptions and biases that we ourselves have absorbed from our culture and that may color our own thinking. As much as possible, we must try to approach the subject in an objective manner, using empirical research methods to evaluate popular beliefs instead of merely assuming them to be true. In our theories and research, we also need to be careful to distinguish between those aspects that are universal in the human species and those that are specific to particular cultures at particular times.

HUMOR AND PSYCHOLOGY

Psychology is often defined as the scientific study of behavior. The concept of behavior in this definition is a very broad one, embracing all kinds of overt actions,

speech, and social interactions, as well as less easily observed processes such as thoughts, feelings, attitudes, and the biological mechanisms underlying all of these in the brain and nervous system. With such a diverse subject matter, psychology is a very broad discipline, and is divided into a number of subfields focusing on particular aspects of behavior, including cognitive, social, biologic, developmental, clinical, and so on. As I have already noted, humor touches on all of these areas. Psychologists view themselves as scientists, taking an empirical and predominantly quantitative research approach to test theories and hypotheses about behavior. Psychological research methods include controlled laboratory experiments in which one variable is manipulated to observe its effect on other variables, as well as correlational approaches in which variables are operationally defined and quantified and their association across individuals is assessed.

As Jon Roeckelein (2002) has noted, one of the curiosities of the psychology of humor is that, although it comprises quite a sizable research literature, it has gone largely unnoticed in mainstream psychology up to now. In a search of *PsycINFO*, a database of psychology publications, using the keywords *humor*, *humour*, *laughter*, *irony*, and other closely related terms, I found references to just over 3400 peer-reviewed journal articles published as of early 2006. Despite the extensiveness of this research literature, however, it is rarely mentioned in undergraduate textbooks or psychology reference works. Roeckelein (2002) examined 136 introductory psychology texts published between 1885 and 1996, and found only three—all published before 1930—that made any reference to humor or related topics. Although humor is occasionally mentioned in more advanced undergraduate texts devoted to particular branches of psychology (e.g., social, developmental), the treatment is usually only brief and superficial. Roeckelein also observed that this topic receives only rare and cursory mention in scholarly reference works such as the *Annual Review of Psychology*. The most recent two-volume edition of *The Handbook of Social Psychology* (Gilbert, Fiske, and Lindzey, 1998), a major reference work for social psychologists spanning more than 2000 pages, contains only a single brief mention, although early editions contained a whole chapter on humor, laughter, and play (Berlyne, 1969; Flugel, 1954).

Two main reasons have been suggested for this general neglect of humor in mainstream psychology until now. First, given its essentially nonserious nature and association with fun and mirth, some researchers may have seen it as too frivolous and unimportant a subject for serious academic study. However, as Berlyne (1969) pointed out more than 35 years ago, the apparent frivolity of humor is a good reason why it should receive more, rather than less, research attention than other psychological behaviors whose adaptive functions are easier to understand. The fact that all human societies expend a great deal of time and energy engaging in humor and laughter, while the purpose of this activity is not immediately obvious, makes this a puzzle worthy of careful and systematic study.

Several decades of research effort since Berlyne's time, approaching the subject from a number of psychological perspectives, are beginning to give us some intriguing answers to this puzzle. For example, recent evolutionary models suggest that humor and laughter may have played an important role in the formation and

maintenance of social groups in our evolutionary history, and therefore have interesting implications for our understanding of human verbal and nonverbal communication and social organization (Gervais and Wilson, 2005; Panksepp, 2000). Thus, the view of humor as too frivolous for serious study is becoming increasingly difficult to defend.

Fortunately, the idea that psychologists should concentrate only on “serious” topics like psychopathology and human deficits seems to be waning in recent years, as demonstrated by such developments as the “positive psychology” movement, with its emphasis on the study of human strengths and positive emotions (Aspinwall and Staudinger, 2003; Seligman and Csikszentmihalyi, 2000). One would hope that psychology has moved beyond the situation of 30 years ago when Walter O’Connell (1976) lamented that “anyone embarking upon research into the origins and development of humor will, more often than not, be seen as a deviant and a freak, one who does not take psychology seriously enough” (p. 316).

A second possible reason for the general neglect of humor, suggested by Dixon (1980), is the sheer elusiveness of the phenomena under investigation. The diversity of stimuli and situations that evoke mirth, the lack of a precise definition of the concept, the multiplicity of theories that have been proposed to account for it, and the difficulties one encounters in trying to capture and study it in controlled experiments in the laboratory may have caused researchers to shy away from it as a subject of investigation.

Once again, however, the complexity and elusiveness of the topic is all the more reason for researchers to apply their efforts, skills, and ingenuity to an understanding of it. Furthermore, as I will try to demonstrate in this book, the cumulative efforts of many researchers over the past few decades have brought increasing focus to the field, generating several fairly circumscribed theories with testable hypotheses and developing practical and reliable research methods for investigating them. Thus, although it certainly continues to pose interesting challenges for researchers to tackle, humor no longer seems to be such an intractable topic of study.

In addition to psychology, humor is also a topic of study in a number of other disciplines, including anthropology, biology, computer science, linguistics, literary and cultural studies, neuroscience, philosophy, religious studies, and sociology. There are even scholarly works on the mathematics of humor (Casadonte, 2003; Paulos, 1980). The International Society for Humor Studies (ISHS) is a multidisciplinary organization of humor scholars that holds annual conferences and publishes a scholarly journal entitled *Humor: International Journal of Humor Research* (for more information, see the ISHS website, available at www.hnu.edu/ishs). At various points in this book, I will touch on some of the contributions of these other disciplines that have augmented the research of psychologists.

In addition, humor is a topic of interest to many professional practitioners in health care (e.g., physicians, nurses, occupational and physical therapists), counseling, social work, education, and business. The Association for Applied and Therapeutic Humor (AATH) is a professional society of individuals from many of these professions who are interested in applications of humor in their respective fields (available

at www.aath.org). Besides addressing psychologists, an additional purpose of this book is therefore to introduce interested individuals from these other academic disciplines and professions to the methods, theories, and empirical findings of psychological research on humor.

CONCLUSION

In summary, humor is a universal human activity that most people experience many times over the course of a typical day and in all sorts of social contexts. There is a good deal of evidence suggesting that humor and laughter have an evolutionary origin and therefore confer adaptive benefits. At the same time, there are obviously important cultural influences on the way humor is used and the situations that are considered appropriate for laughter. From a psychological perspective, humor is essentially a positive emotion called mirth, which is typically elicited in social contexts by a cognitive appraisal process involving the perception of playful, nonserious incongruity, and which is expressed by the facial and vocal behavior of laughter. In social interactions, humor takes on many different forms, including canned jokes, spontaneous witticisms, and unintentionally funny utterances and actions.

Psychological functions of humor include the cognitive and social benefits of the positive emotion of mirth, and its uses as a mode of social communication and influence, and as a way of relieving tension, regulating emotions, and coping with stress. Popular conceptions of laughter have changed dramatically over the past two or three centuries, from being viewed as essentially aggressive and somewhat socially inappropriate to being seen as positive, psychologically and physically healthy, and socially desirable. The meaning of the word *humor* has also evolved from a narrow focus on benign and sympathetic sources of mirth distinguished from more aggressive types of wit, to its use as a broad umbrella term to refer to all sources of laughter. Although humor has important psychological functions and touches on all branches of psychology, and there is a sizable and growing research literature on the topic, mainstream psychology has paid relatively little attention to it until now.

In the next two chapters, I will give an overview of early research in the psychology of humor that was conducted prior to the early 1980s. My review of this research will be organized around five major theoretical approaches that have their roots in earlier philosophical conceptualizations of humor and laughter and have been particularly influential in psychological research over the years. This discussion of theories and early research will provide a background for the remaining chapters, which will focus particularly on research conducted during the past two decades.

In Chapters 4 to 8, I will explore relevant theories, research approaches, and empirical findings in the study of humor from the perspective of each of the basic research domains of psychology, with individual chapters devoted to cognitive, social, biological, personality, and developmental psychology. Chapters 9 and 10 will focus on research examining the implications of humor for mental and physical health, corresponding to the fields of clinical and health psychology, respectively. Finally, in

Chapter 11, I will examine theories and research pertaining to potential applications of humor in several applied areas, including psychotherapy and counseling, education, and industrial-organizational psychology. By the end of the book, I hope it will be evident that the study of humor has relevance to every area of the discipline.

It has often been noted that the academic study of humor is not in itself very funny, and that nothing kills a joke like analyzing it. As McComas (1923) observed, “he who approaches laughter upon science bent will find it no laughing matter” (p. 45). Journalists reporting on the annual conferences of ISHS often take delight in pointing out the apparent irony of scholars presenting very weighty and unfunny research papers on the subject of humor. There is no reason, though, why a scholarly work on humor needs to be funny any more than studies of human sexuality should be titillating or depression research should be gloomy. In my experience, humor scholars, while taking their research seriously, tend to be just as funny as anyone else, or perhaps even more so, in their everyday lives.

In keeping with a long-standing tradition of scholarly books on humor, I therefore warn the reader at the outset that you are not likely to find this book particularly funny. However, I do hope you will find it interesting and informative, and that it will pique your curiosity and eagerness to engage in further study of this intriguing topic.