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Mutual and Partaken Bliss: Introducing the Science of Bodily Beauty

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> Beauty is Nature's coin, must not be hoarded,
> But must be current, and the good thereof
> Consists in mutual and partaken bliss.
>
> ~ John Milton, *Comus*

It was no easy decision that Paris had to make. According to Ovid's *Heroides*, Paris had been resting against a tree in the valleys of Mount Ida, when he was startled by the sudden appearance of Hermes and, in his wake, the three goddesses: Hera, Athena, and Aphrodite. There had been an 'incident' at the banquet celebrating the marriage of Peleus and Thetis, to which Eris, Goddess of Discord, had been left uninvited. Angered by the snub, Eris turned up anyway and threw a golden Apple of Discord into the proceeding. On the apple was a most simple inscription: *Kallisti*, 'for the fairest one.' Only, the three goddesses, Hera, Athena, and Aphrodite, each claimed the apple as their own.

Zeus, mighty Zeus – king of the Gods, ruler of Mount Olympus, god of the sky and thunder – was reluctant to favour any claim himself, and instead gave the task to Paris, a mere mortal. And so, as Hermes tells him, Paris is to be 'the final judge of beauty.' He must decide which of the three goddesses 'has such beauty/that will conquer the other two.' No, it was no easy decision that Paris had to make. 'My frightened heart took comfort, I became bold/enough to study each one of them./All were worthy; I sighed because only one/could win.'

To sway him in his decision, each of the three goddesses used their powers to bribe Paris. Hera offered to make him king of Europe and Asia; Athena offered wisdom and skill in war. But the decision was no

easier: 'How could I choose between power and/a courageous heart?' Finally, Aphrodite – 'she who causes love' – offered Paris the love of the world's most beautiful woman, Helen of Sparta. Aphrodite is effortlessly beautiful, sexual, and charming, and her gift is well-received: Paris awards her the Apple of Discord, at once earning the love of the beautiful Helen and the enmity of the Greeks (Paris' subsequent abduction of Helen from Sparta is the mythological basis for the Trojan War).

In a sense, the Judgement of Paris might be seen as the prototypical beauty contest: the contest which Eris initiates sets the three goddesses against each other, vying for the approval of Paris. But it is a contest in which Aphrodite, Goddess of Love, holds the upper hand: not only is she physically beautiful herself, but she also offers Paris the hand of the most beautiful mortal, Helen of Sparta. But the mythologised Judgement of Paris also serves a different purpose: it highlights the importance of physical beauty, or at least, the fact that human beings have always taken an interest in the beauty of others (although, of course, in the Judgement of Paris, it is a specific beauty that is being judged – the beauty of women).

But the interest does not end there: a consistent theme throughout the history of beauty has been a quest for its secrets. Attempting to define and explain what makes an object or individual beautiful has consumed some of the world's greatest minds. Pythagoras and the ancient Greeks, for example, attempted a mathematico-aesthetical explanation of beauty, when they argued that it just was a matter of having the right proportions. And because these proportions – or 'golden ratios' – were universal, the secret to beauty was the same whether we consider the human face or the dimensions of a building or even music and literature (Armstrong, 2004; Eco, 2004; Swami, 2007).

So convincing was the Pythagorean explanation of beauty that it remained virtually unchallenged until the late 18th century. Leonardo da Vinci, for instance, is said to have designed the proportions of *Mona Lisa* according to Pythagorean notions of beauty; certainly, there can be no denying that his *Vitruvian Man* conformed to quite precise measurements of the human body which he considered ideal. But da Vinci was not alone in doing so: architects and writers, artists and designers, all subscribed to the Platonic thesis that there is an ideal, objective beauty that can be understood and perceived by all individuals. So long as an object has the right proportions, everyone will agree that in it is contained the essence of beauty.

Beginning in the late 18th century, however, a different idea of beauty began to be raised by philosophers like David Hume and Edmund

Burke, for whom beauty was subjective to the individual. Hume's (1757: 208–209) thesis on beauty is often held up as a paradigmatic example of this notion:

> Beauty is no quality in things themselves; it exists merely in the mind which contemplates them; and each mind perceives a different beauty. One person may even perceive deformity, where another is sensible to beauty . . . To seek in the real beauty, or deformity, is as fruitless an enquiry, as to pretend to ascertain the real sweet or real bitter. According to the disposition of the organs, the same object may be both sweet and bitter; and the proverb has justly determined it to be fruitless to dispute concerning tastes.

For philosophers like Hume, the subjective nature of beauty meant that it could only be understood once individual feelings and emotions had been taken into account. Beauty had firmly been placed in the proverbial eye of the beholder.

The psychology of beauty

The psychological sciences are relative late-comers to these debates. The widespread belief that beauty is idiosyncratic, combined with the maxim that 'beauty is only skin-deep,' ensured that the topic of human beauty remained in psychology's blind spot until recently. After all, if beauty was a matter of personal taste, if each of us has her or his own unique idea of what constitutes beauty, then it makes any scientific analysis of such preferences extremely difficult. Moreover, if beauty is only skin-deep – and, by extension, if we should not judge a book by its cover – then beauty becomes a triviality to be explained away (Langlois et al., 2000).

This is especially true between cultures, where it was thought there was little consensus in judgements of attractiveness and hence no consistent effect of physical beauty on social judgements, interactions and behaviours. In 1871, for instance, Charles Darwin published his *Descent of Man*, in which he amassed an impressive array of evidence highlighting cross-cultural and historic differences in beauty practices. Whether it was 'breasts hanging down to the belt' or 'obliquity of the eye' or 'teeth . . . stained black, red and blue' (quoted in Swami, 2007), Darwin believed that there existed great variability in idealised beauty from one culture to the next.

Then, in 1966, Walster, Aronson, Abrahams, and Rottmann advertised a 'computer dance,' in which participants would ostensibly be paired on a blind date by a super-computer based on their similarity. In

reality, the experimenters paired the participants in a random manner, except that no man was paired with a taller woman. During the dance, participants were asked to rate their date, with Walster et al. (1966) expecting personalities, intelligence or other such variables to be the best predictors of liking. Instead, what they found was that the more attractive participants were favoured as dates over less attractive participants, and overall, physical attractiveness was the best predictor of mutual liking. Indeed, six months after the dance, partners who were similar in terms of physical attractiveness were more likely to still have been dating.

Walster et al.'s (1966) serendipitous finding was the catalyst for interest in physical attractiveness within the psychological sciences. A great many studies began to document the important, though often surreptitious, role that physical attractiveness plays in our daily lives (see Patzer, 2002; Swami & Furnham, 2007). Our first impressions of strangers, for example, are based almost entirely on non-verbal cues (Baron, Byrne, & Branscombe, 2006), particularly physical appearance (Park, 1986). When we meet someone for the first time, we tend to focus on information that we believe will provide cues about that person's personality, principles, and values – which typically means categorising individuals based on their looks.

Over the years, numerous studies and reviews of the literature have shown that physical attractiveness and appearance has a predictable effect on the judgements that people make about others (Dion, 1974; Dion, Berscheid, & Walster, 1972; Eagly, Ashmore, Makhijani, & Longo, 1991; Snyder, Tanke, & Berscheid, 1977). In general, we imbue attractive individuals with perceived positive qualities – including social competence, intelligence, dominance and psychological adjustment – and we shower them with more positive social interactions in a wide variety of everyday domains (Eagly et al. (1991).

These inferences are not only directed at adults: attractive babies tend to receive greater attention (kissing, cooing, smiling, eye contact, even cuddling) from their mothers and nurses than less attractive babies (Corter et al., 1978; Langlois, Ritter, Roggman, & Vaughn, 1991; Stephan & Langlois, 1984). In school, attractive children are more popular than unattractive children (Kleck, Richardson, & Ronald, 1974; Langlois & Styczynski, 1979) and even teachers assume that attractive students are more likely to be academically successful than less attractive students (Adams, 1978; Clifford & Hatfield, 1973). In college, too, attractive students are more likely to receive better grades, regardless of the quality of their work (cf. Landy & Sigall, 1974).

But, of course, it is in adulthood that the pervasive effects of physical attractiveness truly become evident. Attractive individuals are more likely to date and marry (Kalick, Zebrowitz, Langlois, & Johnson, 1998; Udry & Eckland, 1984), and they are also more likely to be helped by strangers in the event of an accident (Benson, Karabenick, & Lerner, 1976; Sroufe, Chaikin, Cook, & Freeman, 1977; Swami, Chan, Wong, Furnham, & Tovée, in press). In the courtroom, attractive defendants benefit from more lenient sentencing than less attractive defendants and are less often perceived as guilty (Castellow, Wuensch, & Moore, 1990; Darby & Jeffers, 1988; Kulka & Kessler, 1978; Solomon & Schopler, 1978; Stewart, 1980, 1984). And compared with less attractive individuals, attractive people are more likely to be hired for jobs (Dipboye, Arvey, & Terpstra, 1977; Swami et al., in press) and receive higher starting salaries (Dipboye, Fromkin, & Wiback, 1975).

The social and evolutionary psychologies of beauty

In short, then, a wealth of evidence suggests that, despite the exhortations of received wisdom and age-old maxims, physical beauty has both an immediate and predictable effect on social interactions (Langlois et al., 2000). Within psychology, two relatively distinct bodies of work have developed in an attempt to answer the question of 'why' attractive individuals are perceived and treated more positively. The first of these stems from social psychological and anthropological work, which highlights the social and cultural contexts in which attractiveness judgements are formed and acted upon. Specifically, this view suggests that a great deal of social learning must take place when it comes to defining standards of attractiveness, and that both individual proclivities and subcultural ideals play important roles in defining what we find attractive.

On the other hand, some psychologists have taken an evolutionary approach to physical attractiveness, arguing that some aspects of perceptions of beauty may be influenced by our common biological heritage. This approach can be traced back to the publication of Don Symons' *Evolution of Human Sexuality* in 1979, in which he applied an explicit evolutionary framework to the science of physical attractiveness. Symons' work inspired a great many other researchers to approach the topic of human beauty from a fresh perspective and, in the past two decades especially, research guided by an evolutionary framework has intensified dramatically (see Swami & Furnham, 2007).

Yet, with very few exceptions, evolutionary and social perspectives on human physical attractiveness have rarely been combined within a

more general theoretical framework. In a recent account, Swami and Furnham (2007) lamented this fact, and argued that neither an evolutionary nor a social psychological approach in isolation is sufficient to understand the science of human beauty. Of course, the different paths taken by social and evolutionary psychologists in attempting to understand human beauty stems from their different perspectives. The point remains, however, that in isolation neither perspective can account for the myriad of different factors that affect our attraction to others.

Body beautiful

This, then, is the primary aim of the present volume: we have brought together seminal work from evolutionary and sociocultural perspectives, which explore the questions of *what* our attractiveness preferences are and *why* we find certain others physically attractive. The research and theoretical contributions presented in this volume offer a fresh perspective to understanding the perception of attractiveness, within evolutionary, cognitive, social, motivational, and cultural contexts. The only caveat we introduce is that these contributions focus specifically (though not exclusively) on the human body. The simple reason for this is that much psychological research has been devoted to human facial attractiveness, to the detriment of bodily beauty (see Rhodes & Zebrowitz, 2002).

As might be expected, the human body is an important site of beauty practices (Swami, 2006), and the focus on bodily beauty is not alien to either evolutionary or sociocultural researchers. In terms of the former, for instance, a great deal of research time and expertise has been spent on defining the characteristics of ideal feminine and masculine beauty (see Swami & Furnham, 2007). This body of work has focussed quite specifically on the female waist-to-hip ratio as an index of women's bodily beauty (McBurney & Streeter, Chapter 2), arguing that because a low waist-to-hip ratio was correlated with women's health and fertility in evolutionary history, men should find such ratios attractive today.

Others agree that it is useful to study the human body, but disagree as to the utility of the waist-to-hip ratio as an index of women's physical attractiveness. Fan (Chapter 3) presents the volume-height index as a more accurate predictor of both women's and men's attractiveness, whereas Bateson and colleagues (Chapter 4) take issue with the way in which women's attractiveness has been studied. Instead, they find that overall body weight may be a more important – and accessible – factor in defining what it means to be beautiful, at least for women. The most important conclusion to emerge from these chapters, however, is

that there is unlikely to be a single defining characteristic of attractiveness (Fan, Chapter 3; Bateson, Cornelissen, & Tovée, Chapter 4); rather, body shape, body weight and possibly other characteristics (e.g., the leg-to-body ratio, skin tone and so on; Swami, Einon, & Furnham, 2006; Smith, Cornelissen, & Tovée, 2007) all contribute to men's and women's physical attractiveness.

Another important conclusion to emerge from these chapters is that there is great cross-cultural variability in what is perceived as an attractive body. Scott et al. (Chapter 5) examine ideals of body weight in Bangladesh and Britain, and describe how such ideals may be intricately linked with differences in socioeconomic status. Similarly, Tovée, Furnham, and Swami (Chapter 7) document shifting patterns of body weight ideals in South Africa and Britain, and show how this is associated with similarly changing patterns of what is perceived as healthy body weights. Finally, Yu and colleagues (Chapter 6) show how, in a population of Matsigenka Amerindians, mate choice varies within the same individual depending on the sociocultural role of the potential mate. In short, these chapters highlight the way in which socioeconomic and cultural contexts interact with evolved biology to alter perceptions of an attractive body.

The contributions to this volume also make important theoretical advancements in our understanding of human beauty. Einon (Chapter 8) questions whether attractiveness ideals really do reflect an evolved mechanism for choosing fertile mates; rather, she suggests that there may be alternative adaptive explanations for such ideals, which evolutionary perspectives will need to incorporate. Other chapters highlight the importance of incorporating more inclusive perspectives on human physical attractiveness: Johnson and Tassinary (Chapter 9) explore how body shapes affect evaluative social judgements, whereas Nelson, Pettijohn, and Galak (Chapter 10) examine the cognitive and motivational states that give rise to predictable variation in attractiveness ideals.

An important final contribution of this volume comes from the explicitly sociocultural perspective taken by some researchers (Hildebrandt & Latner, Chapter 11; Smolak & Murnen, Chapter 12; Calogero, Boroughs, & Thompson, Chapter 13). These chapters, which focus on research conducted in the West, highlight the many different ways in which social learning and political contexts influence ideals of attractiveness. Importantly, these chapters also explicate the ways in which an unhealthy pursuit of such ideals can sometimes result in 'normative discontent,' including body image and eating disorders. These are topics

of study that are rarely considered within the evolutionary psychological scheme, and their discussion here serves to highlight key aspects of the literature in which a combined perspective will be fruitful.

Attempts to provide definitive answers to the persistent quest for human beauty have typically relied on either *objective* or *subjective* perspectives. The dominant paradigm for some years now, derived from evolutionary psychology, argues that there are objective criteria of attractiveness which most, if not all, individuals perceive and agree upon, because these were shaped by their common evolutionary history. However, we believe that the pendulum is now swinging back: most contemporary accounts of attractiveness have highlighted the way in which both sociocultural and evolutionary pathways influence the construction and reconstruction of beauty ideals.

Rather than there being consistent ideals of beauty across individuals or cultures, any true understanding of beauty must analyse the way in which individuals incorporate, either consciously or otherwise, biological and subcultural ideals of attractiveness (Swami & Furnham, 2007). The chapters in this book highlight these themes and illustrate the productive nature of work that combines different perspectives within a single over-arching perspective. As the contributors to this volume argue, bodily attractiveness is a complex phenomenon, which in turn requires comprehensive methods of research and analysis. Certainly, this is a premise known to artists and novelists, such as Giovanni Ruffini:

> The perception of the beautiful is gradual, and not a lightning revelation; it requires not only time, but some study.

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