## Endnotes for Spent: Sex, evolution, and consumer behavior

By Geoffrey Miller

**Note:**

Whenever facts, books, people, products, or organizations are not specifically noted, details can be easily accessed by searching the relevant name through Google.com or Wikipedia.org

Citations to books and articles listed in the reference section are by first author’s last name and year. Where name and year refer to more than one item, the first word or two of the title is also included to disambiguate the items.

**Chapter 1: Darwin goes to the mall**

What consumerist capitalism is: see: Bakan 2004; Bell 1996; Bowles, Edwards, & Roosevelt 2005; De Soto 2003; T. Frank 2000; Galbraith 1952, 1958; S. Hart 2007; Illouz 1997; Korten 1999, 2001; Mumford 1934, 1967, 1970; Reich 2007; Rifkin 2001; Schumpeter 1942

Hummer H1 Alpha: specifications accessed from Edmunds.com June 2008; low reliability: see Consumer Reports 2008

On the short-lived pleasures of acquisition, and the psychology of happiness in relation to economics and consumption: Bruni & Porta 2007; Clark, Frijters, & Shields 2008; Diener et al. 1999; Dolan, Peasgood, & White 2008; Easterbrook 2004; Easterlin 1995; R. H. Frank 2000, 2007; Frey 2008; Frey & Stutzer 2007; Gilbert 2006; Kahneman et al. 2006; Kahneman, Diener, & Schwarz 1999; Lane 2000; Layard 2005; Loewenstein & Ubel 2008; Lykken 1999; Schwartz 2004; Scitovsky 1992; Seligman 2002

On evolutionary reasons for the elusiveness of happiness: Buss 2000; Nesse 2004

Humans have evolved in small social groups: Brown 1991; Dunbar 2005; Sober & Wilson 1998; D. S. Wilson 2006

‘Materialism’ as a standard term for consumerism: for examples, see: Belk 1985; Burroughs & Rindfleisch 2002; Kasser 2002; Richins 2004; Twitchell 1999; Van Boven 2005

‘Materialism’ as a profoundly misleading term for consumerism: see Campbell 1987; Davenport & Beck 2001; Mick 2004; Pine & Gilmore 1999

Consumerism in historical context: Bakan 2004; Blom 2004; Cohen 2003; Clark 2007; Collins 2002; Cross 2000; Davidson 1997; T. Friedman 2000, 2005; Gartman 1994; Goodwin, Ackerman, & Kiron 1997; Hughes 2005; Irwen 1996; K. Jackson 1987; Jardine 1998; Leach 1993; McMillan 2003; Mumford 1961; Schama 1997; Seagrave 2002; Strasser 1999; Zinn 2005

Marine phytoplankton as the ‘ultimate nutrogenomic: accessed Ascendedhealth.com May 2008

On consumerism in evolutionary context: Burnham & Phelan 2000; Cary 2000; Colarelli & Dettmann 2003; Conniff 2002; R. H. Frank 1985, 1995, 2000, 2007; Miller 2000 *The mating mind*, 2000 ‘Marketing’, 2000 ‘Memetic evolution…’; Miller, Tybur, & Jordan 2007; Palmer 2000; Penn 2003; Plourde 2009; Saad 2007 *The evolutionary bases*…; Saad & Gill 2000; Shermer 2007

On consumer decision-making: Ariely 2008; Gigerenzer 2007; Harford 2008; Levitt & Dubner 2005; Schwartz 2004; Thaler & Sunstein 2008; Underhill 1999

On runaway consumerism: Arrow et al. 2004; Bakan 2004; Berman 2007; Brown 2008; De Graaf, Wann, & Hawken 1993, 2008; Diamond 2005; Hayden 2000; Jacobson & Mazur 1995; James 2007, 2008; Kuttner 1996; McKibben 2007; Myers & Kent 2004; Naylor 2005; James 2007, 2008; Miller 2007 ‘Runaway consumerism…’; Redclift 1996; Schor 1992, 1998, 2004; Steffen 2006; Szasz 2007; Whybrow 2006

**From Cro-Magnons to consumers**

Invention of agriculture, animal husbandry, etc: Borgerhoff Mulder 1996; G. Clark 2007, Earle 1997, 2002; Sale 2006; Tudge 1999

On human evolution: General background:

* Prehistoric life and human evolution: Boyd & Silk 2005; Dunbar 2005; also Aiello & Wells 2002; Boehm 1999; Boesch & Reichart 2003; Eibl-Eibesfelt 1989; Kelly 1995; Marlowe 2003; Winterhalder & Smith 2000
* Evolutionary biology: Mark Ridley 2001, 2003; D. S. Wilson 2007; Zimmer 2001
* Evolution of animal behavior: Alcock 2001, 2005
* Evolution of primate behavior: Maestripieri 2005; Strier 2002
* Evolutionary psychology popular introductions: Buss 2003; Pinker 1994, 1999, 2002; Matt Ridley 1993, 1996; D. S. Wilson 2007; R. Wright 1994
* Evolutionary psychology introductory textbooks: Buss 2008, Cartwright 2008, Dunbar, Barrett, & Lycett 2005, Gaulin & McBurney 2003
* Evolutionary psychology advanced reviews: Betzig 1997, Buss 2005, Crawford & Krebs 2008; Dunbar & Barrett 2007, Gangestad & Simpson 2007; Kenrick & Luce 2004
* The nature of psychological adaptations: Andrews, Gangestad, & Matthews 2002; Barrett & Kurzban 2006; Cronin 2005; Ketelaar & Ellis 2000

Gérard’s questions:

Men acquiring women as reproductive resources: Baumeister & Vohs 2004; Betzig 1986; Browne 2006; Chagnon 1988; Kruger 2008; Low 2005; Marlowe 2003; Shostak 2000; Summers 2005

Slavery as a reproductive system: Betzig 1986, 1992; Thomas 1997

Seduction through intelligence: Miller 2000 *The mating mind*; Prokosch et al., in press

Seduction through humor: Bressler & Balshine 2006; Bessler, Martin, & Balshine 2006; Cooper et al. 2007; Gervais & Wilson 2005; Greengross & Miller 2008; Kaufman et al. 2007; Provine 2000

Placebo effects: Evans 2003; Shiv, Carmon, & Ariely 2005

Expected prehistoric life-span: Helle, Lummaa, & Jokela 2008; Kaplan & Robson 2002; Kaplan et al. 2000, 2003; Lahdenperä et al. 2004; Lahdenperä, Russell, & Lummaa 2007; Robson & Kaplan 2003

Auto Assault-12 combat shotgun: [www.defensereview.com/article623.html](http://www.defensereview.com/article623.html) accessed May 2008

Paternity uncertainty: Daly & Wilson 1999; Feingold 1992; Geary 2000; Hausfater & Hrdy 2008

Giselle’s questions:

Women’s problems with lovers who ignore, beat, and abandon them: see Archer 2000; Arnqvist & Rowe 2005; Campbell 2002; Hrdy 1997, 1999; Low 2005; Shostak 2000; Smuts 1995; Thornhill & Palmer 2001

Romance novels in evolutionary context: see Bender 1996; Gottschall & Wilson 2005; Salmon & Symons 2001; Whissell 1996

Shared child care and ‘alloparenting’: Hewlett & Lamb 2005; Hrdy 1999; Low 2005; Schön & Silvén 2007

Low quality of contemporary child care: Brooks-Gunn, Han, & Waldfogel 2002; Folbre 2008; Schön & Silvén 2007

Marketers brain-washing the young (children): Cross 2004; Gunter & Furnham 1998; Schor 2004

Importance of meat in prehistoric life: Aiello & Wells 2002; Alvard & Nolin 2002; Hill & Hurtado 1996; Kaplan et al. 2000; Kelly 1995; Marlowe 2005, 2007;

All you have to do…

The artificiality of modern education: Becker 1994; Berhard 1988; Molnar 2007; C. Murray 2008; Spence 1973, 2002; Wolf 2003

The artificiality of modern jobs: Beder 2001; Bell 1996; Bowles & Park 2005; Browne 2002, 2006; Crittenden 2001; De Graaf 2003; Ehrenreich 2001; Furnham 2006; Gini 2000; Hochschild 2003; Landers, Rebitzer, & Taylor 1996; Packard 1959, 1962; Ressler & Thompson 2008; Schor 1994; Sennett 2000

Social alienation from relatives and friends: Putnam 2000

Loss of civil society and political empowerment among consumers: Bakan 2004; Chomsky 2002, 2008; Cohen 2003; Collins 2002; De Graaf, Wann, & Naylor 2005; T. Frank 2000; Frank & Weiland 1997; Huffington 2003; Klein 2002, 2008

Loss of contact with natural environments and foods: Kaplan & Kaplan 1989; Kellert & Wilson 1993; Papanek 1971, 1995; Pollan 2007; Schama 1996; Schlosser 2001

On the general mismatch between prehistoric human nature and modern life: Burnham & Phelan 2000; Eaton et al. 2002; Fox 2002; Gluckman & Hanson 2006; Stearns & Koella 2008; Vining 1986

Suicidal despair under consumerism: Lane 2000; Saad 2007 ‘Suicide triggers…’

General critiques of life under consumerism: Arrow et al. 2004; Bakan 2004; Berman 2007; Bollier 2002, 2005; Brown 2008; De Graaf, Wann, & Naylor 2005; Hawken 1993, 2008; Jacobson & Mazur 1995; James 2007, 2008; Korten 1999, 2001; Kuttner 1996; McKibben 2007; Nussbaum & Sen 1993; Redclift 1996; Schor 1992, 1998; Steffen 2006; Whybrow 2006

**Contrasts and choices**

Modern life as a wondrous funky-town for the wealthiest: see Conniff 2002; Cowen 1998; R. H. Frank 2000; R. L. Frank 2007; Rothkopf 2008; Twitchell 2003; Silverstein & Fiske 2003

Average Cro-Magnon lifestyle:

Close-knit clan of family and friends: Gil-White 2001; Hrushka & Henrich 2006; Robertson 1991; Salmon & Shackelford 2008; Sulloway 1996

Works moderate hours gathering plant foods: Kelly 1995; Low 2005; Marlowe 2005, 2007; Pollan 2007; Sahlins 1972; Stearns & Koella 2008

Gets meat by flirting with guys: Alvard & Gillespie 2004; Baumeister & Vohs 2004; Bliege Bird 1999; Hawkes & Bliege Bird 2002; Marlowe 2003, 2004

Gossiping with friends: Dessalles 1998; Dunbar 1996, 2003; McAndrew & Milenkovic 2002; Wert & Salovey 2004

Breast-feeding babies: Angier 2000; Brown 1991; Hrdy 1999

Enjoys story-telling, grooming, dancing, drumming, and singing: Brown 1991; Burling 2007; Dessalles 2007; Mithen 2005

Males evolved wonderful new forms of foreplay: Miller 2000 *The mating mind*

Once a month, she hooks up secretly: on monthly human female estrus, see: Gangestad & Thornhill 2008; Thornhill & Gangestad 2008; also Durante, Li, & Haselton in press; Haselton et al. 2007; Miller, Tybur, & Jordan 2007

Neanderthal-kills: see Mellars 2004; Tudge 1999

She can look forward to another 40 years of life: Kaplan et al. 2000, 2003

Ever more valued as a woman of wisdom and status: on the importance of grand-mothers and the evolution of menopause: Voland, Athanasios, & Schiefenhovel 2005

Average American lifestyle:

EastView Mall: see eastviewmall.com, accessed June 2008

Ortho Tri-Cyclen: a standard birth control pill, Thepill.com

Another 45 years of life, ever less valued as an obsolete health-care burden: Hogan et al., 2001; also see the novel *Boomsday* by Christopher Buckley

Many thinkers have tried to ‘naturalize’ consumerism (and capitalism): Hodgson 1993; M. Friedman 2002; Rothschild 1992; see R. Nelson 2002

Others have rejected any concept of human nature: Rose & Rose 2001; see Segerstråle 2001

Steven Pinker’s *The Blank Slate*: Pinker 2002

Oppressive institutions of governments, corporations, schools, and media: Bagdikian 2004; Bakan 2004; Beatty 2001; Blumenthal & Goodenough 2006; Fox 1996; Freud 1961; Goodwin, Ackerman, & Kiron 1997; Molnar 2007; Rushkoff 1999; Shrum, Burroughs, & Rindfleisch, 2005

Darwinism as a justification for Victorian-era capitalism: Rose & Rose 2001; Rothschild 1992

The sensible model: also see Ayres & Martinas 2006; Baumeister 2005; Boyd & Richerson 2005; R. H. Frank 2007; Henrich 2006; Pagel & Mace 2004; Richerson & Boyd 2004; Schaller & Crandall 2004; Somit & Peterson 2003; Sperber & Hirschfeld 2004;

The idea of returning to an idealized paradise: see Fox 2002; Freud 1961

Bourgeois bohemians: Brooks 2000, 2004

On corporate social responsibility: Bornstein 2007; R. H. Frank 2005; Gini & Marcoux 2008; Hancock 1999; Harrison, Newholm, & Shaw 2005; Hart 2007; Hollender & Fenichell 2003; Sen & Bhatacharya 2001; Sen & Bhatacharya 2001; Singer 2004; Vogel 2006; Zak 2008

Prehistoric lifestyle as a more natural environment for the human body, mind, family, and clan: Eaton et al. 2002; Freud 1961; Gluckman & Hanson 2006; Papanek 1971, 1995; Stearns & Koella 2008

Prehistoric life as ignorant, insular, violent, and unimaginably boring (and warlike): Buss 2006; Chagnon 1988; Gat 2008; Keeley 1996; Nell 2006; Thomas, Stumpf, & Härke 2006; Thornhill & Palmer 2001; Wrangham 1999; Wrangham & Peterson 1997

On civilization’s key inventions: see C. Murray 2003

Money, markets, and media as the best inventions of all time: see Bernstein 2004, 2008; Carrier 2006; Doherty 2008; Epstein 2002, 2003; Fogel 2004; B. Friedman 2006; Gillin 2007; Irwen 1996; K. Jackson 1995; Lindblom 2002; McLuhan 1964; McMillan 2003; Nozick 1974; Postrel 1998; Rubin 2002; Sowell 2007; Von Mises 1949

**Mamas, don’t let your children grow up to be marketing consultants**

Children are wired to learn and play the normal game of life: Bjorklund & Pelligrini 2002; Bloom 2005; Brown 1991; Ellis & Bjorklund 2005; Figueredo, Hammond, & McKiernan 2006; Harris 1996, 2006; Hewlett & Lamb 2005; Schön & Silvén 2007

Instead, they face a bizarre new world of frustrating duties and counter-intuitive ideas: Berhard 1988; Folbre 2008; Gluckman & Hanson 2006; Gottfredson 2007; Hulbert 2003; Kanazawa 2004; Louv 2008; Schor 2004

Perplexing rants from post-modern French sociologists, such as Jean Baudrillard: Baudrillard 1983, 1998; also see Cashmore & Rojek 1999

Consumerist capitalism is not ‘materialistic’, but ‘semiotic’: Baudrillard 1983, 1998; Dant 1996; Mick et al 2004

Semiotic theory: Eco 1976; Neiva 2007

On the symbolic psychology of products: Akerlof & Kranton 2000; Belk 1988, 2001; Belk, Ger, & Askegaard 2003; Benjamin 1999; Berger & Heath 2007; Bliege Bird & Smith 2005; Buchan 1997; Hankiss 2006; Holt 1997; Levy 1959; Muniz & O’Guinn 2001; Reed 2004; Richins 1994, 1995; Schmitt & Simonson 1997; Simonson 2001; Walker 2008; Zaltman 2003; Zaltman & Zaltman 2008

A premium brand yields a high margin profit compared to a commodity: Dyer, Falzell, & Olegario 2004; Hart & Murphy 1998; Levitt 1983; Levy 1959; Neumeier 2005; O’Cass & Frost 2002; Ries & Ries 2005; Schmitt & Simonson 1997; Sullivan 1998; Twitchell 2000, 2005

On the mis-education marketers: Armstrong 1991, 2003; November 2004; Pfeffer & Sutton 2006; Saad 2007 *The evolutionary bases* …

Seth Godin books: Godin 1999, 2001, 2002, 2005

Malcolm Gladwell books: Gladwell 2000, 2007

Most marketers still use simplistic models of human nature: Allenby 1999; November 2004

Marketers need Darwin: Cary 2000; Colarelli & Dettmann 2003; Palmer 2000; Saad 2007 *The evolutionary bases* …; Saad & Gill 2000; Shermer 2007

**Fitness indicators**

Theory fitness indicators, costly signals, and handicaps: Berglund, Bisazza, & Pilastro 1996; Bradbury & Vehrencamp 1998; Getty 2006; Hasson 1997; Lotem, Wagner, & Balshine-Earn 1999; Michod 1995; Michod & Hasson 1990; Zahavi 1975; Zahavi & Zahavi 1997

On the nature of ‘genetic quality’ and the importance of mutations: Brcic-Kostic 2005; Crow 2000, Debat & David 2001, Eyre-Walker & Keightley 1999, Flatt 2005, Gangestad & Yeo 1997; Gillespie, Russell, & Lummaa 2008; Houle 2000; Hunt et al. 2004; Keightley & Eyre-Walker 2000; Keller 2007, Nielsen 2006; Pritchard 2001, Mark Ridley 2001; Zhang & Hill 2005 XX

On costly signaling theory in sexual selection and mate choice: Andersson & Simmons 2006; Candolin 2003; Cronin 1991; Hooper & Miller 2008; Houle & Kondrashov 2002, Kokko et al. 2003; Reznick, Nunney, & Tessier 2000, Rowe & Houle 1996, Tomkins et al. 2004; Zahavi 1975

On my work regarding costly signaling: Hooper & Miller 2008, Keller & Miller 2006, Mendenhall & Miller in prep; Miller 1997, Miller 1998, Miller 2000 *The mating mind*;Miller 2000 ‘Mental traits…’, Miller 2000 ‘Sexual selection for …’; Miller 2001; Miller 2003 ‘Fear of fitness indicators….’, Miller 2007 ‘Sexual selection for…’; Miller & Todd 1998

On sexual selection and mate choice in general: Andersson & Simmons 2006; Cronin 1991, Judson 2002; Kokko et al. 2003

Almost every animal species has its own fitness indicators to attract mates, intimidate rivals, deter predators, and solicit help from parents and kin: Alcock 2005; Berglund, Bisazza, & Pilastro 1996; Lotem, Wagner, & Balshine-Earn 1999; McGregor 2005

Ortho Tri-Cyclen birth control pills make women’s skin look more attractive by reducing acne, but it lowers reproductive success by eliminating ovulation: see Thepill.com

Our brains did not evolve to pursue reproductive success consciously: Buss 2008; Pinker 1999; Tooby & Cosmides 1990, 2005; Vining 1986

Sex differences in sexual strategies: Archer 2000, 2004; Baumeister & Vohs 2004; Ben Hamida, Mineka, & Bailey 1998; Buss 1989, 2001, 2003; Buss & Schmitt 1993; Ellis 2008; Feingold 1992; Li & Kenrick 2006; Lynn, Irwing, & Crammock 2002; Mealey 2000; Penke & Denissen 2008; Schmitt 2003, 2004, 2005; Schmitt & Buss 1996, 2000; Shackelford, Schmitt, & Buss 2005 XX

Many recent studies have confirmed that men increase the conspicuousness of their consumption when they are most interested in mating: Godoy et al. 2007; Griskevicius et al. 2007; Illouz 1997; Sundie et al. in press; Van den Bergh, Dewitte, & Warlop 2008; also Charles & Egan 2005

On other effects of mating motives on consumer decision-making: Ariely & Loewenstein 2006

Females also compete for status and to attract the higher-quality males: Brown & Lewis 2004; Campbell 2002; Rucas et al. 2006

Evidence so far suggests that males pay very little attention to conspicuous consumption by women: Griskevicius et al. 2007

Humans have evolved unique abilities to invent, make, display, and imitate new kinds of fitness indicators at the cultural level: Dutton 2008; Holt 1998; Plourde 2009

Juvenile humans have an insatiable thirst to learn about these culture-specific indicators: Weisfeld 1999

Status online through ‘interestingness’ scores on Flickr-posted photos, friend-counts on FaceBook, or ‘hotness’ ratings on hotornot.com: Gillin 2007; Lampel & Bhalla 2007; Schau & Gilly 2003; Vazire & Gosling 2004

On the origins and psychology of human status-seeking: Barkow 1989; De Botton 2004; also Anderson, Ames, & Gosling 2008; Chan & Goldthorpe 2007; Denissen et al. 2008; Dessalles 1998; Earle 1997; Ellis 2001; Festinger 1954; Henrich & Gil-White 2001; Hill & Buss 2006; Hill & Reeve 2005; Hopcroft 2006; Huberman, Loch, & Önçüler 2004; Judge et al. 2002; Leary & Baumeister 2000; Maner**,** DeWall, & Gailliot 2008; Mussweiler 2003; Packard 1959, 1962; Plourde 2009; Weeden 2006; XX

On economic aspects of human status-seeking: Alderson, Junisbai, & Heacock 2007; Brekke, Howarth, & Nyborg 2003; Chao & Schor 1998; Congleton 1989; Earle 2002; Eaton & Eswaran 2003; Ellis 2001; English 2005; Frank 1985, 2000, 2007; Frank & Cook 1995; Frey & Stutzer 2007; Graeber 2001; Hayden 1998; Heffetz working paper; Heffertz & Frank in press; Hopkins & Kornienko 2004; Howarth 1996, 2006; Ireland 1994, 1998, 2001; Johansson-Stenman & Martinsson 2006; Koçkesen, Ok, & Sethi 2000; Landers, Rebitzer, & Taylor 1996; McClelland 1961; O’Cass & Frost 2002; Rauscher 1993; Robson 1992; Solnick & Hemenway 1996, 2005; Sullivan 1998; Van Kempen 2003; Velthius 2005; Wang & Wellendorf 2006 XX

Special brain systems for learning language: Burling 2007; Desalles 2007; Dunbar 2003; Locke 2008; Locke & Bogin 2006; Mithen 2005; Pinker 1994

Special brain systems for learning culture-specific fitness indicators: Dutton 2008; Kaufman et al. 2007; Kanazawa 2000; Levitin 2006; Miller 1999; Nettle 2001; Plourde 2009; Simonton 1999;

Monetary wealth, career-based status, and avant-garde taste emerged within the last 10,000 years: Bernstein 2004; Boyd & Silk 2005; Carrier 2006; G. Clark 2007; Colarelli 2003; Conniff 2002; Dunbar 2005; Dutton 2008; Eibl-Eibesfelt 1989; Ellis 2001; R. H. Frank 2007; Kelly 1995; Marlowe 2005, 2007; McMillan 2003; C. Murray 2003; Shermer 2007; Stallabrass 2005; Steiner 2001

People try to display

* physical traits such as health, fertility, and beauty: Etcoff 1999; Morris 1985; Rhodes & Zebrowitz 2001; Sugiyama 2005; Voland & Grammer 2003
* personality traits such as conscientiousness, agreeableness, and openness to novelty: Ambady & Skowronski 2008; Funder 1999, 2006; Furnham & Heaven 1999; John, Robins, & Pervin 2008; Nettle 2007
* cognitive traits such as general intelligence: Geher & Miller 2007; Murphy 2007; Plourde 2009; Zebrowitz & Montepare 2005

Money as an addictive form of liquid fitness: Buchan 1997; Burgoyne & Lea 2006; R. H. Frank 2000; Furnham 2006; Jackson 1995; Lea & Webley 2006; Manning 2000; Vohs, Mead, & Goode 2006

Emotion versus reason in consumer behavior: Ainslie 2002; Ariely 2008; Evans & Cruse 2004; Gigerenzer 2007; Glimcher 2008; Harford 2008; Heath & Heath 2007; Shiller 2001; Thaler & Sunstein 2008; Underhill 1999

Human emotions cannot be described clearly without understanding their evolutionary origins and functions: Elfenbein & Ambady 2002; R. H. Frank 1988; Keltner, Haidt, & Shiota, 2006; Nesse 2001; Tooby & Cosmides 1990

On the functions of social emotions such as pride, embarrassment, shame, etc: Colman 2003; Eisenberger & Lieberman 2004; Emmons 2007; Evans & Cruse 2004; Fraley, Brumbaugh, & Marks 2005; Haidt 2001; Hess & Philippot 2007; Keltner & Busell 1997; Keltner & Anderson 2000; Keltner, Gruenfeld, & Anderson 2003; Keltner, Haidt, & Shiota 2006; McCullough et al. 2001; Price 2005; Tangney & Fischer 1995 XX

**Description and prescription**

Promiscuous hybridizations of ‘is’ and ‘ought’: see Curry 2006; also Binmore 2005; Nesse 2004; Thornhill & Palmer 2001

A distinguished tradition of gaining new prescriptive insights into one’s society:

* John Locke: *An essay concerning human understanding; Two treatises of government*
* Mary Wollstonecraft: *Vindication of the rights of women*
* Daniel Defoe: *Robinson Crusoe, Moll Flanders, A journal of the plague year*
* William Wilberforce: *A letter on the abolition of the slave trade*
* Henry David Thoreau: *Walden, Civil disobedience*
* Karl Marx: *The Communist manifesto, Grundrisse, Capital*
* Max Weber: *The Protestant ethic and the spirit of capitalism, Economy and society*
* Margaret Sanger: *Women and the new race, My fight for birth control*
* Thorstein Veblen 1899, 1904, 1914, 1918, 1919, 1921; also see Alcott 2004
* John Kenneth Galbraith 1952, 1958; also *The new industrial state*
* Alfred Kinsey: *Sexual behavior in the human male, Sexual behavior in the human female*
* Germaine Greer: *The female eunuch, The obstacle race, Sex and destiny*
* Peter Singer 1993, 2000, 2007; Singer & Mason 2007; also *Animal liberation, The expanding circle, The great ape project, Rethinking life and death*

**Consumerist ambivalence**

Consumerist capitalism produces almost everything that is exciting about modern life: Bernstein 2004, 2008; Cowen 1998; Epstein 2003; Fogel 2004; B. Friedman 2006; T. Friedman 2000, 2005; Irwen 1996; Lindblom 2002; McMillan 2003; Nozick 1974; Sowell 2007

Consumerist capitalism produces almost everything that is appalling about it: Arrow et al. 2004; Bakan 2004; Berman 2007; Blum 2003; Blumenthal & Goodenough 2006; Bradsher 2002; T. Clark 2007; Chomsky 2002, 2008; De Graaf, Wann, & Naylor 2005; Denton & Morris 2001; Ehrenreich 2001; Fox 2002; Hochschild 2003; Klein 2002, 2008; Kuczynski 2006; Kuttner 1996; Mumford 1967, 1970; Packard 1957, 1959, 1960, 1962; Putnam 2000; Ressler & Thompson 2008; Schlosser 2001, 2004; Schor 1992, 1998, 2004; Sennett 2000; Strasser 1999;

On consumer ambivalence: Otnes, Lowrey, & Shrum 1997

On consumerism and the contemporary art market: Carey 2005; Stallabrass 2005; Steiner 2001; Velthius 2005

Greenpeace: Weyler 2004

The World Trade Organization, World Bank, World Economic Forum, and globalization: Bhagwati 2007; T. Friedman 2000, 2005; Sassen 2006; Stiglitz 2002; Tabb 2004

Corporate lobbyists: Acemoglu & Robinson 2006; Beatty 2001; Palast 2004; Stigler 1971

Libertarians: Doherty 2008; Epstein 2002, 2003; C. Murray 1997; Nozick 1974; Postrel 1998; Rubin 2002; Von Mises 1949

*Adbusters*: Lasn 2000, 2006

New Urbanism: Burchell 2005; Chiras & Wann 2003; Flint 2006; Girouard 1985; Jacobs 1993, 2005; Mohney & Easterling 1991; Waldheim 2006; also Mumford 1961; Jackson 1987

Voluntary Simplicity: Craig-Lees & Hill 2002; Dacyczyn 1998; Dominguez & Robin 1999; Elgin 1993; Luhrs 1997; Merkel 2003; Silverstein 2006; Uliano 2008; Zavetovski 2002

Slow Food movement: Honoré 2005

True Cost Economics: see the Oakland, CA think tank Redefining Progress

Utility of a cross-species, evolutionary perspective in understanding consumerist capitalism: Conniff 2002; Frank 2000, 2007; Saad 2006, 2007; Saad & Gill 2000; Shermer 2007

**Chapter 2: The genius of marketing**

Products reveal our preferences, more or less: Becker 1998; Ben-Ner & Putterman 2000; Eaton & Eswaran 2003; Kuran 1995; Norton, Constanze, & Bishop 1998; Rentfrow & Gosling 2003; Yang & Allenby 2003

Status products: Alderson, Junisbai, & Heacock 2007; Bloch, Rao & Desai 2004; Chao & Schor 1998; Congleton 1989; De Botton 2004; R. H. Frank 200, 2007; Heffertz & Frank in press; Hopkins & Kornienko 2004; Howarth 1996; Ireland 1994, 1998, 2001; Mason 1981, 2000; O’Cass & Frost 2002; Packard 1959; Rauscher 1993; Silverstein & Fiske 2003; Solnick & Hemenway 2005; Stanley 2000; Thomas 2007; Twitchell 2003; Van Kempen 2003; Wang & Wellendorf 2006; Wong & Ahuvia 1998

Educational credentials as intelligence-indicators and positional goods: Adnett & Davies 2002; Bok 2004; Carson 2007; Herrnstein & Murray 1994; Kuncel & Hezlett 2007; C. Murray 2008; Spence 1973, 2002; Veblen 1918; Weiss 1995

Ethical consumerism as a kindness-indicator: Harrison, Newholm, & Shaw 2005; Singer & Mason 2007

Female sex worker behavior reflects male sexual preferences: see Ariely & Loewenstein 2006; Baumeister & Vohs 2004; Malamuth 1996; Miller, Tybur, & Jordan 2007; Posner 1992; Pound 2002; Schlosser 2004; Schmitt 2003; Symons 1979

Many evolutionary psychologists analyze pleasure products to reveal human preferences: Billing & Sherman 1998; Davis & McLeod 2003; Gottschall & Wilson 2005; Hantula 2003; Hersey 1996, 1999; Kellert & Wilson 1993; Nell 2006; Pollan 2007; Saad 2004, 2006, 2007 *The evolutionary bases*…; Salmon & Symons 2001; Sullivan & Hagen 2002;

Most writing about consumerism assumes that culture shapes human nature: Arnould & Thompson 2005; Barthes 1973; Bell 1996; Campbell 1987; Douglas & Isherwood 1980; Ewan 1999; Firat & Venkatesh 1995; Holt 1998; Jeffries 2005; Kasser & Kanner 2004

Throughout most of the 20th century, psychologists assumed just a few simple instincts: Pinker 2004; Segerstråle 2001 \*\*

### **Beyond Maslow**

Why we care about friendship, love, family, social status, self-respect, moral virtue, and authenticity: Ellis 2001; Fisher 2004; Gazzaniga 2005; Hrushka & Henrich 2006; Maner**,** DeWall, & Gailliot 2008; Nesse 2001 \*\*

Why 'sex sells': Saad 2004, 2007 *The evolutionary bases…;* Reichert & Lambiase 2006

Why empathy and extraversion are sexually attractive: Brase 2006; Noftle & Shaver 2006 \*\*

Why mobile phones reveal our popularity: Lycett & Dunbar 2000; also see Ling 2004

Why pets reveal our kindness and conscientiousness: Archer 1997

Abraham Maslow’s hierarchy of needs: Maslow 1954

Maslow’s hierarchy is hopelessly muddled: compare to: \*\*

Mate preferences for kindness, which may explain ‘social needs’ for intimacy, belongingness, and acceptance: Farrelly, Lazarus, & Roberts 2007; Figueredo, Sefcek, & Jones 2006; Iredale, Van Vugt, & Dunbar 2008; Shackelford, Schmitt, & Buss 2005 \*\*

Mate preferences for status, which may explain ‘esteem needs’ for recognition, fame, and glory: see DeWall & Maner 2008; Ellis 2001; Judge et al. 2002; Maner**,** DeWall, & Gailliot 2008; Mussweiler 2003; Shackelford, Schmitt, & Buss 2005 \*\*

Mate preferences for intelligence, knowledge, skills, and moral virtues, which may explain ‘cognitive needs’ and ‘self-actualization needs’: see Lynn, Irwing, & Crammock 2002; Murphy 2007; Prokosch et al. in press; \*\*

Mate value as a concept: Apicella & Marlowe 2007; Ben Hamida, Mineka, & Bailey 1998; Kirkpatrick & Ellis 2001; Miller & Todd 1998; Penke et al. 2007; Todd & Miller 1999

Life history theory and applications: Brcic-Kostic 2005; Bribiescas 2006; Figueredo et al. 2006; Hagen & Hammerstein 2005; Hill & Chow 2002; Hill & Hurtado 1996; Jones 2005; Kaplan et al. 2000; Locke & Bogin 2006; Thornhill & Fincher 2007; Walker et al. 2006; Winterhalder & Smith 2000

Elephant seals: Fabiani et al. 2004

Evolution of ‘status-seeking’ males: DeWall & Maner 2008; Ellis 2001 \*\*

Male humans did not evolve in prehistory to compete for large harems, but they did sometimes in post-Paleolithic history: Betzig 1986; Summers 2005 \*\*

Both human sexes did evolve to compete for high-quality mates, friends, and allies: \*\*

Maslow’s hierarchy overlooks most of the adaptive preferences, emotions, motivations, and aspirations that evolutionary psychology has demonstrated: e.g. Fisher et al. 2002 \*\*

Distinctive functions of gratitude, guilt, shame, embarrassment, moral outrage, and forgiveness: Emmons 2007; McCullough et al. 2001; Moll et al. 2005; Nesse 2001; Nowak & Roch 2007; Tangney & Fischer 1995

Continuing popularity of Maslow’s hierarchy of needs in marketing and consumer behavior textbooks: e.g. Hawkins, Best, & Coney 2004; Kotler & Armstrong 2006

### **Why evolutionary consumer psychology is just getting started now**

Evolutionary psychology has been giving deep new insights: Buss 2008, Crawford & Krebs 2008; Dunbar, Barrett, & Lycett 2005, Gaulin & McBurney 2003 \*\*

Great popular books by:

* Richard Dawkins 1976, 1982
* Steven Pinker 1994, 1999, 2002
* David Buss 2003, 2006
* Matt Ridley 1993, 1996
* E. O. Wilson 1975, 1998

Evolutionary psychology revolutionized many traditional disciplines:

* Darwinian medicine: Eaton et al. 2002; Nesse & Williams 1996 \*\*
* Darwinian psychiatry: Brune 2002; Crow 1995; Keller & Miller 2006; McGuire & Troisi 1998; Shaner, Miller, & Mintz, 2004, 2007 ‘Age at onset’, 2007 ‘Mental disorders’, 2009; Troisi 2005; \*\*
* Evolutionary analysis in law: Goodenough & Zeki 2006; Jones & Goldsmith 2005; Posner 1992 \*\*
* Evolutionary economics: Cohen & Dickens 2002; R. Frank 1985, 1988, 1995, 2000, 2007; Gandolfi, Gandolfi, & Barash, 2002; Hammerstein & Hagen 2005; Hodgson 1993; Ormerod 2006; Shermer 2007; Witt 2003 XX
* Behavioral finance and game theory: Camerer 2003; Cohen & Dickens 2002; Frey & Stutzer 2007; Henrich et al. 2001; Thaler & Sunstein 2008 \*\*
* Darwinian political science: Henrich 2004, 2006; Pratto & Hegarty 2000; Orbell et al. 2004; Rubin 2000, 2002; Sidanius & Kurzban 2003; Young 1998
* Darwinian aesthetics: Dutton 2008; Grammer et al. 2003; Miller 2001; Tooby & Cosmides 2001; Voland & Grammer 2003
* Darwinian moral theory: Atran & Norenzyan 2004; Barash 2007; Boehm 1999; Cronin 1991; Dennett 1995, 2003; De Waal 1997, 2000, 2006; Flanagan 1991, 2007; Haidt 2001; Hauser 2006; Lahti & Weinstein 2005; McCullough 2008; Miller 2007; Nesse 2001; Petrinovich 1998; Roes & Raymond 2003; Sinnott-Armstrong 2008; Skyrms 1996, 2003; Wright 1994, 2001 XX

Human nature is at the foundation of all social sciences and humanities: Alcock 2001; Barkow 2005; Cohen & Dickens 2002; Dennett 1995; Lopreato & Crippen 1999; Nicholson 1998; Pierce & White 1999, 2006; Pinker 2002; Singer 2000; E. O. Wilson 1998; Young 1998

Evolutionary psychology has had little influence so far in marketing: for exceptions, see Cary 2000; Colarelli & Dettmann 2003; Hantula 2003; Nicholson 1998; Saad 2007 *The evolutionary bases*…, Shermer 2007

Gad Saad’s papers: Saad 2003, 2004, 2006 ‘Applying evolutionary psychology in understanding the representation of women…’, 2006 ‘Applying evolutionary psychology in understanding the Darwinian roots…’, 2006 ‘Sex differences in OCD…’, 2007 ‘Suicide triggers…’; Saad & Gill 2000, 2003; Saad, Gill, & Nataraajan 2005; Saad & Peng 2006

Gad Saad’s book*:* Saad 2007 *The evolutionary bases*…

Robert H. Frank’s books: R. H. Frank 1985, 1988, 2000, 2005, 2007; Frank & Cook 1995

Robert L. Frank, author of *Richistan*: R. L. Frank 2007

Thomas Frank, author of *The conquest of cool* and *One market under God*: T. Frank 1997, 2000; also see T. Frank & Weiland 1997

Vladas Griskevicius at University of Minnesota: Griskevicius, Cialdini, & Kenrick 2006; Griskevicius et al. 2006, 2007

Jill Sundie at University of Houston: Sundie et al. 2006, in press

A few other Darwinians have thought about evolutionary psychology in relation to particular consumption domains such as food, pets, landscapes, porn, romance novels, single’s ads, drugs, and novels:

* Food: Billing & Sherman 1998; Eaton et al. 2002; O’Keefe 2004; Pollan 2007; Sherman & Billing 1999; Sherman & Hash 2001; Wansink 2006 XX
* Pets: Archer 1997; Gosling & Bonnenburg 1998; Gosling, Kwan, & John 2003
* Landscapes: Kellert & Wilson 1993 \*\*
* Pornography: Hersey 1996, Malamuth, 1996; Pound 2002; Salmon & Symons 2001; Symons 1979 \*\*
* Single’s ads: Pawlowski & Dunbar 1999 \*\*
* Drugs: Nesse & Berridgem 1997; Newlin 2002; Sullivan & Hagen 2002; Troisi 200
* Novels and literature: Bender 1996; Carroll 2004; Gottschall & Wilson 2005; Salmon & Symons 2001; Whissell 1996

Also, for evolutionary psychology on other product categories, see:

* Children’s toys: Alexander & Hines 2002 \*\*
* Entertainment: Davis & McLeod 2003; Nell 2006; Steen & Owens 2001 \*\*
* Mobile phones: Lycett & Dunbar 2000 \*\*
* Sexualized advertising: Saad 2004 \*\*

On Darwinian aesthetics in general: Voland & Grammer 2003 \*\*

Hedonomics and design for pleasure: Dutton 2008; Plassman et al. 2008; Tiger 1992 \*\*

Individual differences research has delivered some wonderfully robust and useful models of human personality, intelligence, and moral virtues: Canli 2006; Carroll 1993; Chamorro-Premuzic & Furnham 2005; Deary 2001; Furnham & Heaven 1999; Gottfredson 1998; Jensen 1998; Lubinski 2000; Lubinski & Humphreys 1997; Neisser et al. 1996; Pervin & Plomin & Spinath 2004; John 1999 \*\*

All six dimensions are:

* genetically heritable: Bailey et al. 2001; Bouchard & Loehlin 2001; Bouchard & McGue 2003; Canli 2006; Caspi et al. 2002; Davis, Luce, & Kraus 1994; Deary, Spinath, & Bates 2006; Eaves et al. 1990, 1999; Ebstein 2006; Jang et al. 1998, 2001, 2002, 2006; Jang, Livesley, & Vernon 1996; W. Johnson et al. 2004; Keller et al. 2005; Luciano et al. 2001; McClearn et al. 1997; McCrae et al. 2001; Miller & Penke 2007; Munafò et al. 2003; Penke, Denissen, & Miller 2007; Petrill 2002; Pettay et al. 2005; Plomin 1999; Plomin et al. 2003; Plomin & Spinath 2004; Posthuma et al. 2002; Rushton 2004; Saudino et al. 1997; **Savitz & Ramesar 2004;** Spinath & O’Connor 2003; Turkheimer 2000; Yamagata et al. 2006 XX
* stable across the life-course: Costa et al. 2000; Deary et al. 2004; Roberts, Caspi, & Moffitt 2001; Roberts, Walton, & Viecthbauer 2006; Soldz & Vaillant 1999; Soto et al. 2008
* salient to other people during normal social interaction: Furnham & Heaven 1999 \*\*
* assessed fairly accurately if unconsciously, even within a few minutes: Mehl, Gosling, & Pennebaker 2006 \*\*

Some textbooks on consumer behavior pay lip service to the Big Five traits: Kotler & Armstrong 2006 \*\*

Wacky catch-phrases:

* *Gung ho!*:Blanchard 1997
* *The millionaire mind*: Stanley 2000
* *Who moved my cheese*: Spencer Johnson 1998
* *Lead like Jesus*:Blanchard & Hodges 2006
* *Eat that frog*: Tracy 2007
* *Purple cow*: Godin 2003

Problems with popular business books: Micklethwait & Wooldridge 1997; Pfeffer & Sutton 2006

### **This book**

Most of the trenchant thinking and writing about consumerism has been produced by:

* cultural theory: Arnould & Thompson 2005; Barthes 1973; Bell 1996; Benjamin 1999; Cashmore & Rojek 1999; Campbell 1987; Ewan 1999; Firat & Venkatesh 1995
* post-modern philosophy: Baudrillard 1983, 1998; Heidegger 1977; Marcuse 1956, 1964; also see Firat & Venkatesh 1995; Holt 1997
* gender feminism: Jeffries 2005 \*\*
* cultural anthropology: Douglas 1994, 2002 \*\*
* media studies: Bagdikian 2004; Chomsky 2002, 2008; De Zongotita 2005; Lasn 2006; Postman 2005; Rushkoff 1999 \*\*
* sociology: Corrigan 1997 \*\*

They preach that scientists work to maintain the status quo, and that evolutionary psychologists like me are especially dangerous and conservative: Segerstråle 2001 \*\*

Radical critiques of consumerist culture:

* Marx: *The Communist manifesto, Grundrisse, Capital*
* Nietzsche: *Untimely meditations, Beyond good and evil, On the genealogy of morals, Twilight of the idols*
* Veblen: 1899, 1904, 1914, 1918, 1919, 1921
* Adorno: *Dialectic of enlightenment*, *The authoritarian personality, Minima moralia*
* Marcuse 1956, 1964; also *Reason and revolution, Repressive tolerance, An essay on liberation*
* Baudrillard 1983, 1998; also *The system of objects, The mirror of production, Seduction, America*

**This author**

Evolutionary psychologists have often been caricatured as racist, sexist, conservative reductionists: e.g. Rose & Rose 2001; see Segerstråle 2001 \*\*

Darwinian feminism: Campbell 2002; Hrdy 1997, 1999; Low 2005; Moore et al. 2006; Smuts 1995; Vandermassen 2008

Enjoy anti-consumerism books by:

* Thomas Frank: T. Frank 1997, 2000; T. Frank & Weiland 1997
* Juliet Schor 1992, 1998, 2004; Schor & Holt 2000

The free market as the most ingenious system yet devised for people to enjoy mutual gains from trade: Cosmides & Tooby 1994; also Carrier 2006; Gurven 2004 \*\*

The way that corporate lobbyists corrupt democracy: Acemoglu & Robinson 2006; Bakan 2004; Heinz et al. 1997; Huffington 2004; Nestle 2002; Palast 2004; Stigler 1971 \*\*

Our quality of life in the developed world is a fragile, fortunate exception to the historical norm: Bernstein 2004, 2008; G. Clark 2007; Fogel 2004; Nussbaum & Sen 1993; \*\*

Key founders of evolutionary psychology as of 1990:

* Leda Cosmides and John Tooby: Cosmides & Tooby 1994, 1999, 2002; Tooby & Cosmides 1990, 2001, 2005
* David Buss: Buss 1984, 1989, 1990, 1991, 1995, 2000, 2001, 2003, 2005, 2006, 2008
* Martin Daly and Margo Wilson: Daly & Wilson 1999; Wilson & Daly 1985

On Peter Todd’s subsequent evolutionary psychology work: Gigerenzer & Todd 1999; Miller & Todd 1998; Todd & Miller 1999; Todd, Billari, & Simão 2005

Note: The Centre for Economic Learning and Social Evolution at University College London was directed by game theorist Ken Binmore, who had a great influence on my thinking about social and economic interaction: Binmore 2005

Psychology versus economics: Cohen & Dickens 2002; Frey & Stutzer 2007; Hertwig & Ortmann 2001

A 1999 conference in London: ‘The evolution of utility functions’, Dec. 1-3, University College London

Revealed preferences doctrine: see Becker 1998; Gagnier 2001; Hertwig & Ortmann 2001; Sowell 2007 \*\*

Maternal grandfather Henry G .Baker: Baker 1953

Marketing underlies everything in modern human culture: see Bloom & Gundlach 2000; Seabrook 2001 \*\*

As of 2004, about 212,000 Americans worked as market and survey researchers …: U.S. Department of Labor statistics

**Chapter 3: Why marketing is central to culture**

On the origins and nature of culture: Alvard 2003; Aunger 2000; Baumeister 2005; Borgerhoff Mulder, Nunn, & Towner 2006; Boyd & Richerson 2005; De Waal & Tyack 2003; Douglas & Isherwood 1980; Gangestad, Haselton, & Buss 2006; Henrich & McElreath 2003; Hughes 2005; Mace, Holden, & Shennan 2005; Miller 1999; Miller 2000 ‘Memetic evolution…’; Neiva 2007; Pagel & Mace 2004; Richerson & Boyd 2004; Schaller 2006; Schaller & Crandall 2004; Sperber 1996; Sperber & Hirschfeld 2004; Tomasello et al. 2005; Whiten 2005; Wilk & Cliggett 2004 XX

Marketing is more than advertising: Levitt 1983 \*\*

The concept of marketing in its modern form arose only in the 20th century: Bloom & Gundlach 2000 \*\*

Mass production led to an even heavier emphasis on the cost-efficiency of production:

Edward Bernays: Bernays 1928, 1955; also see Tye 1998

Willie Loman in *Death of a Salesman*: see the 1949 play by Arthur Miller

1950s marketing revolution and marketing orientation: Levitt 1983 \*\*

Marketing revolution and the counter-culture: T. Frank 1997; also Dobrow 1984 \*\*

No role for market research in the world-views of economists:

* Friedrich Hayek 1988
* Milton Friedman 2002
* Gary Becker 1971, 1994, 1998, 2005; Becker & Becker 1997; Becker & Murphy 2003

To left-wing social scientists, journalists, and Hollywood script-writers, marketing means manipulative advertising by greedy corporations: Bakan 2004; Beatty 2001; Galbraith 1958; Seabrook 2001 \*\*

On the weaknesses and obscurity of marketing as a science: see Armstrong 1991, 2003; November 2004; Pfeffer & Sutton 2006; Sprott & Miyazaki 2002

Lines overhead at the 2006 Intelligent Printing & Packaging Conference: *Harper’s* magazine, Feb. 2007, p. 22

30,000 current denominations of the Christian faith: D. Barrett, Kurian, & Johnson 2001

Rogerian psychotherapy: see Carl Rogers *Client-centered therapy, On becoming a person*

Marketing as materialism: Kasser 2002, Kasser & Kanner 2004 \*\*

Marketing as narcissistic pseudo-spiritualism: see Brooks 2004 \*\*

Brands versus commodities: Aaker 1997; Berger, Draganska, & Simonson 2007; Chaor & Schor 1998; Dawar & Parker 1994; Dyer, Falzell, & Olegario 2004; Fournier 1998; Hart & Murphy 1998; Holt 1997, 2002; Marsden 2002; Muniz & O’Guinn 2001; Neumeier 2005; O’Cass & Frost 2002; Ries & Ries 2005; Schmitt & Simonson 1997; Sullivan 1998; Twitchell 2005; XX

The seductive immateralism of *Second Life:* Au 2008; Boellstorff 2008; Ludlow & Wallace 2007; Meadows 2008; Rymanszewski et al. 2008 \*\*

Elite versus mass preferences in politics and consumerism: see Hofstadter 1966; Leibenstein 1950; Miller 2000; Rothkopf 2008; Seabrook 2001

Good vs. bad state-organized services: Mulgan 2006

FIM-92 Stinger surface-to-air missiles: see Janes.com

Marketing is the most important invention of the last two millennia: Miller 2000 ‘Marketing’

Ecologists estimate that humans now consume more than half our planet’s net primary productivity: Rosenzweig 2003

20 million species on earth: Rosenzweig 2003

**Marketing versus memes**

Susan Blackmore on memes: Blackmore 1999

Richard Dawkins on memes: Dawkins 1976

Others on meme theory: Aunger 2000; Heath, Bell, & Sternberg 2001; Shennan 2002

Meme theory applied to marketing: Godin 2001, 2002; Heath & Heath 2007; Kirby & Marsden 2005; Marsden 1998, 2002; Pech 2003; Rosen 2000; Scott 2007; cf. Williams 2002

My critique of Blackmore: Miller 2000 ‘Memetic evolution…’

Most successful memes are promoted by institutions with wealth and power: Bakan 2004 \*\*

Marketers sometimes refer to their work as ‘cultural engineering’: Scott 2007 \*\*

The six global media conglomerates: Bagdikian 2004; Bakan 2004; Blumenthal & Goodenough 2006; Rushkoff 1999

Cross-promotion as standard operating procedure for media conglomerates: \*\*

The four big advertising holding companies: \*\*

About $400 billion per year is spent in the global ad market: \*\*

Every evolutionary psychology textbook suggests that our fast-food cravings for fat, salt, and sugar are innate, evolved preferences:

On the fast food industry and food lobbyists: see Brownell & Horgen 2003; Drewnowski 2007; Nestle 2002; Pollan 2007; Schlosser 2000; Singer & Mason 2007; Wansink 2006

High-fructose corn syrup: Johnston, Delva, & O’Malley 2007; Vartanian, Schwartz, & Brownell 2007

The shaping of such ideas, tastes, norms, habits, and memes by social power systems is exactly what the social sciences study: Barkow 2005; Bloom & Gundlach 2000; Cole, Mailath, & Postlewaite 1992; Hedström 2005; Lareau & Conley 2008; Landes 1999; Lopreato & Crippen 1999; Pierce & White 1999 \*\*

Marketers read the shortest available pop-business books by eccentric writers with extremely large or small quantities of hair: see Gladwell 2000, 2007; Godin 1999, 2001, 2002, 2005

**Chapter 4: This is your brain on money**

Narcissism as narcissistic personality disorder: \*\*

Personality disorders in general: Coid et al. 2006; Grant et al. 2004; Livesley et al. 1998; Skodol et al. 2005 \*\*

On the evolutionary origins and nature of mental illness in general: Brune 2002; Cosmides & Tooby 1999; Keller & Miller 2006; Krueger & Markon 2006; McGuire & Troisi 1998; Wakefield 1992, 2006

**Narcissism and consumerism**

Freud introduced the idea of narcissism in 1914: in the essay “On narcissism”

Psychiatry’s bible, the DSM-IV-TR: American Psychiatric Association 2000

Narcissism and self-stimulation, and showing off: Lasch 1991; Vazire & Funder 2006; Wallace & Baumeister 2002 \*\*

Narcissism symptoms higher in:

* Young adults
* Americans: Lasch 1991
* Males

True narcissistic personality disorder affects only about 1% of people: Coid et al. 2006; Grant et al. 2004 \*\*

On narcissism predicting sexual infidelity, promiscuity, and rape: Baumeister, Catanese, & Wallace 2002; Buss & Shackelford 1997; Robins & Beer 2001; Vazire & Funder 2006

On narcissism undermining relationships: Campbell & Foster 2002; Cooper & Sheldon 2002; Foster, Shrira, & Campbell 2006; Kelly & Conley 1987; Vazire & Funder 2006

On narcissism and consumerism: Lasch 1991

On consumerism as similar to mania in bipolar disorder: Whybrow 2006; also see Jamison 1993

The self-esteem movement in American schooling: \*\*

**The two faces of consumerist narcissism**

Status, showing off, and fitness indicators: \*\*

Pleasure, self-stimulation, and fitness cues: \*\*

Fitness cues identify ways to promote survival and reproduction: \*\*

Cues that identify fertile females carry information about mating opportunities: \*\*

Animals evolve motivation systems: \*\*

**The two faces of the iPod**

History of the iPod: \*\*

Conspicuous consumption in Thorstein Veblen’s sense: Veblen 1899; see also Alcott 2004; Bourdieu 1987; R. H. Frank 2000; Heffertz working paper; Heffertz & Frank in press; Leibenstein 1950; Mason 1981, 2000; Packard 1960; Remnick, 2001; Silverstein & Fiske 2003 \*\* XX

Accessories for iPod customization: see Gelaskins.com, Istyles.com, Skinit.com

**Showing off**

Gad Saad’s 2007 book *The evolutionary bases of consumption*:

A surprisingly high proportion of products are designed and marketed for showing off, according to:

* Thorstein Veblen: 1899, 1918
* Vance Packard: 1957, 1959, 1960, 1962; also see Horowitz 1994
* Robert H. Frank 2000, 2007 *The economic naturalist*

We rarely have clear insight into our own forms of consumer narcissism: Brooks 2004: Johansson-Stenman & Martinsson 2006; \*\*

### **The narcissism premium for cost-dense products**

Notes on the table of cost-densities:

* Tap water: Albuquerque high desert city, 2005, typical residential service through ¾” pipe of 15 water units at 748 gallons per unit, at $6.04, per month.
* Rice: 50 pound bag from grocery store, $14
* Sugar: 50 pound bag from grocery store, $17
* Gasoline: regular unleaded, 6 lbs per gallon, @ $3/gallon
* Can of soda: 12 ounce, $.60
* Apples: Braeburn from grocery store
* House: typical suburban home, 40 lbs/square foot weight @ $80/square foot build cost
* Television: Sony Trinitron® HDTV, 36” tube, 234 pounds, @ $1,500
* Car: Toyota Camry 2008 SE V6, 3,460 pounds, @ $23,640 MSRP
* Fitness machine: Vision Fitness X6100 elliptical trainer, 200 pounds, @ $1,500
* Wine: Penfolds Shiraz Mourvedre Bin 2, 750 ml @ $15.00
* Chair: Levenger Sonoma leather reading chair, 94 pounds, $1,100
* Coffee: Starbucks Columbia Nariño Supremo arabica, 1 lb @ $ 12.00
* Hardback book: Harry Potter and the Half-Blood Prince, 2.4 pounds, $30
* Bicycle: Fuji America Ace, 25 pounds, @ $430
* Luxury car: Lexus LS 600h L, 5,050 pounds, $104,000
* Blue jeans: Levi’s 501 original jeans, 1.6 pounds, $35
* Pet dog: 35 lb border collie with breeding papers @ $800
* Chainsaw: Husqvarna 359, 3.9 hp, 20” blade, 13 pounds, $480
* Human blood: 500 ml unit of whole blood @ $50
* Silver: bullion, $7 per troy ounce
* Combat knife: Ka-Bar KA 1271 with 8” carbon steel blade, .8 pounds, @ $82
* Watch: Timex Reef Gear Diver, steel case, waterproof to 200 m, 7.2 ounces, $75
* Laptop computer: Dell Inspiron 600M, 5.4 pounds, $1,100
* Telescope: TEC 150 APO Refractor, 20 pounds, $4,750
* Bra: Victoria’s Secret seamless IPEX demi bra, 3 ounces, $45
* Handgun: Glock 17, 9 mm, 22 ounces, @ $599
* Private jet: Learjet Challenger 300, 38,500 pounds @ $17.8 million
* Music CD: 15 grams @ $16.00
* Perfume: Guerlain Samsara, 1 oz. EDP spray, @ $58
* iPod 6th Gen. ‘classic’ : 5.7 ounces @ $350
* Fake Columbia University diploma: printed on 80 lb per 500 sheets stock @ $175
* Cell phone: Motorola E815, 4.6 ounces, $400
* Porno DVD: The Fashionistas, Evil Angel Productions, 15 grams, @ $50
* Breast implants: 2 x 400 cc implants by cosmetic surgeon @ $3,400
* Lipstick: MAC brand, 3 grams net weight @ $17
* Marijuana: Super Silver Haze from Amsterdam coffee shop, 9 Euros per gram
* Gold: bullion, $440 per troy ounce
* $20 bills: US currency, 1 gram each
* Luxury watch: Rolex Submariner, steel case, waterproof to 300m: 150 grams, $3,350
* Fake diamonds: cubic zirconium, 6.5 mm 1.75 carat round white brilliant-cut @ $6.00
* Human kidney: Turkish black market transplant, average 140 grams, @ $5,000 installed
* Cocaine: powder, $80 per gram street price
* Human semen: 3 gram insemination vial from intelligent, attractive donor @ $350
* Viagra: 100 mg pills, $350 retail for 30
* Prozac: generic fluoxetine, 20 mg pills @ $90 retail for 30 pills
* Heroin: $150 per gram street price
* Ecstasy: 150 mg tablets @ $25 street price
* Botox: anti-wrinkle injection by cosmetic surgeon, .8 grams, @ $250
* Columbia University B. A. diploma: printed on 80 lb per 500 sheets stock @ $200,000
* Diamonds: 1-carat VS2-clarity round brilliant cut stones @ $6,600
* Painting: Van Gogh’s Portrait of Dr. Gachet, c. 3 pounds canvas and paint, @ $82.5 million in 1990 auction
* LSD: 150 microgram dose @ $10 street price
* Human egg: for one implanted ovum from intelligent, attractive donor, 1 egg = 100 micrometers diameter, so c. 1 million eggs per gram, @ $10,000 total procedure costs

The most precious cargo that males desire: \*\*

These market pressures apply equally whether the egg is obtained from a donor who must be paid by check, or from a wife who must be courted: \*\*

Billionaire Ron Perelman and his first three ex-wives: see his Wikipedia.org entry

The De Beers cartel: Hart 2001 \*\*

The human genome is the ancestral vault of riches: \*\*

**What The Sims 2 got wrong about consumer narcissism**

*The Sims* by Electronic Arts: \*\*

Computer games as potent educational tools: Beck & Wade 2004; Herz 1997; Poole 2000

**Chapter 5: The fundamental consumerist delusion**

Wealth as credit: Schor 1998; Yunus 2007 \*\*

Legitimate vs. illegitimate wealth: \*\*

Brand positioning to signal consumer identity: Akerlof & Kranton 2000; Clippinger 2007 \*\*

On the hidden natural motives underneath modern consumerist identity: see Byrne 2006; Freud 1961 \*\*

Status as an elusive concept: Alderson, Junisbai, & Heacock 2007 \*\*

Robin Dunbar has shown that humans use verbal grooming: Dunbar 1996, 2003, Dunbar, Marriot, & Duncan 1997; Hill & Dunbar 2003;

Many types of status: Bromley 1993; Mussweiler 2003

* intellectual status: Hofstadter 1966 \*\*
* cultural status: Alderson, Junisbai, & Heacock 2007; Holt 1998 \*\*
* moral status: Miller 2007 ‘Sexual selection …’; Nesse 2001; also Gazzaniga 2005 \*\*

Taste admits an even broader diversity of interpretations: see Carey 2005; Stallabrass 2005; Steiner 2001; Velthius 2005

Similarities make it easier for people to coordinate their behavior: \*\*

‘Focal points’ in ‘coordination games’: Schelling 1976

Artist Fred Tomaselli:see his Wikipedia.org entry

### **The social psychology of consumer narcissism**

Under natural conditions, we are good at doing perspective-taking: \*\*

We’re exposed to about 3,000 ads per day: \*\*

*American Psycho*: by Brett Easton Ellis

Decades of social psychology research suggest that we automatically notice only a few basic traits when we see people:

* size, shape, age, sex, race, familiarity, relatedness, and attractiveness: Maner et al. 2003; McElreath, Boyd, & Richerson 2003 \*\*
* special states of physiology: \*\*
* special states of emotion: Elfenbein & Ambady 2002; Hess & Philippot 2007 \*\*

On cosmetic surgery: Blum 2003; Kuczynski 2005

Sex reassignment surgery: Bailey 2003

The sexually-differentiated brain that grew *in utero*: Gazzaniga 2004 \*\*

Recent research on ‘person perception’: Ambady & Skowronski 2008; also Adolphs 2003; Ambady, Bernieri, & Richeson 2000; Andrews 2001, Cialdini 2001, Kenrick, Neuberg, & Cialdini 2005, Krueger & Funder 2004; Maner**,** DeWall, & Gailliot 2008; Mehl, Gosling, & Pennebaker 2006; Yamagishi et al. 2003; Zebrowitz & Montepare 2005; Zebrowitz & Rhodes 2004

Accuracy tends to be higher for more visible traits such as extraversion: Mehl, Gosling, & Pennebaker 2006 \*\*

Accuracy is also higher when we judge a person behaving in a free, unscripted situation: \*\*

More reliable information when the persons observed think they are alone: \*\*

David Funder’s Realistic Accuracy Model: Funder 1995, 1999, 2006

Why major social rituals entail such long durations, high stress levels, and disinhibiting drugs: see Bloch, Rao, & Desai 2004; Mead 2007; Sosis & Bressler 2003 \*\*

Many mental disorders are also rather easy to notice in a few minutes based on appearance, behavior, and conversation: \*\*

On the origins and nature of psychopathy: Cale & Lilienfeld 2002; Fazel & Danesh 2002; R. F. Hare 1993, 2006; Kiehl 2006; Kinner 2003; R. F. Krueger et al. 1998; Lalumiere et al. 2001; Mealey 1995; Millon et al. 2003; Quinsey 2002; Raine 2002; Rhee & Waldman 2002; Wilson, Near, & Miller 1998

### **The fetishization of youth and disparagement of wisdom in consumerist social judgment**

The accuracy of person perception tends to improve with age: \*\*

Teenagers are overly influenced by the traits that are easiest to assess: \*\*

Teen preferences may bewell-adapted to getting good genes in the context of short-term mating: \*\*

Teens reach puberty far earlier today than they did under prehistoric conditions: Weisfeld 1999 \*\*

Parents always had a fairly heavy influence on mate choices made by their teens: \*\*

Two key 20th century ideologies:

* rejecting the idea that an individual’s personality, intelligence, mental health, and moral virtues are useful concepts: Allenby 1999 \*\*
* the idea that these traits show stability and heritability: \*\*

The blank-slate ideology: see Pinker 2002; Segerstråle 2001

On ideology in general: Barthes 1973; Eagleton 1991; Marcuse 1964; Sowell 2007 \*\*

On the psychological functions and correlates of ideology: Jost et al. 2003, 2007; Van Hiel, Mervielde, & De Fruyt 2004 \*\*

DJ Spooky: a black hip-hop musician (b. Paul D. Miller, 1970); Djspooky.com

DJ Spinna: a black hip-hop musician (b. Vincent Williams); Djspinna.com

DJ Qualls: a white film & TV actor (b. 1978), appeared in *The Core* (2003)

### **The Fundamental Consumerist Delusion**

We humans have already spent millions of years evolving awesomely effective ways to display our mental and moral traits: Nesse 2001 \*\*

On the ‘spotlight effect’ whereby we over-estimate how much attention others are paying to our appearance and behavior: Gilovich, Kruger, & Medvec 2002; Gilovich, Medvec, & Savitsky 2000; Savitsky, Epley, & Gilovich 2001

On why young males are risky drivers: Byrnes, Miller, & Schafer 1999; Nell 2002

A better sense of humor would increase female attention far more effectively: Bressler & Balshine 2006; Bessler, Martin, & Balshine 2006; Cooper et al. 2007; Greengross & Miller 2008; Kaufman et al. 2007; Strauss 2005

*Consumer Reports*: Consumer Reports 2008

The radar of spousal jealousy: see Buss 2001

Repeated-interaction mixed-motive games: Camerer 2003; Colman 2003; Skyrms 1996; Trivers 1971

**Chapter 6: Flaunting fitness**

Bowerbirds build elaborate nests: Madden 2001

Almost all animal signals convey self-promoting information: Bradbury & Vehrencamp 1998; Maynard Smith & Harper 2004; Lotem, Wagner, & Balshine-Earn 1999; McGregor 2005

Amotz Zahavi’s handicap principle: Zahavi 1975; Zahavi & Zahavi 1997

Biologists around 1990 understood it clearly enough to develop mathematical models: Grafen 1990

Peacock’s tail as a fitness indicator: Loyau et al. 2005; Møller & Petrie 2002

Humans body and face traits as fitness indicators in general: Etcoff 1999; Feinberg et al. 2005; Grammer et al. 2003; Jablonsky 2006; Kobayashi & Kohshima 2001; Langlois et al. 2000; Miller 2001; Morris 1985; Peiss 1998; Rhodes & Zebrowitz 2001; Scheib, Gangestad, & Thornhill 1999; Sugiyama 2005; Voland & Grammer 2003

Female body and face traits as fitness indicators: Farrell-Beck & Gau 2002; Gottschall 2007; Hönekopp, Bartholomé, & Jansen 2004; Jasienska et al. 2004; Law Smith et al. 2006; Thornhill & Grammer 1999

Male body and face traits as fitness indicators: Dixon et al. 2003; Hönekopp et al. 2006; Shoup & Gallup 2008

Mental fitness indicators:

* Language: Burling 2007; Cooper et al. 2007; Dessalles 1998; Leaper & Ayres 2007; Locke 2008; Locke & Bogin 2006; Miller 2000 *The mating mind*; Miller & Tal 2007; Mithen 2005; Pinker 1994; Rosenberg & Tunney 2008
* Humor: Bressler & Balshine 2006; Bessler, Martin, & Balshine 2006; Gervais & Wilson 2005; Greengross & Miller 2008; Kaufman et al. 2007; Provine 2000
* Art: Dutton 2008; Henshilwood et al. 2004; Miller 1999, 2001; Miller & Tal 2007; Plourde 2009; Vanhaeren et al. 2006; Voland & Grammer 2003
* Music: Hagen & Bryant 2003; Levitin 2006; Miller 1999, 2000 “Evolution of human music”; Mithen 2005; Rentfrow & Gosling 2006
* Creativity: Eysenck 1995; Griskevicius, Cialdini, & Kenrick 2006; George & Zhou 2001; Haselton & Miller 2006; Kaufman et al. 2007; Miller & Tal 2007; Nettle 2001; Nettle & Clegg 2006; Simonton 1999, 2000; Sternberg 2006
* Intelligence: Geher & Miller 2007; Kanazawa 2000; Kanazawa & Still 2000; Miller 2000 “Sexual selection for indicators of intelligence”; Plourde 2009; Prokosch et al. in press
* Kindness: Brase 2006; Farrelly, Lazarus, & Roberts 2007; Griskevicius et al. 2007; Iredale, Van Vugt, & Dunbar 2008; Lotem, Fishman, & Stone 2002; Miller 2007 “Sexual selection for moral virtues”; Millet & Dewitte 2007; Reyes-García et al. 2006; Shackelford, Schmitt, & Buss 2005

Signaling theory applies equally to nature and to culture: Hershey 1996, 1999; Neiman 1998; Plourde 2009 \*\*

**Counterfeiting**

Anti-counterfeiting tactics: see: for U.S. currency: UStreas.gov on ‘How to detect counterfeit money’; for U.K. currency: Bankofengland.co.uk on ‘banknote security features’

The upgraded Series 2004 $20 bill: see Moneyfactory.gov on ‘new money’

Euro currency: see Ect.int on ‘banknote security features’

Gold necklaces: Newman 2000

Replica watches: Glasmeier 2000

Shuanghuan Automobile: ‘The sincerest form of flattery’, *The Economist*, April 7, 2007, p. 64-65

De Beers diamond cartel: Bergenstock, Deily, & Taylor 2006; Hart 2001

History of imitation diamonds: Cipriani & Borelli 1986

On buying good-quality diamonds: Newman 2008

Evolution of verbal humor: Kaufman et al. 2007; Provine 2000

Fake Rembrandts: on art forgery, see Briefel 2006; Dutton 1985; Radnóti 1999

### **Signaling, branding, and profit**

If you want to make a decent profit, your product must have a special signaling value: \*\*

Comparison-shopping based on features and price drives profits to zero: \*\*

Advertising creates the learned association between the consumer’s aspirational trait and the company’s trademarked brand name: Twitchell 2000 \*\*

Celebrity endorsements: Choi, Lee & Kim 2005; Cronley et al. 1999

De Beers ‘right hand rings’: see Therighthandring.com

### **Why bother signaling?**

Quality-signals can solicit parental care: Furlow 1997; Lotem, Wagner, & Balshine-Earn 1999; Soltis 2004

Discriminative parental solicitude; Children whose physical or mental defects undermine such conspicuous quality-signals are subject to much higher rates of parental abuse, neglect, and homicide: Daly & Wilson 1999; Hausfater & Hrdy 2008

Kin selection: Hamilton 1964

Local celebrities are first protected and last abandoned under conditions of warfare, starvation, or illness: Boone 1998; Sugiyama & Sugiyama 2003

Collective quality-signaling to potentially hostile groups is the essence of gang warfare, inter-ethnic rivalry, and international politics: Chagnon 1988; Gat 2008; Hagen & Bryant 2003; Neiman 1998

The $3 trillion war in Iraq: Stiglitz & Bilmes 2008

On the fitness benefits of status-seeking and/or conspicuous consumption

* in small-scale societies: Alvard & Gillespie 2004; Godoy et al. 2007
* in complex societies: Barkow 1989; Betzig 1992; Ellis 2001; Frank 1985, 1995; Keltner, Gruenfeld, & Anderson 2003; Perusse 1993; Rubin 2000, 2002; Sugiyama & Sugiyama 2003

### **Signals of body and mind**

Self-deception and derogation of rivals: Schmitt & Buss 1996; Trivers 1971

### **Conspicuous consumption as fitness-signaling**

Some folks consider it blindingly obvious that most human economic behavior is driven by status-seeking, social signaling, and sexual solicitation: see Baumeister & Vohs 2004; Ellis 2001; Heffertz working paper; Heffertz & Frank in press \*\*

Other folks consider this an outrageously cynical view, and argue that most consumption is for individual pleasure ‘utility’ and family prosperity ‘security’: \*\*

My colleagues Vladas Griskevicius, Josh Tybur, and others ran a series of four experiments: Griskevicius et al. 2007

On the evolution and functions of conspicuous charity: see Beato 2008; Boone 1998; Brandt & Sigmund 2005; Brase 2006; Dessalles 1998, 2007; Reyes-García et al. 2006; Goldberg 1995; Griskevicius et al. 2007; Hawkes & Bliege Bird 2002; Iredale, Van Vugt, & Dunbar 2008; Lotem, Fishman, & Stone 2002; Reed, Aquino, & Levy 2007; Roberts 1998; Smith & Bliege Bird 2000; Tessman 1995 \*\*

On charity in general: Handy & Handy 2006 \*\*

Attractiveness of heroic helping: Farthing 2005; Kelly & Dunbar 2001; also Barclay 2006; Kurzban, DeScioli, & O’Brien 2007

The highly promiscuous men who are most motivated by mating effort: Charles & Egan 2005 \*\*

A fascinating recent paper by Jill Sundie, Vladas Griskevicius, and colleagues: Sundie et al. in press

Sociosexuality inventory: Bailey et al. 2000; Penke & Asendorpf in press; Schaller & Murray 2008; Schmitt 2005;

A final study by evolutionary psychologists Margo Wilson and Martin Daly: Wilson & Daly 2004

**Chapter 7: Conspicuous waste, precision, and reputation**

Elias Root Beadle quote: Fitzhenry 1993 p. 128

Efficiency-seeking instincts: Sennett 2008 \*\*

The theory of ‘indexes’ in the 1990s: \*\*

Body size as a fitness index or indicator: Berglund, Bisazza, & Pilastro 1996

Index theory overtaken by life history theory: Hill & Hurtado 1996; Kaplan et al. 2000; Winterhalder & Smith 2000 \*\*

Empirical tests of life history theory suggest that such evolutionary re-allocations of energy from one growth-pattern to another growth-pattern are rather easy to achieve: \*\*plasticity

There are not, in fact, many hard ‘developmental constraints’ on organisms: cf. Gould \*\*

Thorstein Veblen’s theory of conspicuous consumption: Veblen 1899; also see Alcott 2004; Bagwell & Bernheim 1996; Leibenstein 1950; Mason 1981, 2000; Sundie et al. in press; Trigg 2001 \*\*

Indicator theory: \*\*

Peacock’s tail as fitness indicator: Loyau et al. 2005; Møller & Petrie 2002

Specifications of Hummer H1 and Lexus LS 460: from Edmunds.com accessed June 2008

Consumer Reports reliability ratings: Consumer Reports 2008

Badges of fitness or status: \*\*

Facial markings as status badges among paper wasps: Tibbetts & Dale 2004

On the crucial role on punishing cheaters and praising altruists in sustaining human cooperation: see Barclay 2006; Boyd et al. 2003; Boyd & Richerson 1992; Fehr & Gächter 2002; Gintis 2006; Gürerk, Irlenbusch, & Rockenbach 2006; Henrich 2006; Henrich et al. 2006; D. Johnson 2005; Kurzban, DeScioli, & O’Brien 2007; Nowak 2006; Price 2005; Trivers 1971

Brands as status badges: \*\*

Brand recognition as crucial to brand value: see Goldstein & Gigerenzer 2002

On consumerism as conspicuous waste: Packard 1960; Strasser 1999 \*\*

Species extinction risk increased by being described in scientific literature: Stuart et al. 2006

### **The relative efficiency and morality of different signaling systems**

Environmental critiques of conspicuous consumption: Ayres & Martinas 2006; Borgerhoff Mulder & Coppolillo 2005; Brower & Leon 1999; Brown 2008; Diamond 2005; Farley & Daly 2003; Hawken 1993; Hayden 2000; Howarth 1996, 2006; T. Jackson 2002; McKibben 2007; Myers 1997; Myers & Kent 2004; Nadeau 2003; Norton, Constanze & Bishop 1998; Penn 2003; Redclift 1996; Rosenzweig 2003; Simpson, Toman, & Ayres 2005; Schor 2005; Szasz 2007; Van den Bergh, Ferrer-i-Carbonell, & Munda 2000; cf. Lomborg 2001 XX

Scientology as conspicuous waste:

Fuel requirements of mega-yachts: \*\*

Prehistoric hunting success in meat-pounds per day: Hill & Hurtado 1996

Thomas Malthus on populations vs. carrying capacities: *An essay on the principle of population*

Veblen envisioned a technocratic utopia: Veblen 1904, 1919, 1921; also see Atkin 1977

The aesthetics of international modernism, minimalism, and techno-fetishism as forms of conspicuous precision: see Abercrombie 1995; Atkin 1977; Mumford 1967, 1970; Nelson 1957 \*\*

The eco-aesthetics of ‘small is beautiful’: \*\*

Increased status for the engineers of the very small electronics, biotech, nanotech: Mansell et al. 2007 \*\*

Solving the problem of under-consumption in the 1950s: \*\*

Vance Packard: Packard 1957, 1959, 1960, 1962; also see Horowitz 1994

The innovation parade in car features: \*\*

The gradual ‘dematerialization’ of consumption: \*\*

Conspicuous reputation depends on investments in product’s marketing and branding: \*\*

Top 10 brand equities according to Interbrand: from Interbrand.com

Neuroeconomics: Glimcher et al. 2008; Montague & Berns 2002; Plassman et al. 2008; Tomlin et al. 2006

Invidious social comparison effects: Festinger 1954; Fliessbach et al. 2008; Mussweiler 2003

The zero-sum game of social status: Ellis 2001 \*\*

**Chapter 8: Self-branding bodies, self-marketing minds**

Humans body and face traits as fitness indicators in general: Etcoff 1999; Feinberg et al. 2005; Grammer et al. 2003; Jablonsky 2006; Kobayashi & Kohshima 2001; Langlois et al. 2000; Miller 2001; Morris 1985; Peiss 1998; Rhodes & Zebrowitz 2001; Scheib, Gangestad, & Thornhill 1999; Sugiyama 2005; Voland & Grammer 2003

Female body and face traits as fitness indicators: Farrell-Beck & Gau 2002; Gottschall 2007; Hönekopp, Bartholomé, & Jansen 2004; Jasienska et al. 2004; Law Smith et al. 2006; Thornhill & Grammer 1999

Male body and face traits as fitness indicators: Dixon et al. 2003; Hönekopp et al. 2006; Shoup & Gallup 2008;

Body-watching: Desmond Morris 1985

Publilius Syrus quote: \*\*

Oscar Wilde quote: \*\*

Martha Graham quote: \*\*

As Darwin realized: see *The descent of man* (1871)

Genetic inbreeding reduces our health, fertility, and attractiveness: \*\*

Bodily fitness indicators are most reliable at the medium-to-low end of fitness: Zebrowitz & Rhodes 2004

Repulsion to physical ugliness, asymmetry, disease, handicaps, lesions, and injuries: Brown et al. 2005; Cárdenas & Harris 2006; Scheib, Gangestad, & Thornhill 1999

Body Worlds exhibitions: Bodyworlds.com

China’s executions: \*\*

Black market in human organs: Scheper-Hughes 2000

Cadaver trade: Cheney 2004

Augie Perna quote: *Harper’s* magazine, March 2004, p. 47

Epictetus quote: \*\*

Biometrics: \*\*

Analyses of physical appearance improvement industries:

* clothing \*\*
* cosmetic surgery: Blum 2003; Kuczynski 2006; Rothman & Rothman 2003
* fitness industry: Kolata 2003 \*\*

Bust-Up chewing gum: Getbustupgum.com

Extreme Makeover reality TV show: see its Wikipedia entry

##### The rise of the triathlon

History of the marathon: \*\*

Effects of marathon training on the body: \*\*

History of the triathlon: \*\*

Effects of triathlon training on the body: \*\*

Physical demands of ancestral human life: Stearns & Koella 2008 \*\*

### **Facial fertility indicators and cosmetics**

Traits women display to appear sexually attractive:

Sexual selection focuses heavily on facial appearance: \*\*

Male testostertonized features: \*\*

Female estrogenized features: \*\*

Evolution of female ‘continuous sexual receptivity’ throughout cycle: \*\*

Evolution of female sexual activity before fertility begins in teen years: \*\*

Evolution of menopause female sexual activity after fertility ends around age 50: \*\*

Age-profile of female fertility: \*\*

Males evolving to discriminate peak fertility from non-fertility: \*\*

Cosmetics that amplify facial fertility-cues: \*\*

CoverGirl makeup:

History of cosmetics: \*\*

Chemical differences between the cosmetics are negligible: \*\*

### **Looking tough in World of Warcraft**

Massively multiplayer online games MMOGs: Beck & Wade 2004 ; Castronova 2005; Kelly 2004

World of Warcraft: see its Wikipedia entry

Zack Mendenhall research: Mendenhall & Miller, in preparation

WoW dialect: \*\*

WoW weapon specifications: from Thottbot.com

**The body goes mental**

Humans invented body ornamentation at least 100,000 years ago: Henshilwood et al. 2004; Vanhaeren et al. 2006

Virtual reality avatars: Meadows 2008; also see Au 2008; Boellstorff 2008; Rymanszewski et al. 2008

## Chapter 9: The Central Six

Uniformity of human adaptive design: \*\*

William James quote: \*\*

On general intelligence: Carroll 1993

Charles Spearman’s key work in 1904: Spearman 1904; also see Spearman 1927

Intelligence predicts:

* higher average success in every domain of life: Judge, Colbert, & Ilies 2004; Kuncel & Hezlett 2007; Schmidt & Hunter 2004; Stanovich & West 2000; Simonton 2006; also see Christopher & Schlenker 2000
* sexual and social attractiveness: Murphy 2007; Prokosch et al. in press

Intelligence remains ideologically controversial: \*\*

On the Big Five personality traits: Canli 2006; Funder 2006, Matthews, Deary, & Whiteman 2004, Nettle 2007; Pervin & John 1999

The Big Five are:

* better than the Myers-Briggs dichotomies: McCrae & Costa 1989
* better than Eysenck’s three dimensions: Zuckerman et al. 1993; cf. Eysenck 1967, 1970, 1995
* good at predicting behavior across different domains of life: Furnham 2008; Furnham & Heaven 1999; Judge, Heller, & Mount 2002; Ozer & Benet-Martinez 2006;
* genetically heritable: Canli 2006; Jang, Livesley & Vernon 1996; Jang et al. 1998; McCrae et al. 2000; McCrae et al. 2001; Yamagata et al. 2006
* stable across life: Costa et al. 2000; Roberts, Caspi, & Moffitt 2001; Roberts, Walton, & Viecthbauer 2006; Soldz & Vaillant 1999; Soto et al. 2008
* universal across cultures: Benet-Martinez & John 1998; McCrae & Costa 1997; McCrae & Terracciano 2005; Schmitt 2004; Schmitt et al. 2007; Terracciano et al. 2005; Yamagata et al. 2006
* sexually and socially salient: Berry & Miller 2001; Borkenau et al. 2004; Botwin, Buss, & Shackelford 1997; Donnellan, Conger, & Bryant 2004; Funder 1995, 1999; Furnham & Heaven 1999; Shackelford, Schmitt, & Buss 2005
* reliably measured on personality questionnaires: Benet-Martinez & John 1998; Gosling, Rentfrow, & Swann 2003; John & Srivastava 1999

On personality traits similar to the Big Five in non-human animals: Dingemanse & Reale 2005; Gosling 1998, 2001; Gosling & Bonnenburg 1998; Gosling, Kwan, & John 2003; Gosling et al. 2003; L. Murray 2005; Nettle 2006; Réale 2007; Sinn, Apiolaza, & Moltschaniwskyj 2006; Sinn, Gosling, & Moltschaniwskyj 2008; Weiss, King, & Enns 2002; Weiss, King, & Perkins 2006

On openness: DeYoung, Peterson, & Higgins 2005; Dollinger, Leong, & Ulicni 1996; George & Zhou 2001; Harris 2004; McCrae 1987, 1996; McCrae & Costa 1997

High openness predicts:

* emotional sensitivity, social tolerance: Dollinger, Leong, & Ulicni 1996; Furnham & Heaven 1999; Schutte et al.1998
* political liberalism: Butler 2000; Jost 2006; McCrae 1996; Pratto & Hegarty 2000; Roccas et al. 2002; Sidanius & Kurzban 2003
* seeking complexity and novelty, readily accepting changes and innovations, preferring grand new visions, joining new cults: George & Zhou 2001; Kraaykamp & van Ejick 2005; Weeks & James 1995
* higher intelligence: Harris 2004; Moutafi, Furnham, & Paltiel 2005
* higher rates of bipolar and schizotypy: Gurrera et al. 2005

Low openness predicts being conservative, closed-minded, conventional, and authoritarian: Heaven & Bucci 2001; Schultz & Searleman 2002; Van Hiel, Mervielde, & De Fruyt 2004

On conscientiousness: Roberts et al. 2005; Suddendorf 2006

High conscientiousness predicts:

* self-control, willpower, reliability, consistency, dependability, trustworthiness, emotional maturity: Boudreau, Boswell, & Judge 2001; McCrae et al. 1999; Roberts et al. 2005; Sackett & Wanek 1996
* ability to delay gratification and pursue long-term goals: Ainslie 1992; Curry, Price, & Price 2008; Furnham 2008; Godoy et al. 2004; Suddendorf 2006
* fulfilling promises and commitments: Furnham & Heaven 1999
* resisting impulses and bad habits: Slutske et al. 2005
* feeling embedded in a social network: Organ & Ryan 1995
* craving achievement: Boudreau, Boswell, & Judge 2001; Christopher & Schlenker 2000; Furnham 2008; George & Zhou 2001; Judge & Ilies 2002
* cooperativeness in professional and personal relationships: Asendorpf & Wilpers 1998; Barrick & Mount 1991; Brown et al. 2002; Buss 1991; Cooper & Sheldon 2002; Engel, Olson, & Patrick 2002; Kelly & Conley 1987; Kurzban & Houser 2005; Noftle & Shaver 2006
* eating a healthy diet, exercizing regularly, avoiding drug addiction, and staying healthy: Bogg & Roberts 2004; H. Friedman et al. 1995; Krueger et al. 2002; Swedsen et al. 2002
* being highly desired by employers: Barrick & Mount 1991; Boudreau, Boswell, & Judge 2001; Brown et al. 2002; Burke, Matthiesen, & Pallesen 2006; Furnham 2008; Sackett & Wanek 1996; Tokar, Fischer, & Subich 1998
* obsessive-compulsive disorder: Abeh & De Pauw 1999; Saad 2006

Low conscientiousness predicts:

* reckless impulsivity and criminality: Cale 2006; Dalrymple 2003; Egan & Stelmack 2003; Linton & Wiener 2001; Nigg et al. 2002
* the ‘externalizing’ dimension of mental illness: Cale 2006; Krueger et al. 2002; McGuire, Fawzy, & Spar 1994; Saulsman & Page 2004

Conscientiousness usually increases with age: McCrae et al. 1999, 2000; Srivastava et al. 2003

On agreeableness: \*\*

High agreeableness predicts:

* warmth, kindness, sympathy, empathy, trust, compliance, modesty, benevolence, peacefulness: Ashton et al. 1998; Krueger, Hicks, & McGue 2001; McGuire, Fawzy, & Spar 1994; Preston & de Waal 2002; Roccas et al. 2002
* seeking harmony, adapting to others’ needs, and keeping their opinions to themselves when it avoids conflict: Barrick & Mount 1991; Furnham 2008; Furnham & Heaven 1999; Tokar, Fischer, & Subich 1998
* being a more pleasant long-term partner: Asendorpf & Wilpers 1998; Brase 2006; Buss 1991; Cooper & Sheldon 2002; Graziano, Jensen-Campbell & Hair 1996; Kelly & Conley 1987; Noftle & Shaver 2006; Paunonen 2006; Watson, Hubbard, & Wiese 2000
* being a better reciprocator, contributing more to public goods: Curry, Price, & Price 2008; Mount, Barrick, & Stewart 1998
* lower rates of personality disorders: Krueger et al. 2002

Low agreeableness predicts:

* psychopathy: Cale 2006; Lynam et al. 2005; McGuire, Fawzy, & Spar 1994; Rhee & Waldman 2002
* seeking glory or notoriety, pursuing their own needs, and expressing their opinions forcefully: Boudreau, Boswell, & Judge 2001; Christopher & Schlenker 2000
* taking social and sexual advantage of others: Linton & Wiener 2001
* the ‘externalizing’ dimension of mental illness: Krueger et al. 2002; Nigg et al. 2002; Saulsman & Page 2004

Agreeableness usually increases with age: Costa et al. 2000; McCrae et al. 1999, 2000; Srivastava et al. 2003

Low agreeableness may predict creative contributions: \*\*

Low-agreeableness ‘bad’ boys and girls can be more sexually attractive: Gangestad et al. 2004 \*\*

On stability and neuroticism: \*\*

On the evolutionary origins of individual differences in neuroticism, anxiety, and fearfulness: Claridge & Davis 2001; Ellis, Jackson, & Boyce 2006; Ohman & Mineka 2001

High stability predicts:

* being resilient, optimistic, calm, at ease, and quick to rebound from set-backs: Boudreau, Boswell, & Judge 2001; Egan & Stelmack 2003; Furnham 2008; Magnus et al. 1993; Noftle & Shaver 2006
* general mental health and happiness: DeNeve & Cooper 1998

Low stability predicts:

* being neurotic, anxious, worried, self-conscious, pessimistic, angry: Buss 1991; Claridge & Davis 2001; Cooper & Sheldon 2002; Judge & Ilies 2002; Omura, Constable, & Canli 2005 \*\*
* the ‘internalizing’ dimension of mental illness depression, anxiety, panic: Claridge & Davis 2001; R. F. Krueger 2005; Livesley et al. 1998; Saulsman & Page 2004
* marital dissatisfaction: Karney & Bradbury 1997; Kelly & Conley 1987 \*\*

On extraversion: Nettle 2005 \*\*

High extraversion predicts:

* being friendly, gregarious, talkative, funny, expressive, assertive, active, excitement-seeking, and socially self-confident: Furnham & Heaven 1999; Nettle 2005
* showing surgency activity, power, dominance, and self-confidence: Anderson et al. 2001; Boudreau, Boswell, & Judge 2001; Egan & Stelmack 2003; Furnham 2008; Magnus et al. 1993; Nettle 2005
* feeling positive emotions \*\*
* working with and trusting others: Barrick & Mount 1991 \*\*
* enjoying leadership: Boudreau, Boswell, & Judge 2001; Furnham 2008 \*\*
* being physically active and sexually adventurous: Nettle 2005; Nigg et al. 2002 \*\*
* (also: having higher facial symmetry: Fink et al. 2005)

Low extraversion predicts shyness, social passivity, and lower levels of social status-seeking: \*\*

Social judgment heuristics: Gigerenzer 2007; Gigerenzer & Todd 1999; Goldstein & Gigerenzer 2002; Maner et al. 2005

High values on some traits can compensate for low values on other: Li et al. 2002 \*\*

*The Sims*: Thesims.ea.com

Highly stable Sims would be highly happy regardless of their material or social circumstances: \*\*

All human cultures seem to have their own terms for the Central Six: \*\*

All cultures value the Central Six when selecting mates, friends, and business associates: \*\*

Chinese concepts of *mianzi* and *lian*: \*\*

David Sinn on squid personality: Sinn, Apiolaza, & Moltschaniwskyj 2006; Sinn, Gosling, & Moltschaniwskyj, 2008

Samuel Gosling on hyena personality: Gosling 1998

Samuel Gosling on dog personality: Gosling et al. 2003; Gosling, Kwan, & John 2003

The Big Five in other species of pets: Gosling & Bonnenburg 1998

The Big Five in other great apes: L. Murray 2005; Weiss, King, & Enns 2002; Weiss, King, & Perkins 2006

### **Preferences for the Central Six**

Higher intelligence usually preferred: Murphy 2007; Prokosch et al. in press \*\*

Similarity on Big Five usually preferred: Ellis, Simpson, & Campbell 2002; Figueredo, Sefcek, & Jones 2006 \*\*

Richard Robins study on self-esteem and personality: Robins et al. 2001

Nine previous studies: cited in Robins et al. 2001

Further studies on what people consider ‘normal’ in the Big Five: Wood, Gosling, & Potter 2007

Employer preferences for the Big Five: Barrick & Mount 1991; Furnham 2008; Tokar, Fischer, & Subich 1998 \*\*

High impulsivity and spontaneity may be attractive in a short-term lover: Figueredo, Sefcek, & Jones 2006 \*\*

High conscientiousness may be preferred for a long-term spouse: Buss 1991; Figueredo, Sefcek, & Jones 2006 \*\*

‘Impression management’: Bromley 1993

‘Self-monitoring’: Snyder 1974

Stability of Big Five traits across life-time: Soldz & Vaillant 1999; Soto et al. 2008; \*\*

Emotions as short-term shifts in apparent personality: Elfenbein & Ambady 2002 \*\*

Social functions of anger: \*\*

Courtship functions of being in love: Fisher 2004; Fisher et al. 2002

Moods as longer-term shifts than emotions: \*\*

States versus traits: Buss & Craik 1983; Fleeson 2001 \*\*

**Measuring your Big Five**

Beatrice Rammstedt and Oliver John BFI-10 scale: Rammstedt & John 2007

Other short measures of the Big Five: see Gosling, Rentfrow, & Swann, 2003; Nettle 2007

## How were the Big Five discovered?

History of personality research: Cattell 1965; Digman 1990; John, Angleitner, & Ostendorf 1988; John & Srivastava 1999; John, Robins, & Pervin 2008

Galen’s humours: \*\*

Raymond Cattell proposed 16 dimensions of personality: Cattell 1965

The Myers-Briggs system advocated 4 dimensions: see McCrae & Costa 1989

Hans Eysenck argued for 3 dimensions: Eysenck 1967, 1970

Gordon Allport and Henry Odbert on English adjectives: Allport 1937

Ernest C. Tupes and Raymond E. Christal work: Tupes & Christal 1961

Warren Norman work: \*\*

Andrew Comrey, John Digman, Lewis Goldberg, and Naomi Takemoto-Chock reached a consensus: see Digman 1990; \*\*

Costa and McCrae’s ‘NEO Five Factor Model’: Costa & McCrae 1992; Costa, McCrae, & Kay, 1995; Costa, Terracciano, & McCrae, 2001; Costa & Widiger 1994; McCrae & Costa 1996, 1997, 2003; McCrae et al. 2000, 2001

Big Five proved to be stable, heritable, and universal: see references above

Stable sex differences in average Big Five scores across cultures: Costa et al. 2001

Lewis Goldberg’s ‘Big Five’ model: Lewis Goldberg 1981, 1990, 1992, 1993, 2006

The 1936 Allport and Odbert adjective list: Allport 1937

The ‘lexical hypothesis’: Lewis Goldberg 1981; also Ashton & Lee 2001

Lewis Goldberg argues that when we meet someone: \*\*

Dog personality traits: Gosling, Kwan, & John 2003; Jones & Gosling 2005; also see Coren 1995; Hare 2002

## The Central Six each form a bell curve

Human intelligence forms a bell curve: Jensen 1998; also Carroll 1993

Big Five traits form bell curves: \*\*

Almost all continuously-varying biological traits form a bell curve: \*\*

But many biological traits are discrete, forming distinct morphs: \*\*

Species as macro-morphskept qualitatively distinct by reproductive isolation: \*\*

Jungian archetypes such as the trickster: see Carl Jung’s *The archetypes and the collective unconscious*

## The Central Six are fairly independent

Central Sixare almost statistically independent: Ashton & Lee 2001

General intelligence has a modest positive correlation with openness: Harris 2004; Moutafi, Furnham, & Paltiel 2005 \*\*

Why smart people do not buy homeopathic products: Singh & Ernst 2008

Profitability of neophilia: \*\*

Personality traits of liberals vs. conservatives: Heaven & Bucci 2001; Jost 2006; Schultz & Searleman 2002

Social stereotypes versus independent personality traits: Greenwald et al. 2002; Phelps 1973; Terracciano et al. 2005

Personality ‘types’ versus traits: Canli 2006 \*\*

## Beyond the Central Six?

Beyond personality traits: see Gosling 2008 \*\*

Research on social intelligence: Adolphs 2003; Anderson et al. 1999; Andrews 2001; Bar-On et al., 2003; Baron-Cohen 2004; Baron-Cohen & Belmonte 2005; Cacioppo, Visser & Picket 2006; Call 2001; Colman 2003; Connor 2007; De Waal 2000; De Waal & Tyack 2003; Dunbar 2003; Easton & Emery 2005; Ellis & Bjorklund 2005; Emery et al. 2007; Fiske & Taylor 2008; Fletcher 2002; Haidt 2001; Hare 2002; Haselton et al. 2005; Haselton & Nettle 2006; Humphrey 1976; Jussim 2005; Krueger & Funder 2004; Langford et al. 2006; Maestripieri 2005; Orbell et al. 2004; Reader & Laland 2002; Sabini, Siepmann, & Stein 2001; Schaller, Kenrick, & Simpson 2006; Stiller & Dunbar 2007; Suddendorf & Whiten 2001; Tomasello et al. 2005; Voland 2007; Whiten 2005; Wright 2002 XX

Social intelligence as general intelligence plus some Big Five traits: \*\*

Autism effects on personality traits: Shaner, Miller, & Mintz 2009 \*\*

Research on emotional intelligence: Brackett & Mayer 2003; Casey et al. 2007; Elfenbein & Ambady 2002; Matthews, Zeidner, & Roberts 2004; Mayer, Salovey, & Caruso 2004; Schutte et al. 1998 XX

Emotional intelligence as general intelligence plus some Big Five traits: Schulte, Ree, & Carretta 2004; also see De Raad 2005; Van Rooy & Viswesvaran 2004

Creativity as general intelligence plus openness: Miller & Tal 2007; also George & Zhou 2001

Mating Intelligence: Geher & Miller 2007; see also Geher, Miller, & Murphy 2007; Miller 2007 ‘Mating intelligence…’; Penke et al. 2007

Sociosexuality: Bailey et al. 2000; Gangestad & Simpson 2000; Linton & Wiener 2001; Lyons et al. 2004; Schmitt 2005

The polyamorous ‘Lifestyle’: Bellemeade 2008; Gould 2000

Mating effort vs. parenting effort: Brase 2006; Charles & Egan 2005; Feingold 1992 \*\*

Liberals a little brighter than conservatives on average: \*\*

Ongoing research on genetics and neuroscience of the Big Five: Gazzaniga 2004; Omura, Constable, & Canli 2005; Whittle et al. 2006 \*\*

Several researchers are working hard on evolutionary personality psychology: Buss 1990, 1991; Buss & Greiling 1999; Canli 2006; Denissen & Penke 2008; Figueredo et al. 2005; Gangestad & Simpson 2000; Kirkpatrick 1999; Kurzban & Houser 2005; MacDonald 1995, 1998; Nettle 2005, 2006; Penke et al. 2007; Troisi 2005; D. S. Wilson 1998; Wilson, Near, & Miller 1998; Tooby & Cosmides 1990; cf. Cervone 2000 XX

**Chapter 10: Traits that consumers flaunt and marketers ignore**

Speed-dating: Eastwick et al. 2007; Kurzban & Weeden 2005; Todd et al. 2007 \*\*

BFI-10 personality inventory: Rammstedt & John 2007

‘Cheap talk’ and unreliable signals: Ekman 2001

A prestigious university degree, which contains no more information than a 2-hour IQ test: see Flanagan & Harrison 2005; Phelps in press

Credit scores and conscientiousness: see Ainslie 1992; Dalrymple 2003 \*\*

Mobile phones, so we can gossip loudly in public to our friends: Lycett & Dunbar 2000; also see Ling 2004

Cultural displays of openness: see Holt 1998; Kraaykamp & van Ejick 2005; Weeks & James 1995 \*\*

Religion as a personality-display: see Radosh 2008 \*\*

# How car choices reveal the Central Six traits

Brand personality: Aaker 1997 \*\*

## Advertising the Central Six through music preferences and web pages

Peter Rentfrow and Samuel Gosling on student chatting about music: Rentfrow & Gosling 2006

Another Rentfrow and Gosling study on music preferences and the Big Five: Rentfrow & Gosling 2003

Further studies by psychologists Simine Vazire, Samuel Gosling, and others on web page judgments: Vazire & Gosling 2004; also see Schau & Gilly 2003

On how people’s offices and bedrooms also reveal their personalities: Gosling et al. 2002; Gosling 2008

## Why marketers ignore the Central Six

The typical consumer behavior textbook includes a large section on individual differences, but ignores general intelligence and the Big Five traits: see e.g. Hawkins, Best, & Coney 2004

General intelligence sometimes makes an appearance under the guise of ‘cognitive resources’: e.g. Capon & Davis 1984;

Marketers give far more attention to ‘demographic variables’: Allenby 1999 \*\*

One of the few mentions of the Big Five in JMR: Aaker 1997; Brown et al. 2002

Not a single JM, JMR, or JCR paper has ever mentioned: based on literature searches through SciSearch and Web of Knowledge, as of May 2008

A handful of papers in these journals use costly signaling theory in discussing how companies can send signals about product quality to consumers: Boulding & Kirmani 1993; Hellofs & Jacobson 1999; Kirmani & Rao 2000; Shiv, Carmon, & Ariely 2005

Hans Baumgartner quote: Baumgartner 2002

Vague talk about ‘identities’, ‘self-schemata’, and ‘consumer personalities’: Akerlof & Kranton 2000; Wheeler, Petty, & Bizer 2005 \*\*

‘Relationship quality’ and relationship marketing: Godin 1999, 2005; Palmer 2000 \*\*

‘Consumer culture theory’: Arnould & Thompson 2005; Firat & Venkatesh 1995

Distinction between ‘utilitarian’, ‘hedonic’, and ‘positional’ goods: Abel 1990; Alessie & Kapteyn 1991; Dhar & Wertenbroch 2000 \*\*

Most current research on marketing and consumer behavior relies on a chaotic grab-bag of out-dated theories and unreliable findings: Armstrong 1991, 2003; November 2004; Pfeffer & Sutton 2006; Sprott & Miyazaki 2002

Stereotypes in one recent consumer behavior textbook: \*\*\*\*

The slightly higher average IQ of Asian-Americans compared to Anglo-Americans: \*\*

Sex differences in agreeableness: \*\*

Cross-national differences in average personality traits: Schmitt et al. 2007 \*\*

The central intellectual taboo of modern America; the blank slate view: Pinker 2002

Thomas Kuhn on scientific paradigms: see *The structure of scientific revolutions*

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International Society for Intelligence Research: Isironline.org

Personality psychology conferences: e.g. Association for Research in Personality; European Conference on Personality; International Society for the Study of Individual Differences; Society for Personality and Social Psychology;

‘Individualism vs. collectivism’: Fincher et al. 2008 \*\*

‘Abstract vs. associative thinking styles’: Capon & Davis 1984 \*\*

‘Masculinity vs. femininity’ and ‘gender-role conformity’: Holt & Thompson 2004 \*\*

‘Strength of reference group influence’: Cialdini 2008 \*\*

‘Locus of control’: Judge et al. 2002 \*\*

The social, sexual, and career incentives for individual marketers are often poorly aligned with the financial interests of a firm’s share-holders: Sowell 2007; Young 1998 \*\*

The theory of advertising as conspicuous corporate waste, e.g. to deter market entry by rival firms, to signal financial stability to investors, or to signal product quality to consumers: Comanor & Wilson 1967; also see Boulding & Kirmani 1993; Clark, Cornwell, & Pruitt 2002; Crimmins & Horn 1996; Hellofs & Jacobson 1999; Shiv, Carmon, & Ariely 2005

**Chapter 11: General intelligence**

Universal aspect of intelligence as a set of psychological adaptations: Bar-On et al. 2003; Chiappe & MacDonald 2005; Cochran, Hardy, & Harpending 2006; Cosmides & Tooby 2002; Flinn, Geary, & Ward 2005; Gardner 1983; Geary 2005; Geary & Huffman 2002; Geher, Miller, & Murphy 2007; Kanazawa 2004; Lee 2007; Reader & Laland 2002; Sternberg & Kaufman 2002; Zechner et al. 2001 XX

Individual-differences aspect of intelligence as a set of correlated differences: Brett Anderson 2001; Cattell 1963; Deary 200, 2001; Detterman 2002; Houle 2000; Lee 2007; Miller 2000 ‘Sexual selection for indicators of intelligence…’; Spearman 1904, 1927; XX

Intelligence as ability to master evolutionarily novel, counter-intuitive concepts and skills: Andrews et al. 2007; Cochran, Hardy, & Harpending 2006; Flinn, Geary, & Ward 2005; Gottfredson 2007; Kanazawa 2004; Sol et al. 2008; Stanovich & West 2000

Life-long monogamous marriages as an evolutionary novelty: Boesch & Reichart 2003; Buss 2003; Marlowe 2003

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On intelligence as an epistemic virtue: Brady & Pritchard 2003; DePaul & Zagzebski 2003; Stanovich & West 2000

Assessing intelligence through IQ tests: Anastasi & Urbina 1997; Flanagan & Harrison 2005; Phelps in press

Assessing intelligence through informal conversations and observations: Murphy 2007; Reynolds & Gifford 2001 \*\*

Intelligence predicts performance across all important life-domains: Gottfredson 1997; Herrnstein & Murray 1994; Kuncel, Hezlett, & Ones 2004; Kuncel & Hezlett 2007; Lubinski et al. 2006; Lynn & Vanhanen 2006; Neisser et al. 1996; Schmidt & Hunter 2004; Simonton 2006; Stanovich & West 2000

Ordinary folks recognize intelligence’s variance, generality, and importance: Sternberg\*\*

Educated elites opposed to the very concept of general intelligence: \*\*

‘Health’ as a latent variable: \*\*

‘Beauty’ as a latent variable: Feinberg et al. 2005; Steiner 2001; Voland & Grammer 2003

‘Intelligence’ as a latent variable: Carroll 1993; Jensen 1998

Intelligence as an index of genetic quality and phenotypic condition: Houle 2000; Miller 2000 ‘Sexual selection for intelligence-indicators…’ \*\*

On the heritability and genetics of intelligence: Deary, Spinath, & Bates 2006; Hulshoff Pol et al. 2006; Kovas & Plomin 2006 ; Mingroni 2004; Petrill 2002; Plomin 1999; Plomin et al. 2003; Plomin & Crabbe 2000; Plomin, Kennedy, & Craig 2006; Plomin, Kovas, & Haworth 2007; Plomin & Spinath 2004; Zechner et al. 2001 XX

On assortative mating for intelligence: Godoy et al. 2008; Kanazawa & Kovar 2004; Reynolds, Baker, & Pedersen 2000; Watson et al. 2004

Intelligence correlates positively with:

* Overall brain size: Colom, Jung, & Haier 2006; McDaniel 2005; Miller & Penke 2007; Posthuma et al. 2002; Thoma et al. 2005
* Sizes of specific cortical areas: Colom, Jung, & Haier 2006; Geake & Hansen 2005; Gong et al. 2005; Hulshoff Pol et al. 2006; Jung & Haier 2007
* Concentrations in the brain of particular neurochemicals: Yeo, Brooks, & Jung 2006
* The age at which the cortex is thickest in childhood: Shaw et al. 2006
* Speed of performing basic sensory-motor tasks: Deary & Der 2005; Luciano et al. 2001; Rindermann & Neubauer 2004
* Speed with which nerve fibers carry impulses through the arms and legs: Rijsdijk & Boomsma 1997; also see Reed, Vernon, & Johnson 2004
* Height: Case & Paxson 2008; Richards et al. 2002
* Physical symmetry of the face and body: Bates 2007; Furlow et al. 1997; Luxen & Buunk 2006; Prokosch, Yeo, & Miller 2005; Thoma et al. 2005; cf. Johnson, Segal, & Bouchard 2008
* Physical health and longevity: Batty, Deary, & Gottfredson 2007; Deary et al. 2004; Deary & Der 2005; Gottfredson 2004; Lubinski & Humphreys 1997; Whalley & Deary 2001
* Semen quality in males: Arden et al., in press
* Mental health: Batty, Mortensen, & Osler 2005; Martin et al. 2007; Walker et al. 2002
* Romantic attractiveness: Geher & Miller 2007; Haselton & Miller 2006; Kanazawa 2000; Kanazawa & Still 2000; Millet & Dewitte 2007; Murphy 2007; Penke et al. 2007; Taylor et al. 2005; Zebrowitz et al. 2002

Lars Penke and my work on intelligence and brain size: Miller & Penke 2007

Recent twin research found a positive ‘genetic correlation’ between intelligence and brain size: Postuma et al. 2003 \*\*

Mark Prokosch, Ron Yeo, and my work on intelligence and body symmetry: Prokosch, Yeo, & Miller 2005

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Other work by Ron Yeo and colleagues: Yeo, Brooks, & Jung 2006

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Critics of intelligence research: Kamin, Gould \*\*

Intelligence is at the center of a whole web of empirical associations: Jensen 1998 \*\*

The intelligence-based meritocracy that drives capitalist educational and occupational aspirations: Adnett & Davies 2002; Arrow, Bowles, & Durlauf 2000; Carson 2007; Kuncel & Hezlett 2007; Lubinski et al. 2006 \*\*

### **Educational credentialism**

Beyond general intelligence, there are also allegedly traits like:

* social intelligence \*\*
* practical intelligence: \*\*
* emotional intelligence \*\*
* creativity: Burch 2006; Eysenck 1995; Griskevicius, Cialdini, & Kenrick 2006; Harris 2004; Haselton & Miller 2006; Kaufman et al. 2007; King, Walker, & Broyles 1996; Kuncel, Hezlett, & Ones, 2004; McCrae 1987; Miller & Tal 2007; Nettle 2001; Nettle & Clegg 2006; Simonton 1999, 2000, 2003; Sternberg 2006 XX
* wisdom: \*\*

Harvard has Howard Gardner, advocate of ‘multiple intelligences’: Gardner 1983 \*\*

Yale has Robert Sternberg, advocate of three intelligences: Sternberg & Grigorenko 2002; Sternberg & Kaufman 2002 \*\*

Yale has Peter Salovey, advocate of ‘emotional’ intelligence: Mayer, Salovey, & Caruso 2004 \*\*

These alternative ‘intelligences’ as combinations of general intelligence and some personality traits: Brody 2003; De Raad 2005; Gottfredson 2003; Kuncel, Hezlett, & Ones, 2004; Schulte, Ree, & Carretta 2004

Educational credentialism: Spence 1973, 2002; also see Adnett & Davies 2002; Bok 2004; Bousquet 2007; Carson 2007; Dalmia 2008; Herrnstein & Murray 1994; C. Murray 2008; Twitchell 2005; Veblen 1918; Weiss 1995

Universities use the IQ-type tests such as the SAT to select students: Carson 2007; Flanagan & Harrison 2005; Karabel 2005; Kuncel & Hezlett 2007; Lubinski et al. 2006; Phelps in press; Springer & Franck 2005

The claim by Educational Testing Service that the SAT is not an IQ test: \*\*

Its tests must avoid charges of bias across ethnic groups, sexes, and classes: Kuncel & Hezlett 2007; Phelps in press \*\*

Even when those groups do have somewhat different distributions of general intelligence: see \*\*

Positional goods: Abel 1990; Alessie & Kapteyn 1991; Galli 1994; Mason 1981, 2000; McAdams 1992 \*\*

Runaway credentialism: Adnett & Davies 2002 \*\*

The Trium Global Executive MBA: \*\*

British universities do not rely so heavily on standardized testing: Adnett & Davies 2002 \*\*

Oxford and Cambridge interview questions: *Harper’s* magazine, Dec. 2006, p. 23

The 300 ‘diploma mills’: \*\*

Rochville University: www.rochevilleuniversity.org

Belford University: www.belforduniversity.org

The 19 accrediting organizations recognized by the U.S. Department of Education: http://www.ed.gov/admins/finaid/accred/accreditation\_pg7.html

The FBI Diploma Scam task force: \*\*

Online ‘lost diploma replacement services’: bogusphd.com, noveltydegree.com

The ‘human capital’ view of education: Gary Becker; Weiss 1995

On the limited benefits of costly private education: See ‘Private education: Is it worth it?’, *The Economist*, March 1, 2008, pp. 57-58.

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Cultural transmission of knowledge makes us smarter and wiser: Baumeister 2005 \*\*

Ben Franklin quote: Fitzhenry 1993 p. 139

Charles William Eliot quote: Fitzhenry 1993 p. 135

The Teaching Company: www.teach12.com

Corporate training: \*\*

FranklinCovey group: \*\*; also Covey 1989

The ‘warehousing’ view that public education is cheap child care: \*\*

The ‘conformism’ view that public education socializes children: \*\*

General intelligence is such a powerful predictor of job performance: \*\*

A gentleman need not know Latin: quote from Brander Matthews, Fitzhenry 1993 p. 134

Thorstein Veblen on higher education: Veblen 1918

### **Other intelligence-indicators**

On intelligence-indicators in general: Plourde 2009 \*\*

The taste for news and non-fiction: Davis & McLeod 2003; Shoemaker 1996 \*\*

XLibris and vanity publishing: \*\*

The bidder who bought James Joyce’s ‘Eumaeus’ chapter draft from Sotheby’s:

Parents encourage children to boost their conspicuous cognitive skills: \*\*

IQ-boosting toys: \*\*

Private schools: \*\*

Intelligent retirement: \*\*

Cultural travel expeditions: \*\*

‘Feature creep’ \*\*

History ofsewing machines: \*\*

Private pilot’s license as an intelligence-indicator: \*\*

Strategy games as intelligence-indicators: \*\*

Gary Kasparov and IBM’s Deep Blue: \*\*

Sudoku as an intelligence-indicator: \*\*

Day-trading as an intelligence-indicator: \*\*

It’s hard to beat the market: \*\*

Smart products: \*\*

Males use technical features to show off verbal knowledge: ; also see Lynn, Irwing, & Crammock 2002 \*\*

Medieval Muslim girih tiling patterns: Lu & Steinhardt 2007

### **Intelligence-boosting products**

Intelligence tends to peak in young adulthood: \*\*

The young-adult outpouring of creativity: \*\*

Thought aids: Norman 1993

Mozart Effect claims vs. evidence: \*\*

Baby Einstein claims vs. evidence: \*\*

Nintendo DS game *Brain Age*: \*\*

Web sites such as Happy Neuron and MyBrainTrainer: \*\*

On computer games and complex TV shows as intelligence-boosters: Herz 1997; S. Johnson 2005; cf. Kanazawa 2002, 2006

Intelligence-boosting drugs: \*\*

Transhumanist movement: Nick Bostrom, David Pearce; see Kurzweil 2005 \*\*

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Research by Corey Fincher, Randy Thornhill, Mark Schaller, and Damian Murray: Faulkner et al. 2004; Fincher et al. 2008; Park, Faulkner, & Schaller 2003; Park, Schaller, & Crandall 2007; Schaller 2006; Schaller & Duncan 2007; Schaller & Murray 2008; Schaller, Park, & Faulkner 2003; Thornhill & Fincher 2007

The problem with parasites: see Gage 2005; Gangestad & Buss 1993; Mackey & Immerman 2003; Torrey & Yolken 2005; M. Wilson 2004; Wolfe, Dunavan, & Diamond 2007

Parasites evolve faster: \*\*

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The adaptive immune system and lymphocytes: \*\*

‘Immunological memory’ and immunization: \*\*

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‘Psychological immune system’ to avoid potential sources of infection: Abeh & De Pauw 1999

The ‘Corrupted Blood’ plague that ravaged *World of Warcraft*: Balicer 2007; Coppola 2007

Schaller and Murray: openness and extraversion should be lower where people suffer from higher parasite loads: Schaller & Murray 2008

Fincher, Thornhill, Schaller, and Murray on ‘individualism versus collectivism’: \*\*

Dan Fessler, David Navarette, and Mark Schaller found that ‘perceived vulnerability to disease’ predicts xenophobia: Faulkner et al. 2004; Navarrete & Fessler 2006

Looking at photographs of parasites and disease symptoms makes people more xenophobic: \*\*

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Joshua Tybur on three kinds of disgust \*\*

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Ötzi the ice-man: ‘Tressed to impress’, *New Scientist*, Nov. 4 2006, pp. 39-41

Biologists W.D. Hamilton and Anders Møller on sexual ornaments as indicators of parasite-resistance: Møller & Petrie 2002; Møller & Swaddle 1997

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**Why don’t we all want maximum openness?**

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Psychosis as a harmful side-effect: Crow 1995

# How much openness can you take?

Schizophrenia tends to develop in early adulthood:

Young adults take great pride in being able to withstand bizarre and ‘cool’ experiences: see T. Frank 1987; Kerner & Pressman 2007

Research shows that stressful life events can increase psychotic symptoms among those already at risk: \*\*

Maladaptive memes such as astrology, homeopathy, or scientology: see Diamond 2001; Singh & Ernst 2008 \*\*

### The open-marriage scene, which almost always leads to divorce: \*\*

The methamphetamine scene, which leads to psychosis: \*\*

Spousal homicide:

### **The embarrassment and danger costs of openness**

‘Xtreme’ sports: \*\*

‘Extreme tourism’: \*\*

Sexual novelty-seeking: \*\*

REALDolls: \*\*

Critiques of ‘complementary and alternative medicine’: Diamond 2001; Singh & Ernst 2008

### **Openness, novelty, and fashion**

Uniforms vs. fashions: \*\*

High-openness consumers as early-adopters: see Keller & Berry 2003; Kraaykamp & van Ejick 2005

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Vance Packard on planned obsolescence: Packard 1960; also see Horowitz 1994

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On fads, fashions, and runaway popularity: Bikhchandani, Hirshleifer, & Welch 1998; Frank 1997; Goldstein & Gigerenzer 2002; Henrich & Gil-White 2001; Keller & Berry 2003; Salganik, Dodds, & Watts 2006; Shiller 2001

**Chapter 13: Conscientiousness**

The nature of conscientiousness: Ainslie 1992; Roberts et al. 2005

Conscientiousness as character, principle, honor, and moral fiber: Brown et al. 2002; Dalrymple 2003, 2007; Nesse 2001

Inhibitory self-control imposed by the frontal lobes: \*\*

Marketers appeal to impulsive youth by framing older-adult conscientiousness as rigidity, archaism, inhibition, and uncoolness: T. Frank 1997

Conscientiousness matures slowly with age: Srivastava et al. 2003 \*\*

Short-term mating increases reproductive success of males more than females: Li & Kenrick 2006 \*\*

Civilization domesticates the young, wild, and impulsive: Freud 1961

Hunter-gatherer life did not require as much advanced planning and memory: see Godoy et al. 2004; Kelly 1995; Suddendorf 2006 \*\*

Changes in selection pressures on human personality in recent millennia: see Cochran, Hardy, & Harpending 2006; Hawks et al. 2007; Prabhakar et al. 2006; Sabeti et al. 2006; Wang et al. 2006

People usually strive to present a public façade of high conscientiousness: Brown et al. 2002 \*\*

On social judgments concerning the ‘effort heuristic’, an indicator of conscientiousness: Kruger et al. 2004

### **High-maintenance products**

Traditional economics assumes that consumers try to maximize their ease and leisure: \*\*

The modern American mega-kitchen: see Brooks 2000 \*\*

### **Pets as conscientiousness-indicators**

On the evolutionary psychology of pets: Archer 1997 \*\*

Artificial pets such as Tamagochi: \*\*

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‘Ecosystem engineering’ and ‘niche construction’: Daily 1997; Odling-Smee, Laland, & Feldman 2003; Smith 2007

Future of domestic robots: \*\*

**Collecting**

Conscientiousness and obsessive-compulsive behavior: \*\*

Collecting as identity-expression: Basbanes 1995; Blom 2004; Dilworth 2003; Karp 2006

William James quote “A man’s Self is the sum total of all that he can call his”:

Runaway collecting as the apotheosis of runaway consumerism: Belk 2001

eBay collectibles: see ebay.com

### **Personal grooming**

Evolution of continuously-growing human head hair:Arthur Neufeld & Conroy, Evolutionary Anthropology, 13, p. 89-; Bernard Thierry, Evo Anthro vol, 14, p. 5- \*\*

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Hair-styles across cultures: Mesko & Bereczkei 2004 \*\*

On hair as a reliable signal of one’s grooming network:Alison Jolly, Evolutionary Anthropology, vol. 14, p. 5 \*\*

### **The unused exercise machine**

Home fitness industry: Kolata 2003 \*\*

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The core role of good credit in consumerist spending-power: Bernthal, Crockett, & Rose 2005; Manning 2000; Schor 1998; Yunus 2007 \*\*

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Low conscientiousness predicts absenteeism, risky behavior, etc; so employers highly value conscientiousness:: Barrick & Mount 1991; Dalrymple 2003; Furnham 2008; Tokar, Fischer, & Subich 1998

Different conscientiousness-displays across social classes: Holt 1998; Lareau & Conley 2008

The challenges of self-structured, self-directed work: \*\*

**Chapter 14: Agreeableness**

The nature of agreeableness: \*\*

Agreeableness is at the heart of human altruism, kindness, and social progress: Krueger, Hicks, & McGue 2001 \*\*

On the evolution of human capacities for violence, aggression, homicide, and crime, and cruelty: Buss 2006; Chagnon 1988; Daly & Wilson 1999; Nell 2006; Quinsey 2002; Thornhill & Palmer 2001

On the primate origins of empathy, justice, and peace-making: Brosnan & de Waal 2003; de Waal 2000; Jensen et al. 2006; Maestripieri 2005; Melis, Hare, & Tomasello 2006; Preston & de Waal 2002; Silk et al. 2005; Warneken & Tomasello 2006 XX

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**The agreeable economy**

Gift-giving as an agreeableness-indicator: Saad & Gill 2003; also Belk & Coon 1993

Ritualized occasions for gift-giving: Sozou & Seymour 2005 \*\*

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The gold in the 18-34 year old male demographic group: \*\*

Initial displays of low agreeableness to attract mates and intimidate rivals: see Gangestad et al. 2004 \*\*

On young males displaying low agreeableness through video games: Herz 1997; Poole 2000

Longer-term displays of high agreeableness to retain mates: Brase 2006; Gangestad et al. 2004; Miller 2007 ‘Sexual selection for moral virtues’

On the payoffs for agreeableness and effective coordination in human long-term relationships: Cooper & Sheldon 2002; Fisher et al. 2002; Geary 2000; Kelly & Conley 1987; Kurzban & Houser 2005

On the need for effective cooperation in monogamous bird pairs: Emery et al. 2007

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Cars and SUVs as symbols of sexual rivalry, conquest, and aggression: Bradsher 2002 \*\*

On the taste for violence and aggression in leisure & entertainment: Bok 1998; Holt & Thompson 2004; Nell 2006; Wrangham & Peterson 1997

### **Displaying agreeableness through conformity**

### Vladas Griskevicius and colleagues on mating prime effects on conformity and agreeableness: \*\*

### Women have a stronger preference than men do for mates who display assertiveness, dominance, leadership, and risk-taking: Brown & Lewis 2004; Byrnes, Miller, & Schafer 1999; Campbell 2002; Figueredo, Sefcek, & Jones 2006; Gangestad et al. 2004; Hill & Chow 2002; Jensen-Campbell, Graziano, & West 1995

In a follow-up study, Griskevicius discovered: \*\*

### **Ideology as an agreeableness-indicator**

Political ideology as a courtship display: \*\*

Instincts for ideologies do not require survival payoffs:

Human as ideological animals: Clippinger 2007

Economists puzzled by why people vote: \*\*

Men are, on average, more conservative, more authoritarian, more rights-oriented, and less empathy-oriented than women: Pratto & Hegarty 2000 \*\*

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Young males should be especially risk-seeking: Archer & Mehdikhani 2003; Browne 2002; Byrnes, Miller, & Schafer 1999; Egan & Stelmack 2003; Hill & Chow 2002; Zuckerman & Kuhlman 2000

Political orientations as proxies for personality traits: Pratto & Hegarty 2000 \*\*

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The religious services industry and religious consumerism: Radosh 2008; Twitchell 2005, 2007 \*\*

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Religious and political ideologies as personality-indicators: Atran & Norenzyan 2004; Kirkpatrick 1999; Miller 1996; Pratto & Hegarty 2000

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Critics such as Stephen Jay Gould, Steven Rose, and Richard Lewontin: see Rose & Rose 2001; Segerstråle 2001 \*\*

1970s sociobiology: E. O. Wilson 1975; also see Segerstråle 2001 \*\*

Progressive evolutionary thinkers:

* Peter Singer: Singer 1993, 2000, 2004; Singer & Mason 2007
* Robert H. Frank: R. H. Frank 1985, 1988, 1997, 2000, 2005, 2007; R. H. Frank & Cook 1995
* E. O. Wilson: Wilson 1975, 1998; Wilson & Holldobler 2005; also Kellert & Wilson 1993
* Robert Trivers: Trivers 1971
* John Maynard Smith: Maynard Smith & Harper 2004

Right-wing American fundamentalists see evolutionary psychology as an ultra-liberal attack on family values and religion: see Crawford & Salmon 2004; Curry 2006; Hagen 2005; Mallon & Stich 2000; Miller 2003, 2007; Mooney 2005; Wright 1994 \*\*

Josh Tybur, Steve Gangestad, and I did on online survey: Tybur, Miller, & Gangestad 2007

**Chapter 15: The centrifugal soul**

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The standard self-display strategy: Clippinger 2007 \*\*

David Brooks on bourgeois bohemians: Brooks 2000, 2004

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On the simple living and thrift movements: Craig-Lees & Hill 2002; Dacyczyn 1998; Dominguez & Robin 1999; Elgin 1993; Karp 2008; Kaza 2005; Lastovicka et al. 1999; Luhrs 1997; Merkel 2003; Silverstein 2006; Uliano 2008; Yeager 2007; Zavetovski 2002 XX

On ownership, possessions, and the ‘endowment effect’: Belk 1988; Dilworth 2003; Ditmar 1992; Nesselroade, Beggan, & Allison 1999; Richins 1994,

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On minimizing the wastefulness of rapid depreciation: McDonough & Braungart 2002

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On used product markets: Akerlof 1970

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Division of labor principle: Matt Ridley 1996

On crafts: Adamson 2007; Risatti 2007; Sennett 2008

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Mass-designed houses: Archer 2008; Jackson 1987; Mohney & Easterling 1991

On the history and psychology of houses: Gardiner 1974; Jackson 1987; also Dolan 2002; Martinson 2000

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2.8 billion people who live on less than $2 a day: \*\*

Even if you must buy the product at full retail price, it can usually be better appreciated by visiting the factory that made it: Axelrod & Brumberg 1997 \*\*

### **Taming the centrifugal soul**

Great conversationalists: ‘Chattering classes’, *The Economist*, Dec. 23, 2006, pp. 79-81

Dale Carnegie’s *How to win friends and influence people*: Carnegie 2006

Conversational skills: Burling 2007; Dessalles 1998, 2007; Dunbar 1996, 2003; Dunbar, Marriot, & Duncan 1997; Locke 1999, 2008; Locke & Bogin 2006; Mithen 2005; Pennebaker & King 1999; Pinker 1994; Strauss 2005

**The promise of mass customization**

Mass customization: ‘A long march’, The Economist, July 14, 2001, pp. 79-81.

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**Chapter 16: The will to display**

### **Asymmetric warfare**

History and analysis of asymmetric warfare: Tierney 2006; also Gat 2008

Popular musicians not playing fair according to sexual mores of their time: Paglia 1990

**Why not trait-tattoos?**

Testing institutions: see Flanagan & Harrison 2005; Phelps in press

The Big Five from ages 10 to 20: Soto et al. 2008

Educational Testing Service and hard-to-fake intelligence tests: Phelps in press

Objective personality measures from peer ratings: \*\*

Information-sharing power of gossip and reputation: Bromley 1993 \*\*

Personality traits from online behavior data: Vazire & Gosling 2004 \*\*

Personality traits from brain imaging data: see Gazzaniga 2004; Miller 2002; Tovino 2007 \*\*

Personality traits from ‘consumer genomics’ companies such as 23andMe and Cambridge Genomics: ‘Your own book of life’, *New Scientist*, Sep. 8, 2007, pp. 8-11

I’ve argued in some recent papers that personality alleles should be easier to find: Penke, Denissen, & Miller 2007 \*\*

Some personality-related genes have already been found: Ebstein 2006; Munafò et al. 2003; **Savitz & Ramesar 2004** \*\*

Surprising principle from costly signaling theory: everyone across the whole spectrum has incentives to signal: \*\*

Person perception provokes hot emotions, not just cool assessments: Ambady & Skowronski 2008; Elfenbein & Ambady 2002; Fraley, Brumbaugh, & Marks 2005; Price 2005; Yamagishi et al. 2003

3-D MRI brain scan might convey good information about intelligence: Gazzaniga 2004 \*\*

Consumerist socialization of children: Cross 2004; Gunter & Furnham 1998; Hulbert 2003; Linn 2004; Louv 2008; McNeal 2007; Schor 2004; Witt 2001

Mass social transparency: Shiller 2003; Tapscott & Ticoll 2003

**Prerequisites for buying certain products**

Astronaut selection: see Tom Wolfe’s *The Right Stuff*

Space tourism market: ‘There’s no business…’, *New Scientist*, Sept. 8, 2007, pp. 55-58

### **A government War on Bling?**

The blunderbuss of government policy: see C. Murray 2008; Postrel 1998; Sowell 2007 \*\*

New programs lead to new bureaucracies with vested interests: Stigler 1971

The Pentagon bureaucracy, military-industrial complex, and ‘War on Terror’: \*\*

The ‘War on Drugs’: Gray 2001; MacCoun & Reuter 2001; Schlosser 2004; also see Earlywine 2005; Koob & Le Moal 2006 \*\*

### **A little something called civil society**

The nature of civil society: Galbraith 1952 \*\*

Atomization of modern social life: Putnam 2000, 2007; also Alesina & La Ferrara 2000; Clippinger 2007 \*\*

Economic growth requires rule of law: ‘Order in the jungle’, *The Economist*, March 15, 2008, pp. 83-85

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Civil-society norms must rely on fallible personal judgment that can lead to prejudice, bias, and stereotyping: Dalrymple 2007; Gigerenzer 2007; Greenwald et al. 2002; Maner et al. 2005; McElreath, Boyd, & Richerson 2003; Phelps 1973; Schultz et al. 2007; Sunstein 2005; Terracciano et al. 2005; Yamagishi et al. 2003

On the popular but philosophically incoherent notion of free will: see Dennett 1995, 2003; Voland 2007

Madness-of-the-crowd excesses: Shiller 2001; Sunstein 2005

### **The power of informal social norms**

The importance of informal social norms in sustaining cooperation within groups: Alvard & Nolin 2002, Bowles 2006; Bowles & Gintis 2002, Boyd & Richerson 1990, 2002, 2005; Brandt & Sigmund 2005, Colarelli 1998, 2003; Cole, Mailath, & Postlewaite 1992; Colman 2003, Fehr & Fischbacher 2004, Hagen & Bryant 2003; Hammerstein 2003; Henrich et al. 2006; Kenrick, Li, & Butner 2003, Kurzban & Leary 2001; McElreath, Boyd, & Richerson 2003; Ostrom & Ahn 2003; Ostrom & Walker 2005; Penner et al. 2005; Price 2005; Saad & Peng 2006, Schultz et al. 2007; Sosis & Bressler 2003; D. S. Wilson 2003, 2006 XX

The British understand this perfectly well: see Dalrymple 2003, 2007

### **What anti-consumerist protesters are doing wrong**

The Green movement: see Steffen 2006; Weyler 2004

Most adults have a social network of around 150 people: Dunbar 1996; Hill & Dunbar 2003; Stiller & Dunbar 2007

Movies that address consumerism: see Further reading and viewing

### **Multi-culturalism versus local social norms**

Housing law and anti-discrimination: see Arrow 1973; Schelling 1976

Robert Putnam’s research: Putnam 2007; also see Putnam 2000, 2003

Many other researchers have found similar results: Alesina & La Ferrara 2000; Alesina et al. 2003; Costa & Kahn 2003; Rosenfeld, Messner, & Baumer 2001

As Robert Kurzban and collaborators have shown, ethnicity fades into the background: Kurzban, Tooby, & Cosmides 2001; cf. Gil-White 2001; Pettigrew & Tropp 2006

Network reciprocity: Nowak 2006; Nowak & Roch 2007

Wealth becomes reified as the central form of status in every community: Christopher & Schlenker 2000; R. H. Frank 2000, 2007; R. L. Frank 2007; Luttmer 2005; Veblen 1899

Marijuana and medical marijuana communities: Schlosser 2004

Polyamorist social norms and status games: Bellemeade 2008; Gould 2000

Communities require:

* rules of etiquette for avoiding conflict: Fehr & Fischbacher 2004; Forni 2002; Kenrick, Li, & Butner 2003; Schultz et al. 2007
* a common spoken language for resolving conflict: Alesina et al. 2003; Anderson & Paskeviciute 2006; Dunbar 1996, 2003; Laitin 2000; Pinker 1994
* norms governing relationships: Bowles & Gintis 2002; Gürerk, Irlenbusch, & Rockenbach 2006; Hagen & Bryant 2003; Hess & Philippot 2007; Landes 1999; McElreath, Boyd, & Richerson 2003; Sosis & Bressler 2003; Tabb 2004 XX
* norms for coordinating group action, especially in emergencies: Boehm 1996; D. S. Wilson 2006; Wilson, Timmel, & Miller 2004

On the importance of voluntary movement for maintaining cohesive groups: Aktipis 2004; Kurzban & Leary 2001; Levine & Kurzban 2006

On reviving communitarianism, voluntary communities, and intentional living: Beito, Gordon, & Tabarrok 2002; Etzioni 1998; Hirsch 1976; Kunstler 1996; McKenzie-Mohr & Smith 1999, McKibben 2007; Mohney & Easterling 1991; Mulgan 2008; Norwood & Smith 1995; Putnam 2000, 2003; Sale 2008; Steffen 2006

On the tendency of like-minded people to aggregate in groups and geographical areas: Gil-White 2001; Low 2005; S. Murray et al. 2002; Mumford 1961; R. Nelson 2005; Pettigrew & Tropp 2006; Reynolds, Baker, & Pedersen 2000; Rushton 1989; also Melis, Hare, & Tomasello 2006 XX

Co-living and gated communities: Mohney & Easterling 1991; R. Nelson 2005

As John Stuart Mill argued on protecting children: see *On liberty* (1859), *The subjection of women* (1869)

### **Going virtual**

New forms of electronic communication:

* mobile phones: Horst & Miller 2006; Katz & Aakhus 2002; Ling 2004; Mansell et al. 2007
* social networking sites: Donath 2007, in press; Donath & Boyd 2004; Li & Bernoff 2008; Schau & Gilly 2003; Turner 2006; Vazire & Gosling 2004; Weber 2007
* massively multiplayer online games MMOGs: Au 2008; Boellstorff 2008; Castronova 2005; Meadows 2008; Rymanszewski 2008; also Beck & Wade 2004
* Web 2.0, mass collaboration, blogs, etc: Gillin 2007; Scoble & Israel 2006; Scott 2007; Surowiecki 2005; Tapscott & Williams 2008

Allowing new virtual communities to arise with their own social norms: Boellstorff 2008; Donath 2007; Turner 2006

History shows that every new generation succeeded, despite the endless revolutions in technology and economic roles: Bernstein 2004, 2008; Betzig 1986; Gregory Clark 2007; Cochran, Hardy, & Harpending 2006; Dunbar 2005; Earle 1997, 2002; Jardine 1998; Johnson & Earle 2000; Kindleberger 1996; McMillan 2003; Mumford 1961; Rybczynski, 1991; Sale 2006; Schama 1997; Seabright 2005; Zinn 2005 XX

What we call ‘reality’ today is already 90% social convention: see Arnould & Thompson 2005; Baudrillard 1983, 1998; Chomsky 2002, 2008; Douglas 1994, 2002;

On ways that increased social interaction through virtual reality may reduce runaway material consumerism: Donath 2007, in press; Donath & Boyd 2004; Li & Bernoff 2008; Mulgan 2008; Turner 2006

**The Grand Social Quasi-Experiment**

Social sciences have always been crippled because they can’t assign groups of people randomly to different cultures: Butz & Torrey 2006; Hedström 2005

Campbell Collaboration for evidence-based social policy: Campbellcollaboration.org

Culture is almost always confounded with genetic composition, demographic structure, level of economic development, and ecological context: Butz & Torrey 2006; Diamond 2005

Quasi-experimental design (a.k.a. ‘natural experiments’): Meyer 1995

Cultural group selection, as anthropologists Robert Boyd and Peter Richerson call it: Boyd & Richerson 1990, 2002, 2005; Richerson & Boyd 1999, 2004; also see Bowles 2006; Henrich & McElreath 2003; Mace, Holden, & Shennan 2005; McElreath, Boyd, & Richerson 2003; Pagel & Mace 2004; Penner et al. 2005; Sosis & Bressler 2003; D. S. Wilson 2003, 2006; Witt 2008 XX

**Chapter 17: Legalizing freedom**

Governments impose perverse incentives that limit people’s freedom to change old social norms: Mulgan 2006; Nelson 2005; Sen 2000; Sowell 2007; Stigler 1971

U.N. Human Development Index HDI: see Neumayer 2001

Even the World Bank: ‘Greening the books’, *The Economist*, Sept. 17, 2005, p. 82

Hours worked per year: ‘Working hours’, *The Economist*, Sept. 24, 2005, p. 124

# From income taxes to consumption taxes

Consumption taxes: Bradford 1980; Cole, Mailath, & Postlewaite 1992; Courant & Gramlich 1984; M. Friedman 1943; Howarth 1996, 2006; Ireland 1998, 2001 ‘Optimal income tax…’; Kaldor 1955; McCaffery 2006; Ng 1987; Seidman 1997

On other tax and regulatory policy suggestions given human concerns about relative status: Alvarez-Cuadrado 2007; Aronsson & Johansson-Stenman 2008; Ayres & Martinas 2006; Boskin & Sheshinski 1978; Bowles & Park 2005; Cole, Mailath, & Postlewaite 1992; Frank 2008; Gneezy & Rustichini 2000; Ireland, 1994, 2001 ‘Status-seeking…’; Loewenstein & Ubel 2008; McAdams 1992; McCaffery & Slemrod 2006; Somit & Peterson 2003; Sprott & Miyazaki 2002 XX

FairTax: Boortz & Linder 2008

Economist Robert Frank on a steeply progressive consumption tax: R. H. Frank 2000, 2007, 2008

Many purchases function as positional goods: Abel 1990; Adnett & Davies 2002; Alessie & Kapteyn 1991; Aronsson & Johansson-Stenman 2008; Bloch, Rao, & Desai 2004; Christopher & Schlenker 2000**;** Davidson 1997; Duesenberry 1949; Frank 1997, 2000, 2007, 2008; Frank & Sunstein 2001; Galli 1994; Hirsch 1995; Hopkins & Kornienko 2004; Howarth 1996, 2006; James 1987; Mason 1981, 2000; McAdams 1992; Neumark & Postlewaite 1998; Richins 1995; Robson 1992; Silverstein & Fiske 2003; Solnick & Hemenway 1996, 2005; Thomas 2007; Twitchell 2003; Wong & Ahuvia 1998 XX

Subjective well being as it can be measured reliably and validly with many different questionnaires: see Diener et al. 1999; Kahneman, Diener, & Schwarz 1999; Lane 2000

### **Different consumption tax rates for different products?**

Negative externalities: Nadeau 2003; Witt 1996

Smoking levels in China and India: Chatterji et al. 2008

Handgun ammunition sales: Ammunitionaccountability.com; Ammocoding.com

A person’s life is generally reckoned to be worth about 6 million dollars: Sunstein 2004

Gun control debates: Ayres & Donohue 2003; Duggan 2001

**Drawing the True Cost Map**

Ubiquitous confounds and complexities in estimating externalities: e.g. Dasgupta 2000; Ogden, Williams, & Larson 2004; Moretti 2004; Witt 1996

Maybe low-agreeableness males tend to buy porno more often, and also commit more rapes, but perhaps the porno doesn’t cause the rapes: Malamuth 1996

Debate over soda consumption and diabetes: Drewnowski 2007; Johnston, Delva, & O’Malley 2007; Vartanian, Schwartz, & Brownell 2007

Garrett Hardin’s ‘tragedy of the commons’: see Hardin 1993

Problems of over-fishing: Ostrom 2005; Ostrom & Ahn 2003; Ostrom & Walker 2005

Robert Nozick on the ‘night watchman state’: Nozick 1974

Laws against murder and robbery as ways of deterring people from imposing negative externalities such as death or property loss on others: Goodenough & Zeki 2006; Jones & Goldsmith 2005; Posner 1992

**Promoting product longevity**

Corporations maximize long-run sales through planned obsolescence: Gartman 1994; McDonough & Braungart 2002; Nelson 1957; Slade 2007; Strasser 2001

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Color ‘forecasting’ by the Inter-Society Color Council; also see the Color Association of the United States, and the Color Marketing Group

Rebecca Earley and eco-fasion: ‘Dressed for life’, *New Scientist*, Oct. 6, 2007, pp. 54-54

# What the consumption tax might accomplish

Design for repairability: Papanek 1971, 1995; also Fernández 2007

Heating and cooling buildings requires about 45% of the world’s energy budget: Fernández 2007

Social capital through trade, reciprocity, reputation, and trust: Anderson & Paskeviciute 2006; Bateson, Nettle & Roberts 2006; Bernstein 2008; Blair & Stout 2001; Bowles & Gintis 2002; Carrier 2006; Donath 2007; Donath & Boyd 2004; Fukuyama 1996; Gurven 2004; Helliwell 2006; Hubbard 2002; Irwen 1996; Jacobs 1993, 2005; Kramer 2006; Kuran 1998; Lin 2001; McPherson, Smith-Lovin, & Cook 2001; Milinski, Semmann, & Krambeck 2002; Ostrom & Ahn 2003; Ostrom & Walker 2005; Rosenfeld, Messner, & Baumer 2001; Rupasingha, Goetz, & Freshwater 2006; Sale 2008 XX

### **The will to change**

Signaling systems show strong lock-in effects: Bliege Bird & Smith 2005; Cronk 2005; Heath, Ho, & Berger, 2006; Huxley 1966; Maynard Smith & Harper 2004; Searcy & Nowicki 2005; Seyfarth & Cheney 2003

Difficulty of sustaining impossibly egalitarian and altruistic communes that break all ties of marriage, family, friendship, and ethnicity: see Gil-White 2001; Hrushka & Henrich 2006; Pettigrew & Tropp 2006

Europe has changed from a patchwork of ragged empire-remnants to the world’s largest, richest, best-integrated economy: Giddens 2006; Rifkin 2004

The number of countries with multi-party democracy: see Freedomhouse.org

The two countries that will matter most are China and India: web-search for Worldmapper to see graphic illustrations of relative population sizes and economies.

China’s economic future: Hutton 2006; Hvistendahl 2006; Khanna 2007

On consumerism and marketing in China: Wong & Ahuvia 1998; Zhao & Belk 2008

China’s road construction: ‘Rushing on by road, rail, and air’, *The Economist*, Feb. 16, 2008, pp. 30-32

Imperial civil service exams: Miyazaki 1981

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##### Ethical investment: see Bornstein 2007; R. H. Frank 2005; Hancock 1999; Harrison, Newholm, & Shaw 2005; Singer 2004

**Why the sky won’t fall if we gently shift our signaling systems**

Joseph Schumpeter on creative destruction: Schumpeter 1939

Austrian School economists on the ingenuity and adaptiveness of the market: Hayek 1988; Rothbard 2004; Von Mises 1949

Chicago School economists on the ingenuity and adaptiveness of the market: Gary Becker 1971, 1994, 1998, 2005; M. Friedman 2002; Posner 1992; George Stigler 1971; also see Nelson 2002

Our ancestors survived vast economic disruptions without going extinct:

* Neolithic Revolution: Budiansky 1992; Kislev, Hartmann, & Bar-Yosef 2006; Tudge 1999; Weiss, Kislev, & Hartmann 2006; Zeder et al. 2006
* Industrial Revolution: Ayres & Ayres 2002; Fogel 2004; Hawken, Lovins, & Lovins 1999; Marcuse 1964; Veblen 1899, 1914, 1919, 1921;
* Marketing Revolution: Bloom & Gundlach 2000; T. Frank 1997; Levitt 1983; Levy 1959; Miller 2000 ‘Marketing’

The institutional and cultural prerequisites for free markets to work: Bornstein 2007; Cole, Mailath, & Postlewaite 1992; De Soto 2003; Landes 1999; Pagel & Mace 2004; Sachs 2006, 2008; Sassen 2006; Tabb 2004; Zak 2008

### **Conclusion: Self-gilding genes**

We can flaunt our fitness in better ways: See Further reading and viewing.