## Introduction

In 1965, Gardner Lindzey, in his presidential address to the Division of Personality and Social Psychology of the American Psychological Association, criticized division members for failing to attend to morphology in their research. Lindzey argued that morphology may have an important influence on personality and social behavior—perhaps an even more important influence than the psychological variables that, at the time, occupied researchers' attention.

Two years later, Eliot Aronson (1969) offered an explanation for why one aspect of morphology—that of physical attractive-ness—had been neglected in the research. Aronson suggested that the environmental bias in psychology may have led researchers to view documenting the importance of physical attractiveness as somehow "undemocratic." Moreover, researchers may have assumed that physical attractiveness effects were limited to females, and only to females of dating and mating age. Therefore, the study of attractiveness was unlikely to reveal basic and generalizable principles of social behavior.

In the decades that followed Lindzey's (1965) remarks there has been an explosion of research on physical appearance. The study of physical attractiveness, in particular, has been raised from

"unsanitary scientific practice" to "legitimate scientific inquiry" (Berscheid 1986). What this research has revealed is that, democratic or not, physical attractiveness has an important influence in almost every realm of behavior in which its effects have been studied. Ellen Berscheid, a leading investigator in the field, summarized the findings in this way:

A person's physical attractiveness level has been revealed by numerous investigations to be an extraordinarily important psychological variable, for it has accounted for a statistically significant proportion of the variance in almost all situations in which it has been investigated and for almost all dependent measures which have been constructed to show its effects. (Berscheid 1986, 322)

What is surprising in light of Aronson's (1969) explanation for the neglect of physical attractiveness before 1965 is the subsequent neglect of gender in the research on physical attractiveness. Although researchers presumably avoided the study of attractiveness because its effects were thought to be limited to females, gender has not been the focus of attention in research on attractiveness. The neglect of gender is apparent in recent volumes that summarize, analyze, and criticize the research but pay only passing attention to gender differences (See, for example, Alley 1988a; Bull & Rumsey 1988; Hatfield & Sprecher 1986; Patzer, 1985). If gender differences are mentioned at all they are treated as interesting additional findings, both in these volumes and in much of the original research. Typically, physical appearance effects that are observed for one sex are casually generalized to the other sex.

The objective of this volume is to demonstrate that gender must be considered in research on physical appearance effects for at least two reasons. First, two major theoretical perspectives—the sociobiological perspective and the sociocultural perspective—predict that the importance of physical appearance depends on gender. Second, the empirical evidence indicates that appearance effects frequently depend on gender. This volume begins by elaborating on the two theoretical perspectives with respect to their hypotheses about gender differences in appearance effects (chapter 2). The remainder of the volume is devoted to examining the empirical evidence in light of these hypotheses.

### WHAT IS PHYSICAL APPEARANCE?

Before arguing that the importance of physical appearance depends on gender, it is important to examine how social scientists have defined and measured physical appearance in their research, and some of the issues surrounding the research. Most definitions and measures focus on facial appearance rather than on body appearance (described as "from the neck down") or overall appearance. Most of the issues center around the generalizability of the research findings to the real world.

### Facial Appearance

It is certainly not surprising that the face has occupied center stage in the research on physical appearance. After all, the face is usually the first source of information available about a person, and often the most potent source of information available to the perceiver. The face is the most salient and stable source of information during social interaction, and the most important body aspect for communicating a large and varied amount of information (See, for example, Alley 1988b; Berscheid & Walster 1974; Bowman 1979; Fiske & Cox 1979; Kassin 1977; Kleck & Rubenstein 1975; Lyman, Hatelid & Macurdy 1981; Secord & Muthard 1955). As Kretschmer expressed it decades ago the face is "the visiting card of the individual's general constitution" (Kretschmer 1925, 25).

Most of the social psychological research on facial appearance is actually research on facial attractiveness, although some attention has recently been given to facial disfigurement (See Alley 1988a). The first task facing researchers was to define facial attractiveness and to determine how to measure it reliably. What is a beautiful face? What makes some faces attractive and others not? Poets and philosophers have pondered these questions for centuries. Some of them abandoned hope of ever defining facial beauty. For example, Santayana stated: "Beauty as we feel it is something indescribable. What it is or what it means can never be said" (Santayana 1936, 201).

Social scientists, on the other hand, have been relentless in their efforts to define facial attractiveness, although perhaps more successful in measuring it than in defining it. In fact, the definition of facial attractiveness is inextricably bound to its measurement in the social science research. Facial attractiveness is defined in terms of the gestalt. It is "... that which best represents one's conception of the ideal appearance and gives the greatest pleasure to the senses" (Hatfield & Sprecher 1986, 4). Facial attractiveness is measured in terms of consensus about gestalts. An attractive face is nothing more than a face that most people consider attractive. Recent efforts to identify facial features associated with attractive gestalts have been promising, but have yet to yield consistent results (Berry & McArthur 1985; Cunningham 1986; Cunningham, Barbee & Pike 1990; Farkas, Munroe & Kolar 1987; Franzoi & Herzog 1987; Hildebrandt & Fitzgerald 1979; Keating 1985; Lucker 1981; Lucker, Beane & Guire 1981; Lucker, Ribbens & McNamara 1981; McArthur & Apatow 1983/1984).

Fortunately for the research enterprise, most people agree about which gestalts are attractive and which are not. Thus, contrary to folk wisdom that "beauty is in the eye of the beholder," there is remarkable consensus in people's ratings of others' attractiveness. Consensus has been observed across a variety of rater characteristics—such as sex, race, age, and socioeconomic status and across cultural backgrounds (See, for example, Adams 1978; Bernstein, Lin & McClelland 1981; Burns & Farina 1987; Cavior & Lombardi 1973; Cross & Cross 1971; Dongieux & Sassouni 1980; Hansell, Sparacino & Ronchi 1982; Iliffe 1960; Johnson, Dannenbring, Anderson & Villa 1983; Johnson & Pittenger 1984; Kerr & Kurtz 1978; Kopera, Maier & Johnson 1971; Langlois in press; Langlois & Stephan 1977; Lynn & Bolig 1985; Maret 1983; Maret & Harling 1985; McArthur & Berry 1987; Pittenger, Mark & Johnson 1989; Stephan & Langlois 1984; Stycznski & Langlois 1977; Weisfeld, Weisfeld & Callaghan 1984). The truth-of-consensus method is, today, the most popular way for both defining and measuring facial attractiveness (Patzer 1985).

The truth-of-consensus method apparently resolved the issue of how to define facial attractiveness by defining it in terms of how it is measured. But other issues—most of which center around the generalizability of the research findings to the real world—emerged in the attractiveness research. These issues are important to understanding and interpreting the empirical evidence presented in this volume.

One issue raised about the facial attractiveness research is that it typically compares people who are high in attractiveness (as either subjects or targets) to people who are low in attractiveness. Thus the term "attractiveness effects" refers to differences between these two extreme groups. Assuming that most people are average

in attractiveness, then the generalizability of the research findings to most people is open to question (Patzer 1985). Moreover, without an average attractiveness level in the research design, it is difficult to know whether the effects observed are attributable to high attractiveness, to low attractiveness, or to both.

But are most people average in attractiveness? As Berscheid noted in 1986, the distribution of attractiveness in the population has never been determined. That is, we do not know whether the distribution is normal or "skewed," such that most people are more attractive or less attractive than the midpoint of the distribution. Some recent evidence, discussed elsewhere in this volume. suggests that the distribution of facial attractiveness may be skewed. That is, most people are more attractive than the median level of attractiveness in the population (Langlois & Roggman 1990). Such evidence is encouraging for the generalizability of research findings to most people, insofar as it suggests that "attractive faces, in fact, are only average" (Langlois & Roggman 1990, 120).

Other issues surrounding the facial attractiveness research can be briefly summarized in terms of three criticisms of the research. First, critics have argued that attractiveness effects are typically small, and may, therefore, be ecologically trivial despite their statistical significance (See Bull & Rumsey 1988; Morrow & McElroy 1984). Second, the attractiveness research has been criticized for relying too heavily on first and brief encounters, often with fictitious, static targets (Alley 1988a; Bruce 1982; Bull & Rumsey 1988: Morrow & McElroy 1984). The effects observed under these conditions may not be generalizable to the real world of extended encounters with dynamic targets (Alley 1988b). Third, critics have argued that the attractiveness effects observed in the research are at least partly attributable to the lack of more meaningful information about the target. If more meaningful information were available—as it typically is in the real world—attractiveness would presumably be less important or even totally unimportant (Bull & Rumsey 1988; Morrow & McElroy 1984).

Facial attractiveness researchers have of course responded to these criticisms, often pointing to the empirical evidence itself. In response to the first criticism, attractiveness researchers have noted that small effects are not necessarily ecologically trivial effects (Berscheid 1986; Hatfield & Sprecher 1986; Patzer 1985). As Abelson (1985) has demonstrated, even small effects can result in meaningful differences over time. Moreover, small or moderate effects are typical of psychological research (Eagly 1987). This is a fact that may distress psychologists, but few have abandoned the discipline because of it. Further encouragement comes from a recent demonstration by Rosenthal (1990) that the effect sizes considered to be practically important in medical research are considerably smaller than the typical effect sizes observed in psychological research. (See also Hedges 1987, for encouraging comparisons between psychological research and research in the physical sciences.)

In response to the second criticism, attractiveness researchers have argued that although studies of facial attractiveness often fail to capture the richness of dynamic targets and extended encounters, the findings may nevertheless be generalizable to the real world for at least three reasons. First, high correlations have been observed between ratings of static targets or photos and ratings of dynamic targets or video tapes, suggesting that the static targets used in much of the research may not be as impoverished as critics allege (Berscheid 1981; Brown, Cash & Noles 1986; Fischer et al. 1982; Smith 1985). Second, evidence indicates that impressions formed during first and brief encounters can have long-range effects by way of expectancy confirmation processes and self-fulfilling prophecies (Jussim 1986; Miller & Turnbull 1986). Third, single and brief encounters are not uncommon in everyday life, particularly in today's mobile and fast-paced society. Thus, the paradigms used in the facial attractiveness research are not without analogs in the real world.

The empirical evidence itself further addresses the second and third criticisms levied against the attractiveness research. There is ample evidence, which is discussed throughout this volume, that facial attractiveness impacts on real-world outcomes, and that its impact persists even when more meaningful information is available (See Byrne, Ervin & Lamberth 1970; Kupke, Hobbs & Cheney 1979; Walster, Aronson, Abrahams & Rottman 1966). For example, attractiveness effects have been observed in dating and marital relationships which obviously extend over time and provide more meaningful information about interactants than is typically provided in the research (Beasley 1989; Margolin & White 1987; Murstein & Christy 1976; Peterson & Miller 1980; Udry & Eckland 1984).

One final issue raised about the facial attractiveness research concerns the stability of facial attractiveness. Is facial attractiveness a stable characteristic of an individual? Do cute infants grow up to be cute children and attractive adults? Some researchers have

argued that, if attractiveness is not a stable characteristic of an individual, then it is unlikely to have a major impact on the individual's development (McArthur 1982; Sorell & Nowak 1981). Although only a handful of studies have addressed the stability issue, the findings are generally encouraging. Facial attractiveness appears to be relatively stable from childhood through late adulthood, very stable within a developmental level, and more stable than body attractiveness (Adams 1977a; Alley 1984; Burns & Farina 1989; Jones & Adams 1982; Langlois 1986; Livson 1979; Maruyama & Miller 1981; Patzer 1985; Pittenger et al. 1989; Sussman, Mueser, Grau & Yarnold 1983).

### Body Appearance

The second way in which social scientists have defined and measured physical appearance is in terms of body appearance. Definitions and measures of body appearance have been more problematic than have definitions and measures of facial appearance (Garner & Garfinkel 1982; Shontz 1974). Only recently has some consensus emerged about how to define and measure "body image," i.e., the self-perceptions of body appearance (Berscheid, Walster & Bohrnsted 1973; Cash, Winstead & Janda 1986; Franzoi & Shields 1984; Tucker 1981, 1985; Winstead & Cash 1984). Definitions and measures of body type have advanced little beyond Sheldon's original designation of three basic body types—the ectomorph, mesomorph, and endomorph (Sheldon 1940, 1954; Sheldon, Stevens & Tucker 1942).

As with facial attractiveness, body attractiveness has been defined and measured by the truth-of-consensus method. However, rather than rating bodies on a continuum ranging from "very attractive" to "very unattractive," respondents are asked to choose the body type that they most prefer from among a range of body types. Thus, body attractiveness is typically defined and measured categorically by assessing body-type preferences. More fine-grained analysis of body attractiveness, as with more fine-grained analysis of facial attractiveness, has yet to produce consistent results (Franzoi & Herzog 1987; Litman, Powell & Stewart 1983).

Difficulties in defining and measuring body appearance are only partly responsible for the lesser emphasis on it than on facial appearance in the research. A more important reason is that body appearance is less stable than facial appearance (Adams 1977a). Body appearance changes dramatically during the course of development, and, for some individuals, can also change dramatically within a developmental period, such as extreme weight loss or gain. The relative instability of body appearance suggests that it should have less influence on self-perceptions and the perceptions of others than facial appearance does. Some research indirectly supports this suggestion. Ratings of overall physical attractiveness depend more on facial attractiveness than on body attractiveness, although body attractiveness does contribute significantly to these ratings (Berscheid 1981; Mueser, Grau, Sussman & Rosen 1984; Nielsen & Kernalaguen 1976; Smith 1985).

### Physical Appearance in this Volume

Corresponding to the emphasis in the research, this volume focuses on facial appearance, particularly facial attractiveness. Four chapters are devoted to the facial attractiveness research, although these chapters also consider research on facial unattractiveness (e.g., facial disfigurement). Two chapters are devoted to the body appearance research—one chapter to body types (i.e., others' perceptions of body appearance) and one chapter to body image (i.e., self-perceptions of body appearance and their correlates). Consistent with the emphasis in the research, the two theoretical perspectives also focus on facial attractiveness.

### THEORETICAL PERSPECTIVES ON THE GENDER-APPEARANCE RELATIONSHIP: THE SOCIOBIOLOGICAL AND SOCIOCULTURAL PERSPECTIVES

Sociobiological and sociocultural perspectives predict that the importance of physical appearance depends on gender. These perspectives and their hypotheses are described in detail in chapter 2. Briefly, the sociobiological perspective argues that physical appearance is more important for females than for males because appearance is more strongly related to reproductive potential for females than for males (Buss & Barnes 1986; Daly & Wilson 1978, 1983; Symons 1979; Trivers 1985; Wilson 1989). Thus, gender differences in appearance effects stem from gender differences in the reproductive significance of appearance. According to the sociocultural perspective physical appearance is more important for females than for males because the culture values an attractive appearance more in females than in males (Hatfield & Sprecher 1986; Hochschild

1975; Stannard 1971). Thus, cultural values are responsible for gender differences in appearance effects.

The sociobiological and sociocultural perspectives have been used in the past to explain gender differences in the importance of physical appearance in mate preferences (See Buss 1985, 1987; Buss & Barnes 1986). In chapter 2, these perspectives are elaborated to generate hypotheses for other domains besides the interpersonal domain, such as the professional domain and the societal domain which are defined later in this chapter.

### Deriving Hypotheses from the Sociobiological and Sociocultural Perspectives

Hypothesis about gender differences in appearance effects were derived from the sociobiological and sociocultural perspectives using the basic propositions of each perspective and assumptions consistent with these propositions. Thus, the hypotheses of the sociobiological perspective are based on the basic proposition that sexual selection is for reproductive fitness, and on assumptions about the relationship between reproductive fitness and appearance for the sexes. The hypotheses of the sociocultural perspective are based on the basic proposition that our American culture values physical attractiveness more in females than in males, and on assumptions about the relationship between cultural and individual values and behaviors.

Thus, the endorsement of any hypothesis presented in chapter 2 depends on the endorsement of the basic theoretical propositions and on the endorsement of the assumptions used to generate that hypothesis (Crano & Brewer 1973). A hypothesis may not be endorsed because the theory's propositions are not endorsed, because the assumptions are not endorsed, or for both reasons. On the other hand, a hypothesis may be endorsed without endorsing either that theory's propositions or assumptions if an alternative theory suggests the same hypothesis.

For example, one hypothesis derived from the sociobiological perspective in chapter 2 is that facial attractiveness is more strongly related to intellectual competence for females than for males. This hypothesis is based on the proposition that sexual selection is for reproductive fitness, and on three assumptions; that attractiveness is a stronger cue to reproductive fitness for females than for males, that sexual selection has favored genotypes that combine attractiveness and the ability to acquire material resources, and that "intelligence" is one component of the ability to acquire material resources. Other components are physical characteristics such as height and musculature, that confer strength.

Would every sociobiologist endorse this hypothesis? Probably not, for at least two reasons. First, the sociobiological perspective is not a single, monolithic perspective. Rather, it is a diverse collection of perspectives that share the view that evolutionary principles can be applied to understanding human behavior (Buss 1990). Although "the" sociobiological perspective is referred to in this volume, it should not been inferred that the representation presented here is the *only* possible representation of the sociobiological perspective. Similarly, reference to "the" sociocultural perspective is not intended to imply that there are no other ways to represent the sociocultural point of view.

A second reason why a sociobiologist may not endorse the hypothesis that facial attractiveness is more strongly related to intelligence for females than for males is that she or he may disagree with one or more of the assumptions behind this hypothesis. For example, the assumption that intelligence is one component of the ability to acquire material resources may be accepted by some sociobiologists but not by others. This may be a totally unacceptable assumption to a socioculturalist.

Thus, consensus regarding the correct set of hypotheses to derive from either the sociobiological or sociocultural perspectives seems unlikely. There is bound to be disagreement within each perspective regarding the appropriateness of assumptions, and disagreement between perspectives regarding basic propositions. A more realistic objective than consensus about a hypothesis is consensus about how the empirical evidence should be used to evaluate a hypothesis. Toward this end, decision rules were formulated to determine when the empirical evidence did or did not support a hypothesis.

# Decision Rules for Evaluating the Sociobiological and Sociocultural Hypotheses

A vast amount of research that bears on the gender-appearance relationship is reviewed in this volume. Currently, the most popular technique for reviewing large bodies of research is metanalysis. Metanalytic techniques have a number of advantages over traditional narrative reviewing techniques (Eagly 1987; Hedges 1987; Hedges & Olkin 1985; Hunter & Schmidt 1990; Mullen &

Rosenthal 1985; Rosenthal 1984; Rosenthal & Rubin 1986). Briefly, metanalysis permits quantitative comparisons of effects sizes and uses significance tests that reduce subjectivity in drawing conclusions from multiple studies. It is therefore unsurprising that there has been an explosion of metanalytic reviews of research on gender differences (Eagly 1987; Hedges & Becker 1986).

A number of recent metanalytic reviews of the physical appearance research are discussed in this volume (such as Eagly, Ashmore, Makhijani & Kennedy in press; Feingold 1989, 1990). However, the approach in this volume is basically narrative primarily because so much of the research on physical appearance has ignored gender differences (i.e., calculating gender differences in effect sizes is not possible). The fact that the empirical evidence is reviewed in light of theory-based hypotheses is one safeguard against the subjectivity that sometimes enters into narrative reviews. Another safeguard is the decision rules used to evaluate the empirical evidence. These rules can be summarized as follows:

First, all of the research relevant to a particular hypothesis was identified from the pool of research retrieved by the literature search procedures which are described later in this chapter. From among the relevant research, the percentage of studies showing appearance effects of any kind was compared to the percentage showing no effects. Obviously, if appearance effects were themselves equivocal, then the question of gender differences in appearance effects is moot.

Second, studies showing appearance effects were categorized into three groups: studies using females only, as either subjects or targets; studies using males only; and studies using both sexes. Among the single-sex studies, the percentage showing the hypothesized effects for females was compared to this percentage for males. Among studies using both sexes, percentages showing appearance effects for females only, males only, and both sexes were compared. Sample sizes were also taken into account, although no quantitative analyses of effect sizes were performed.

Third, the empirical evidence was interpreted as supportive of a hypothesis, most of which predicted stronger appearance effects for females than males if: (1) the hypothesized effect was more frequently observed in studies using females only than in studies using males only; and (2) the hypothesized effect was more frequently observed, or was stronger for females than for males in studies using both sexes. A more tentative conclusion, in favor of the hypothesis, was drawn if all or nearly all of the studies relevant to a hypothesis used only one sex. The rationale for drawing a tentative conclusion in this case is that an exclusive focus on one sex is likely to reflect an assumption—whether explicit or implicit—that the effect exists only for that sex—or at least is stronger for that sex. Alternatively, it may reflect a failure to obtain significant effects for the other sex (i.e., the bias against the null hypothesis Greenwald 1975; Rosenthal, 1979).

Thus, firm conclusions about gender differences in physical appearance effects were possible only when a number of studies addressed a hypothesis and produced consistent findings. More tentative conclusions are offered when the preponderance of the research focused on one sex and consistently found appearance effects. No conclusions are offered when few studies addressed the hypothesis or when the findings were weak or inconsistent.

# THE EMPIRICAL EVIDENCE FOR A GENDER-APPEARANCE RELATIONSHIP

Previous volumes that have reviewed the research on physical appearance have documented its importance by indicating the range and diversity of appearance effects (Alley 1988a; Bull & Rumsey 1988; Hatfield & Sprecher 1986; Patzer 1985). This volume differs from previous volumes in a number of important respects.

First, the research is reviewed in light of gender differences in appearance effects predicted by the sociobiological and sociocultural perspectives. Previous volumes take a topical approach to reviewing the literature.

Second, the research on both facial appearance and body appearance is reviewed. Most previous volumes focus only on facial appearance.

Third, research on both the implications and consequences of physical appearance is considered, with an eye toward examining the correspondence between the two. Few previous volumes have systematically considered how others' perceptions of people who differ in physical appearance relate to their self-perceptions and real-life outcomes.

# The Literature Search Procedures

A multiple-step search procedure was used to identify the pool of research on physical appearance from the literature. In step one, computer-based information searches were conducted using the following keywords: physical appearance, facial appearance, facial attractiveness, body appearance, body attractiveness, and body image. The following data bases were searched: PsycINFO (Psychological Abstracts) 1970-1989; ERIC (Educational Resources Information Center) 1970-1989; Dissertation Abstracts Online 1900-1989; ABI/INFORM (a worldwide business and management data base) 1970-1989; and Sociological Abstracts 1970-1989.

In step two, the reference lists of the research articles located in step one were used to locate additional research missed by the computer searches. This step permitted the inclusion in this review of research published prior to 1970.

Step three involved searching the reference lists of recently published volumes that have reviewed the research on physical appearance (Alley 1988a; Bull & Rumsey 1988; Hatfield & Sprecher 1986; Herman, Zanna & Higgins 1986; Patzer 1985). Cash's (1981a) annotated bibliography was also consulted, as were book chapters on physical appearance (e.g., Adams 1982; Sorell & Nowak 1981).

In step four, the most recent research on physical appearance was obtained by searching the 1990 issues of the following journals: American Psychologist, Child Development, Developmental Psychology, Journal of Applied Psychology, Journal of Applied Social Psychology, Journal of Clinical Psychology, Journal of Consulting and Clinical Psychology, Journal of Personality and Social Psychology, Journal of Psychology, Journal of Social Psychology, Organizational Behavior and Human Decision Processes, Organizational Behavior and Human Performance, Personality and Social Psychology Bulletin, Psychological Reports, Psychological Science, Psychological Bulletin, Psychological Review, Psychology of Women Quarterly, Sex Roles, and Social Psychology Quarterly.

The final step of the literature search was to personally contact researchers in the area who might have relevant work under review or in press. Four copious review articles were located in this manner. Three were metanalytic reviews (Eagly, Ashmore, Makhijani & Kennedy in press; Feingold 1989, 1990) and one was a narrative review (Burns & Farina 1989). One empirical report was also identified (Frieze, Olson & Russell 1990).

### The Organization of the Empirical Evidence

One task in reviewing any large body of research is to organize the findings in some meaningful way. The physical appearance research suggested two natural categories for organizing it; research on facial appearance could easily be distinguished from research on body appearance. Within these two natural categories, a number of subcategories were identified to further organize the findings.

First, research that addressed others' perceptions of people who differed in physical appearance, whether facial or body, was distinguished from research that addressed the personal correlates of appearance (i.e., self-perceptions, behavior, and outcomes of people who differed in physical appearance). This distinction is analogous to Cash's (1985) distinction between the outsiders' view (i.e., others' perceptions) and the "insiders' view" (i.e., personal correlates).

Throughout this volume, the effects of physical appearance on others' perceptions are referred to as the *implications* of appearance. The personal correlates of physical appearance (e.g., self-esteem, occupational status) are referred to as the *consequences* of appearance. Although this distinction is somewhat artificial, blurred by the fact that the implications of appearance often have real consequences (e.g., other's perceptions influence self-perceptions and outcomes), it was nevertheless a useful distinction for organizing the research. More importantly, this distinction permitted subsequent comparisons between the implications of appearance and its actual consequences.

Thus, four categories of research were produced by using these two distinctions: research on the implications of facial appearance, research on the implications of body appearance, research on the consequences of facial appearance, and research on the consequences of body appearance. Within each of these four categories, the research was further subdivided in terms of the *domain* which it addressed. Three partly overlapping domains were identified: the interpersonal domain, the professional domain, and the societal domain.

The interpersonal domain was identified to include research on the implications and consequences of appearance for personal characteristics, other-sex attraction, and same-sex attraction. For example, research on the effects of facial attractiveness on perceptions of personality traits, dating desirability, and friendship preferences is included in this domain because all are interpersonal implications of attractiveness. Research relating facial attractiveness to actual personality traits, dating frequency, and number of same-sex friends is included because all are interpersonal consequences of attractiveness.

The professional domain was designated to include research on the implications and consequences of physical appearance for

professional outcomes. For example, research on the effects of facial attractiveness on perceptions of intellectual competence and occupational potential is included here because both are professional implications of attractiveness. Research relating facial attractiveness to actual intellectual competence, to success at persuasion, and to real occupational outcomes are consequences of attractiveness considered in this domain.

The societal domain was somewhat arbitrarily distinguished from the interpersonal domain to include the research focused on facial unattractiveness rather than on facial attractiveness. For example, research relating facial unattractiveness (e.g., facial disfigurement) to social deviance, both perceived (i.e., the implications of unattractiveness) and actual (i.e., the consequences of unattractiveness) is included in this domain. Social deviance is broadly defined in this volume to include the minor transgressions of children, the criminal behavior of adults, and the poor psychological and social adjustment of both children and adults. Research relating physical appearance to altruistic behavior is also included in the societal domain, although it might just as easily be included in the interpersonal domain.

Thus, the research on physical appearance was organized into twelve categories that address the implications and consequences of facial appearance and body appearance in the interpersonal, professional, and societal domains. The sociobiological and sociocultural perspectives offer hypotheses for each of these twelve categories.

### EVALUATING THE SOCIOBIOLOGICAL AND SOCIOCULTURAL PERSPECTIVES

Much of this volume is devoted to evaluating the sociobiological and sociocultural perspectives in terms of how well the empirical evidence supports their hypotheses, i.e., "theory-data matching." One outcome of such an evaluation might be a conclusion that one perspective is better than the other, insofar as explaining the gender-appearance relationship. However, there are a number of reasons why such an outcome is unlikely, inappropriate, and even undesirable.

First, as noted earlier in this chapter, the sociobiological and sociocultural perspectives are not monolithic approaches to human behavior. There is diversity within these perspectives about how to apply evolutionary principles (the sociobiological perspective) or cultural values (the sociocultural perspective) to understanding behavior. The representations of the two perspectives presented in this volume are but one way in which each can be represented. Thus, support or lack of support for the hypotheses derived from these representations is not tantamount to support or lack of support for that perspective.

Second, comparisons between two theoretical perspectives typically involve comparing the empirical support for their competing hypotheses or, at the very least, for the unique hypotheses of each. Such comparisons necessarily entail that the two perspectives make competing hypotheses in the first place, that empirical evidence is available that addresses these competing hypotheses, and that the evidence is consistent with respect to these hypotheses. Comparisons involving unique hypotheses assume that all possible unique hypotheses have been generated from each perspective, and that empirical evidence is available to address them. Few of these ideal conditions are satisfied in comparing the sociobiological and sociocultural perspectives. As revealed elsewhere in this volume, the two perspectives make few competing hypotheses, the empirical evidence is alarmingly incomplete, and it is doubtful that all possible unique hypotheses have been generated from the two perspectives.

Thus, the question of whether the sociobiological or sociocultural perspective is the better perspective for explaining the gender-appearance relationship is not answered in this volume. Indeed, it is an inappropriate question, for reasons which are elaborated on in chapter 2. Briefly, the two perspectives address different levels of analysis, each providing an explanation for the gender-appearance relationship at its level (Buss 1990; Daly & Wilson 1983, 1988; Symons 1979; Tooby & Cosmides 1990). Indeed, confusion about levels of analysis is partly responsible for the failure to see the complementarity of the sociobiological and sociocultural perspectives.

Other reasons why the sociobiological and sociocultural perspectives are mistakenly viewed as competing rather than complementary are: confusion about the concepts of *innate* and *learned*; the failure to recognize that determinism is inherent in all scientific inquiry; and the false dichotomy that has been created between biology and the environment. All are elaborated on in chapter 2 to support the conclusion that the sociobiological and sociocultural perspectives are complementary approaches to understanding the gender-appearance relationship.

Of course, it would be naive and presumptuous to expect that the arguments presented in chapter 2 will put to rest what is essentially the nature-nurture controversy in psychology. Biological explanations for behavior-including gender differences in behavior-will continue to be viewed as incompatible with environmental explanations as long as people believe that different implications follow from these explanations. They do not. To assert that there is a biological basis for some particular sex difference does not imply that the environment plays no rule. Nor does it imply that such a difference is inevitable. The focus of change should change be desired—continues to be on the environment.

If the arguments presented in chapter 2 fail to convince the reader that the sociobiological and sociocultural perspectives are compatible, then perhaps the hypotheses generated from the two perspectives will be convincing. Many of the hypotheses of the sociobiological perspective are similar or identical to those of the sociocultural perspective. Some hypotheses are unique to one perspective, addressing issues at that level of analysis. The few competing hypotheses may not be competing at all. Taken together with the arguments in favor of a compatibility view, perhaps the reader will be convinced that a richer understanding of the genderappearance relationship comes from a consideration of both perspectives rather than from either perspective alone.

### PREVIEW OF THIS VOLUME

This volume contains nine chapters, including this introductory chapter. One chapter focuses exclusively on the sociobiological and sociocultural perspectives and their hypotheses about the gender-appearance relationship. Six chapters present the empirical evidence available to evaluate these hypotheses. The final chapter focuses on conclusions, integration of theory and research, and directions for future research.

Chapter 2 sets the stage for all of the subsequent chapters. Overviews of the sociobiological and sociocultural perspectives are presented and hypotheses are derived from each perspective for each of the research domains described earlier in this chapter (see The Organization of the Empirical Evidence p. 13). Hypotheses about gender differences in the implications and consequences of facial appearance are offered for the interpersonal, professional, and societal domains. Some general hypotheses about body appearance

are also presented. The apparent conflict between the sociobiological and sociocultural perspectives is discussed, with arguments favoring a compatibility view of the two perspectives.

Chapters 3 through 8 review the empirical evidence in light of the hypotheses of the sociobiological and sociocultural perspectives. All of these chapters begin with a brief overview, a review of the sociobiological and sociocultural hypotheses, and a figure that summarizes the framework for reviewing the empirical evidence. Each chapter ends with conclusions and a table that summarizes the findings. Postscripts to each chapter highlight one or more of the basic themes presented in the chapter.

Chapter 3 examines research on the interpersonal implications of facial appearance which is relevant to the hypotheses of the sociobiological and sociocultural perspectives. Research on mate preferences, standards of facial attractiveness, and crosscultural research on these topics is reviewed. Research on the relationship between attractiveness and aging, attractiveness and same-sex attraction and the physical attractiveness stereotype is considered in this chapter. Additional evidence bearing on the evaluation of the sociobiological and sociocultural perspectives is also presented (e.g., research on the automaticity of attractiveness judgments, research on early preferences for attractive faces).

Research on the professional implications of facial appearance is examined in chapter 4. Facial attractiveness effects on perceptions of intellectual competence and occupational potential are the focus of the hypotheses of the sociobiological and sociocultural perspectives. Attractiveness effects on persuasion are also examined here. Inconsistencies in the findings with respect to gender differences—which have been overlooked in previous reviews of this literature—are highlighted in this theory-based review.

Chapter 5 focuses on the societal implications of facial unattractiveness (rather than attractiveness). Research on perceptions of social deviance as a function of unattractiveness is examined. Social deviance is broadly defined to include the minor transgressions of children, the criminal behavior of adults, and the poor psychological and social adjustment of both children and adults. The implications of facial appearance for altruistic behavior are also considered.

The interpersonal, professional, and societal consequences of facial appearance are examined in chapter 6. Special attention is given to how well the consequences of facial appearance match the implications suggested in preceding chapters. Thus, research on the

personalities, interpersonal experiences, and professional outcomes of people who vary in attractiveness is considered in this chapter. Evidence that unattractiveness is related to actual social deviance is also examined. As in preceding chapters, the sociobiological and sociocultural perspectives are evaluated in terms of support for their hypotheses and their ability to account for additional findings.

Chapter 7 examines the implications of body appearance, and chapter 8 considers its consequences for all three research domains. Chapter 7 reviews research on body-type preferences and stereotypes, and research on the effects of weight and height on others' perceptions. Chapter 8 considers research on body image, weight, and height, the correlates of each, and the interpersonal and professional consequences of body weight and height. Relationships between body image and psychopathology—such as anorexia nervosa-are also considered in chapter 8. Both chapters evaluate the empirical support for the hypotheses of the sociobiological and sociocultural perspectives.

Chapter 9 summarizes the conclusions drawn in previous chapters about the gender-appearance relationship. The empirical support for the hypotheses of the sociobiological and sociocultural perspectives is evaluated. The compatibility of the two perspectives is reiterated in light of the empirical evidence. Directions for future research to test the untested or inadequately tested hypotheses of the two perspectives, and to clarify ambiguous findings, are identified.

#### POSTSCRIPT

The stated objective of this volume is to demonstrate that the importance of physical appearance depends on gender. A moment's reflection reveals that this is hardly a provocative or controversial suggestion. Ask any random sample of one hundred adults whether they think that good looks are more important for women than for men, and the overwhelming majority will doubtlessly say "Yes." Thus, in one sense, this volume does little more than confirm folk wisdom about gender differences in the importance of appearance.

In another sense, however, it goes well beyond folk wisdom by offering some provocative and controversial explanations for why physical appearance is more important for women than men. These explanations are intended to be heuristic rather than divisive. They suggest directions for future research of both theoretical and practical importance.